

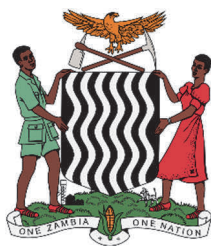
# Zambia



## Demographic and Health Survey

## 2013-14





# **Zambia**

## **Demographic and Health Survey**

### **2013-14**

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Rockville, Maryland, USA

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Additional information about the 2013-14 ZDHS may be obtained from the Central Statistical Office, P.O. Box 31908, Lusaka, Zambia; Telephone: (260-211) 251377/85 257604/05; Fax: (260-211) 1253468; E-mail: [Info@zamstats.gov.zm](mailto:Info@zamstats.gov.zm); Internet: <http://www.zamstats.gov.zm>; Data Portal: <http://zambia.africadata.org>.

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## PREFACE

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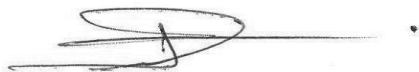
The 2013-14 Zambia Demographic and Health Survey (ZDHS) is a national sample survey designed to provide up-to-date information on background characteristics of the respondents, fertility levels, nuptiality, sexual activity, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutritional status of mothers and young children, early childhood mortality and maternal mortality, maternal and child health, awareness and behaviours regarding HIV/AIDS and other sexually transmitted infections (STIs), and prevalence and incidence of HIV/AIDS and other STIs. The target groups were men age 15-59 and women age 15-49 in randomly selected households across Zambia. Information about children age 0-5 was also collected, including data on weight and height. The survey collected blood samples for HIV testing in order to determine national and provincial prevalence and incidence rates.

While significantly expanded in terms of household coverage and scope, the 2013-14 ZDHS is a follow-up to the 1992, 1996, 2001-02, and 2007 ZDHS surveys and provides updated estimates of basic demographic and health indicators covered in the earlier surveys. The 2013-14 survey is the third ZDHS that includes collection of information on violence against women and HIV testing. Also, it is the first ZDHS to collect information on HIV incidence. In addition, data on malaria prevention and treatment were collected.

The 2013-14 ZDHS was implemented by the Central Statistical Office (CSO) in partnership with the Ministry of Health (MoH), the University of Zambia Teaching Hospital (UTH) Virology Laboratory, the Tropical Diseases Research Centre (TDRC), and the Department of Population Studies at the University of Zambia (UNZA) under the overall guidance of the National Steering Committee. A technical committee provided technical guidance for the survey. TDRC and the UTH Virology Laboratory provided technical support in the implementation of HIV testing. The government of Zambia, through the Ministry of Health and the Ministry of Finance, provided funding for the survey. Cooperating partners, namely the U.S. Centers for Disease Control and Prevention (CDC), the United Nations Children's Fund (UNICEF), and the United Nations Population Fund (UNFPA), provided additional funds. The Demographic and Health Surveys Program at ICF International, which is funded by the United States Agency for International Development (USAID), provided technical assistance in the areas of survey design, sample design, questionnaire design, interviewer training, fieldwork logistics, blood specimen collection, laboratory testing, and data processing and analysis. CDC provided technical assistance with protocol development, as well as technical support to TDRC and UTH during laboratory testing and reporting of HIV incidence.

Key people in the implementation of the 2013-14 ZDHS were Dr. Peter Mwaba, former Permanent Secretary, Ministry of Health; Dr. Davies M. Chikamata, current Permanent Secretary Ministry of Health; Mr. William Mayaka, former Deputy Director, Social Statistics- Central Statistical Office; Mr. Iven Sikanyiti, current Deputy Director, Social Statistics- Central Statistical Office; Dr. Christopher Simoonga, Director of Policy and Planning, Ministry of Health; Mrs. Sheila S. Mudenda, Survey Coordinator, Central Statistical Office; and Mr. Chipalo Kaliki, Survey Coordinator, Ministry of Health. Also instrumental to the implementation of the survey were Ms. Dorothy S. Kaemba, Josephine Chewes, and Chola N. Daka from the Central Statistical Office; Ms. Gina Mulundu of the UTH Virology Laboratory; Dr. Webster Kasongo of TDRC; Jacob RS Malungo of UNZA; and the team from ICF International that provided technical assistance during the design, planning, and implementation of the survey and during data processing and analysis.

Special appreciation goes to the trainers, field monitors, supervisors, editors, interviewers, nurses/nurse counsellors, laboratory technicians, regional statisticians, provincial directors of health, and drivers for their hard work and commitment. Gratitude also goes to the respondents for their patience and willingness in providing the required information and the blood samples. This survey would not have been a success without their cooperation.

A handwritten signature in dark ink, consisting of a large, stylized 'J' followed by a horizontal line and a small dot.

John Kalumbi  
Director  
Census and Statistics

# ACRONYMS

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ACT	artemisinin-based combination therapy
AIDS	acquired immunodeficiency syndrome
ANC	antenatal care
ARI	acute respiratory infection
ASFR	age-specific fertility rate
BCG	Bacille Calmette-Guerin
BMI	body mass index
CBD	Community Based Distributors
CDC	Centers for Disease Control and Prevention
CDD	Control of Diarrhoeal Diseases
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CPR	Contraceptive Prevalence Rate
CSO	Central Statistical Office
CSPRO	Census and Survey Processing System
DBS	dried blood spot
DFID	Department of International Development
DTP	diphtheria, pertussis, and tetanus
EA	enumeration area
ELISA	enzyme-linked immunosorbent assay
EPI	Expanded Programme on Immunisation
GDP	gross domestic product
GPS	Global Positioning System
GRZ	Government of the Republic of Zambia
HIV	human immunodeficiency virus
HepB	hepatitis B
IMCI	Integrated Management of Childhood Illnesses
IPTp	intermittent preventive treatment
IRS	indoor residual spraying
ITN	insecticide-treated net
IUD	intrauterine device
IYCF	Infant and Young Child Feeding
LAM	lactational amenorrhoea method
LLIN	long-lasting insecticidal net
MCDMCH	Ministry of Community Development Mother and Child Health
MDG	Millennium Development Goal
MOFNP	Ministry of Finance and National Planning
MoH	Ministry of Health
MoJ	Ministry of Justice
NAC	National AIDS Council
NCDP	National Commission for Development Planning
NFNC	National Food and Nutrition Commission
NGO	non-governmental organisation

NHSP	National Health Strategic Plan
OPV	oral polio vaccine
ORS	oral rehydration salt
ORT	oral rehydration therapy
PAHO	Pan American Health Organization
PMTCT	Prevention of Mother-to-Child Transmission
POPIN	United Nations Population Information Network
RHF	recommended home fluid
SDM	standard days method
STI	Sexually transmitted infection
TDRC	Tropical Diseases Research Centre
TFR	total fertility rate
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
UNZA	University of Zambia
USAID	United States Agency for International Development
UTH	University Teaching Hospital
VAD	Vitamin A deficiency
WHO	World Health Organization
ZDHS	Zambia Demographic and Health Survey

# MILLENNIUM DEVELOPMENT GOAL INDICATORS

## Millennium Development Goal Indicators

Zambia 2013-14

Indicator	Sex		Total
	Male	Female	
<b>1. Eradicate extreme poverty and hunger</b>			
1.8 Prevalence of underweight children under age 5	16.0	13.5	14.8
<b>2. Achieve universal primary education</b>			
2.1 Net attendance ratio in primary education <sup>1</sup>	81.4	84.5	83.0
2.3 Literacy rate of 15 to 24-year-olds <sup>2</sup>	84.9 <sup>a</sup>	77.3	81.1 <sup>b</sup>
<b>3. Promote gender equality and empower women</b>			
3.1 Ratio of girls to boys in primary, secondary, and tertiary education			
3.1a Ratio of girls to boys in primary education <sup>3</sup>	na	na	1.0
3.1b Ratio of girls to boys in secondary education <sup>3</sup>	na	na	1.1
3.1c Ratio of girls to boys in tertiary education <sup>3</sup>	na	na	0.8
<b>4. Reduce child mortality</b>			
4.1 Under-5 mortality rate <sup>4</sup>	87	74	75
4.2 Infant mortality rate <sup>4</sup>	53	43	45
4.3 Proportion of 1-year-old children immunized against measles	84.4	85.5	84.9
<b>5. Improve maternal health</b>			
5.1 Maternal mortality ratio <sup>5</sup>	na	na	398
5.2 Percentage of births attended by skilled health personnel <sup>6</sup>	na	na	64.2
5.3 Contraceptive prevalence rate <sup>7</sup>	na	49.0	na
5.4 Adolescent birth rate <sup>8</sup>	na	141.2	na
5.5a Antenatal care coverage: at least one visit <sup>9</sup>	na	97.7	na
5.5b Antenatal care coverage: four or more visits <sup>10</sup>	na	55.5	na
5.6 Unmet need for family planning	na	21.1	na
<b>6. Combat HIV/AIDS, malaria, and other diseases</b>			
6.1 HIV prevalence among the population age 15-24	5.4	7.7	6.6
6.2 Condom use at last high-risk sex <sup>11</sup>	50.1	40.1	45.1
6.3 Percentage of the population age 15-24 with comprehensive correct knowledge of HIV/AIDS <sup>12</sup>	46.7	41.5	44.1
6.4 Ratio of school attendance of orphans to school attendance of non-orphans age 10-14	0.87	0.86	0.86
6.7 Percentage of children under 5 sleeping under insecticide-treated bed nets	40.5	40.6	40.6
6.8 Percentage of children under 5 with fever who are treated with appropriate antimalarial drugs <sup>13</sup>	41.2	38.5	39.9
	Urban	Rural	Total
<b>7. Ensure environmental sustainability</b>			
7.8 Percentage of population using an improved drinking water source <sup>14</sup>	89.2	46.9	63.1
7.9 Percentage of population with access to improved sanitation <sup>15</sup>	39.2	19.7	27.3

na = Not applicable

<sup>1</sup> The ratio is based on reported attendance, not enrollment, in primary education among primary school age children (7-13 years). The rate also includes children of primary school age enrolled in secondary education. This is a proxy for MDG indicator 2.1, Net enrollment ratio.

<sup>2</sup> Refers to respondents who attended secondary school or higher or who could read a whole sentence or part of a sentence

<sup>3</sup> Based on reported net attendance, not gross enrollment, among 6-12-year-olds for primary, 13-17-year-olds for secondary, and 18-22-year-olds for tertiary education

<sup>4</sup> Expressed in terms of deaths per 1,000 live births. Mortality by sex refers to a 10-year reference period preceding the survey. Mortality rates for males and females combined refer to the five-year period preceding the survey.

<sup>5</sup> Expressed in terms of maternal deaths per 100,000 live births in the seven-year period preceding the survey

<sup>6</sup> Among births in the five years preceding the survey

<sup>7</sup> Percentage of currently married women age 15-49 using any method of contraception

<sup>8</sup> Equivalent to the age-specific fertility rate for women age 15-19 for the three years preceding the survey, expressed in terms of births per 1,000 women age 15-19

<sup>9</sup> With a skilled provider

<sup>10</sup> With any health care provider

<sup>11</sup> High-risk sex refers to sexual intercourse with a non-marital, non-cohabitating partner. Expressed as a percentage of men and women age 15-24 who had higher-risk sex in the past 12 months.

<sup>12</sup> Comprehensive knowledge means knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus.

<sup>13</sup> Measured as the percentage of children age 0-59 months who were ill with a fever in the two weeks preceding the interview and who received any antimalarial drug

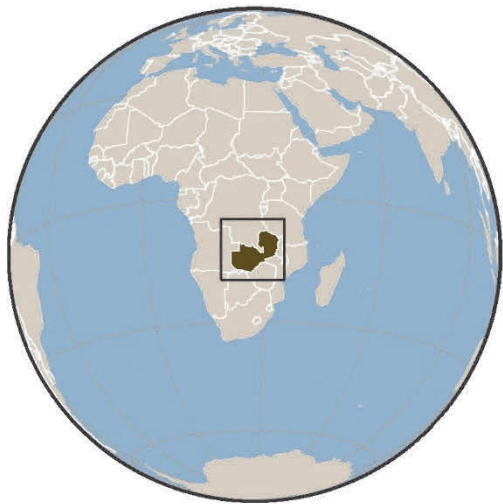
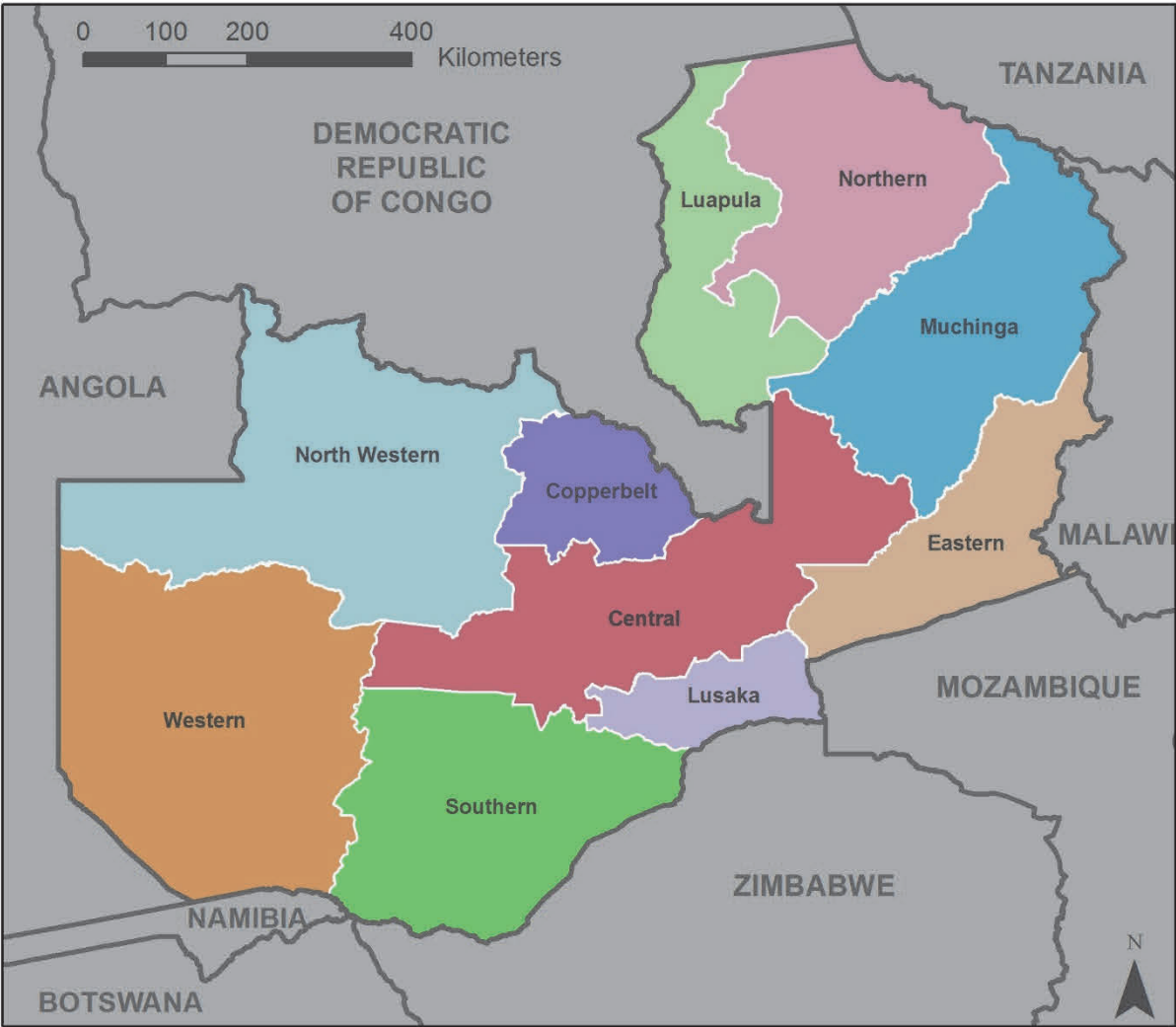
<sup>14</sup> Percentage of de jure population whose main source of drinking water is a household connection (piped), public tap or standpipe, tubewell or borehole, protected dug well, protected spring, rainwater collection, or bottled water.

<sup>15</sup> Percentage of de jure population whose household has a flush toilet, ventilated improved pit latrine, pit latrine with a slab, or composting toilet and does not share its facility with other households

<sup>a</sup> Restricted to men in a subsample of households selected for the male interview

<sup>b</sup> The total calculated as the simple arithmetic mean of the percentages in the columns for male and females

# ZAMBIA





# INTRODUCTION

---

## 1.1 HISTORY, GEOGRAPHY, AND ECONOMY

### 1.1.1 History

Zambia was originally inhabited by Khoisan peoples, and in the 13th century it was occupied by Bantu-speaking horticulturalists. Following visits by European explorers in the 18th century, Zambia became the British protectorate of Northern Rhodesia toward the end of the 19th century. The country was governed by an administration appointed from London with the advice of the British South Africa Company. In 1924, the British Colonial Office assumed responsibility for administering the territory. In 1953, Northern Rhodesia (Zambia) and Southern Rhodesia (Zimbabwe) joined Nyasaland (Malawi) to form the Central African Federation of Rhodesia and Nyasaland, despite the opposition of Northern Rhodesia's Africans. This federation was dissolved in 1963.

On October 24, 1964, Zambia gained political independence and adopted a multiparty system of government. The country became a one-party state in 1972 before once again adopting the multiparty system of government in 1991, beginning a period of social-economic growth and government decentralisation.

### 1.1.2 Geography

Zambia is a land-locked country in sub-Saharan Africa that borders the Democratic Republic of Congo to the north, Tanzania to the northeast, Malawi and Mozambique to the east, Zimbabwe and Botswana to the south, Namibia to the southwest, and Angola to the west. Zambia covers a land area of 752,612 square kilometres. Administratively, the country is divided into 10 provinces and 74 districts. Of the 10 provinces, two are predominantly urban, namely Lusaka and Copperbelt. The remaining provinces—Central, Eastern, Muchinga, Northern, Luapula, North Western, Western, and Southern—are predominantly rural. The capital city is Lusaka, in the south-central part of the country.

Zambia lies between 8 and 18 degrees south latitude and between 20 and 35 degrees east longitude. It has a tropical climate and vegetation with three distinct seasons: the cool dry winter from May to August, a hot dry season during September and October, and a warm wet season from November to April.

There are several major rivers in Zambia that are the main sources of water: the Zambezi, Kafue, Luangwa, and Luapula. The country also has major lakes such as Tanganyika, Mweru, Bangweulu, and the man-made Kariba. The northern part of the country has the highest rainfall, with an annual average ranging from 1,100 mm to over 1,400 mm. The southern and eastern parts of the country have the least rainfall, ranging from 600 mm to 1,100 mm annually, which sometimes result in droughts.

### 1.1.3 Economy

Zambia has a mixed economy consisting of a rural agricultural sector and a modern urban sector that, geographically, follows the rail line. Currently, construction sector contributes 14 percent of the gross domestic product (GDP), agriculture contributes 9 percent of the GDP, manufacturing sector and mining each contribute 8 percent of the GDP (CSO, 2014).

For many years, the modern sector was dominated by parastatal organisations, while private businesses dominated the construction and agriculture sectors. Historically, the country's economy has been based on the copper mining industry, accounting for 95 percent of annual export earnings and contributing 45 percent of government revenues during the decade following independence (1965-1975).

The country's economy deteriorated in the mid-1970s after a sharp decline in copper prices and a sharp increase in oil prices. The creation of import substitution parastatals with the goal of minimising the country's dependency on copper exports and diversifying the economy did not achieve the desired results. In the midst of a stagnating economy, Zambia began to implement vigorous structural adjustment programmes; however, these programmes failed to substantially alter the economy and led to increased levels of poverty for the majority of Zambians.

In the mid-1990s, an economic recovery programme led to sustained positive economic growth and improved living standards. The performance of the Zambian economy improved further during the implementation of the Poverty Reduction Strategy Plan and the Transitional National Development Plan from 2002 to 2005. Both strategies serve as frameworks for economic and social development. Real GDP growth averaged 5 percent per year, up from an annual average of 2 percent in the preceding years.

The subsequent development plan (2006-2010), the Fifth National Development Plan, arose from the need to institute a strategy that would focus on "broad-based wealth and job creation-through citizenry participation and technological advancement." The strategy was based on rising economic growth amidst high poverty levels (MoFNP, 2006). Annual average economic growth reached 6 percent during 2006-2010 as a result of prudent macroeconomic management, market liberalisation, privatisation efforts, expansion of investments in the copper mining industry and related infrastructure, and a steep increase in copper prices (MoFNP, 2013).

The Sixth National Development Plan (SNDP), covering the period 2011-2015, was partially implemented between 2011 and 2013 with the aim of achieving sustained economic growth and poverty reduction through infrastructure and human development (MoFNP, 2011). In its pursuit to improve the quality of life for all, the government of the Republic of Zambia is currently implementing the Revised Sixth National Development Plan (R-SNDP) for the period 2013-2016. The R-SNDP identifies primary growth areas, including skill development, agriculture, and infrastructural development, and focuses on enhancing the water and sanitation, education, and health sectors (MoFNP, 2014).

According to the Living Conditions Monitoring Survey 2010, 60 percent of Zambians are classified as poor. In the Zambian context, poverty is defined as lack of access to income, employment opportunities, and entitlements, including freely determined consumption of goods and services, shelter, and other basic needs. As of 2010, poverty continued to be more prevalent among rural than urban residents (78 percent and 28 percent, respectively) (CSO, 2011).

## 1.2 POPULATION

Table 1.1 presents selected demographic indicators from the 1980, 1990, 2000, and 2010 Zambia Population and Housing Censuses. The 2010 census reported a population of 13.1 million and a population growth rate of 3 percent per annum. The population increased steadily from 5.7 million in 1980 to 13.1 million in 2010. During the 2000-2010 intercensal period, growth rates varied by province, ranging from 2 percent in Western to 5 percent in Lusaka (CSO, 2012).

The population density in Zambia increased from 8 people per square kilometre in 1980 to 17 in 2010. Average density by province in 2010 ranged from a high of 100 people per square kilometre in Lusaka to a low of six people per square kilometre in North Western. In addition to being the most densely populated provinces, Lusaka and Copperbelt are also the most urbanised.

**Table 1.1 Demographic characteristics**

Selected demographic indicators, Zambia 1980, 1990, 2000, and 2010

Indicator	Census year			
	1980	1990	2000	2010
Population (millions)	5.7	7.8	9.9	13.1
Density (population/ km <sup>2</sup> )	7.5	10.4	13.1	17.4
Percent urban	39.9	38.0	35.0	39.5
Total fertility rate	7.2	6.7	6.0	5.9
Completed family size (women age 45-49)	6.6	7.1	6.9	6.0
Infant mortality rate	97	123	110	76
<b>Life expectancy at birth</b>				
Male	50.4	46.1	48.0	49.2
Female	52.5	47.6	52.0	53.4

Source: Central Statistical Office, 1985a, 1985b, 1995, 2002, 2003, 2012

The proportion of the population living in urban areas was 40 percent in 2010, an increase from 35 percent in 2000. The proportion of the urban population varies by province, from 13 percent in Eastern and Western to 85 percent in Lusaka (CSO, 2012).

The estimated total fertility rate of 7.2 births per woman in 1980 declined steadily to 5.9 births per woman in 2010. The 2010 census reported a life expectancy at birth of 49 years for males and 53 years for females. Overall life expectancy at birth ranged from 45 years in Luapula to 56 years in Southern (CSO, 2012).

### **1.3 THE POPULATION POLICY AND NATIONAL POPULATION AND DEVELOPMENT PROGRAMME OF ACTION**

The results of the 1980 Population and Housing Census emphasised the rapidity with which the population was expanding and the implied adverse effect on development and individual welfare. This led the government to reappraise the role of population in national development efforts. In 1984, the then National Commission for Development Planning (NCDP) was given a mandate to initiate a draft population policy that would aim at achieving a population growth rate consistent with the growth rate of the economy (NCDP, 1991). The National Population Policy was accepted in May 1989. Since then, the country's population growth rate has remained high and continues to be a serious impediment to sustainable development.

The demographic factors and other emerging issues, such as rapid urbanisation, gender concerns, and HIV/AIDS, that began unfolding in the 1990s were major obstacles to ensuring improved quality of life among Zambia's population. In an effort to address these issues, the process of revising the population policy commenced in December 1996, based on issues adopted by the 1994 Cairo International Conference on Population and Development. The new objectives of the policy took into account concerns regarding HIV and AIDS, poverty, reproductive health, the environment, unemployment, gender issues, and a global perspective on population and development.

The National Population Policy was revised in 2007 with the vision of improving quality of life in Zambia through improved population trends and socioeconomic development. The main objectives of the policy are to:

- Integrate population variables, reproductive health (including family planning), gender, and HIV/AIDS into development planning and programme implementation processes, especially in education, health, and agriculture.
- Reduce the incidence of morbidity and mortality, particularly maternal, infant, and child mortality.
- Reduce the high level of fertility, particularly adolescent fertility.
- Improve sexual and reproductive health (including family planning) so as to encourage a manageable family size.
- Improve and maintain the nation's population database.
- Achieve a more even distribution of the population between rural and urban areas and regulate international migration (MoFNP, 2007).

### **1.4 HEALTH PRIORITIES AND PROGRAMMES**

The high disease burden in Zambia is compounded by the high prevalence of HIV, high poverty levels, and the poor macroeconomic situation. The government of the Republic of Zambia is committed to

improving the quality of life for all Zambians, and this commitment is demonstrated through the government's efforts to improve health care delivery by reforming the health sector. In 1991, the government launched radical health policy reforms characterised by a move from a strongly centralised health system in which the central structures provided support and national guidance to the peripheral structures. An important component of health policy reform is the restructured primary health care programme. The government is committed to providing efficient and cost-effective quality basic health care services for common illnesses as close to the family as possible through implementation of the Basic Health Care Package (BHCP) at all levels of care. Currently, the following priority health service areas have been identified for inclusion in the BHCP: nutrition; environmental health; control and management of communicable diseases; malaria; tuberculosis (TB); epidemic and disaster prevention, preparedness, and response; school health; and oral health. The elements of the BHCP are selected on the basis of an epidemiological analysis of diseases and conditions that cause the highest burden of morbidity and mortality. Population-based and health facility-based surveys are regularly and consistently conducted to guide policy and planning.

The Ministry of Health (MoH) has embarked on the 2011-2015 National Health Strategic Plan (NHSP), aimed at reducing the disease burden and accelerating the attainment of the Millennium Development Goals and other national priorities. The plan represents a major departure from past strategic plans. While it is recognised that all health care interventions are important and should continue to receive the necessary levels of support, prioritisation of interventions is of critical importance as the resources and capabilities available are significantly constrained. The NHSP places emphasis on addressing human resource crises; improving the state of the health care infrastructure; fostering multisectoral responses in key areas such as nutrition, HIV/AIDS, control of epidemics, and health education; and increasing access to basic environmental health facilities such as water and sanitation, electricity, and telecommunication. The plan includes an increased focus on establishing effective, strong, and sustainable partnerships among all key stakeholders involved in health service delivery in Zambia (MoH, 2011).

The NHSP groups priority areas into four major categories: human resources, health service delivery interventions, clinical care and diagnostic service priority interventions, and priority integrated support systems.

The objectives under these health priority areas are to:

- Reduce the under-5 mortality rate from the current 119 deaths per 1,000 live births to 63 deaths per 1,000 live births by 2015.
- Reduce the maternal mortality ratio from the current 591 deaths per 100,000 live births to 159 deaths per 100,000 live births by 2015.
- Increase the proportion of rural residents living within 5 km of a health facility from 54 percent in 2004 to 70 percent by 2015.
- Reduce the population/doctor ratio from the current 17,589 to 10,000 by 2015.
- Reduce the population/nurse ratio from the current 1,864 to 700 by 2015.
- Reduce the incidence of malaria from 252 cases per 1,000 population in 2008 to 75 by 2015.
- Increase the percentage of deliveries assisted by skilled health personnel from 45 percent in 2008 to 65 percent by 2015.
- Reduce the prevalence of non-communicable diseases associated with identifiable behaviours.

## **1.5 STRATEGIC FRAMEWORK TO COMBAT THE NATIONAL HIV/AIDS EPIDEMIC**

Zambia, like many sub-Saharan countries, has been adversely affected by the HIV/AIDS pandemic. The first AIDS case in Zambia was diagnosed in 1984. For the last three decades, the government of the Republic of Zambia has been committed to responding to the HIV/AIDS epidemic, in collaboration with national and international partners. Several national plans have been developed to respond to the epidemic: (1) the Emergency Short-Term Plan, developed in 1987 to ensure safe blood and blood product supplies; (2) the MTP1 and MTP2 medium-term plans, covering the periods 1988-1992 and 1994-1998, respectively; (3) and the National HIV/AIDS Intervention Strategic Plan and National Monitoring and Evaluation Plan, covering the period 2002-2005.

In December 2002, the Parliament established the National HIV/AIDS/STI/TB Council (NAC) to coordinate and support development, monitoring, and evaluation of the multisectoral national response to HIV/AIDS, sexually transmitted infections (STIs), and TB. In 2005, the National HIV/AIDS Policy was established to provide the directive and mandate for the national response. In 2006, the government created the National HIV/AIDS/STI/TB Monitoring and Evaluation Plan for 2006-2010. The plan was developed to prevent, halt, and begin to reverse the spread of HIV by 2010. The plan defines six themes describing priority action areas: (1) intensifying prevention; (2) expanding treatment, care, and support; (3) mitigating the socioeconomic impact of HIV/AIDS; (4) strengthening decentralised responses and mainstreaming HIV/AIDS; (5) improving monitoring of responses; and (6) integrating advocacy and coordination of multisectoral responses. To facilitate effective coordination, the NAC developed the National HIV/AIDS Monitoring and Evaluation System, allowing the country to track its progress toward the plan's goals and objectives.

In response to the high morbidity and mortality associated with HIV infection, the Ministry of Health began to distribute free antiretroviral drugs in two major public health care facilities in 2005 (MoH/NAC, 2008). Distribution of highly effective antiretroviral therapy (ART) has since been scaled up to include almost all of the districts in Zambia. A laboratory infrastructure for basic assessment and monitoring of HIV-positive patients has been set up in almost all provincial hospitals. The MoH has expanded quality services for prevention of mother-to-child transmission of HIV, voluntary HIV counselling and testing, ART, and other treatment and care services. The Ministry of Health also encourages joint implementation of TB-HIV programme activities, given the cross-cutting nature of the two conditions, including early and improved detection of TB, strengthening of TB diagnostic capacity, and surveillance for multidrug-resistant TB.

The 2011-2015 National HIV and AIDS Strategic Framework, launched in 2010, emphasises a multisectoral and decentralised response to the AIDS epidemic. Four national priorities for tackling the epidemic have been identified. The first priority is to accelerate and intensify prevention in order to reduce annual rates of new HIV infections. The second is to accelerate universal access to comprehensive treatment, care, and support for people living with HIV/AIDS, as well as their caregivers and families. Comprehensive treatment and care for TB, STIs, and other opportunistic infections is emphasised. The third priority is to mitigate the socioeconomic impact of HIV/AIDS, especially among the most vulnerable groups (such as orphans and vulnerable children, people living with HIV/AIDS, and their caregivers and families). The final priority is to strength the capacity for a well-coordinated and sustainably managed multisectoral response to HIV/AIDS (MoH/NAC, 2010).

## **1.6 OBJECTIVES AND ORGANISATION OF THE SURVEY**

### **1.6.1 Objectives**

The Zambia Demographic and Health Survey (ZDHS) is a nationally representative sample survey of women and men of reproductive age. The main objective is to provide information on levels and trends in fertility, childhood mortality, use of family planning methods, maternal and child health indicators

including HIV/AIDS. This information is necessary for programme managers, policymakers, and implementers to monitor and evaluate the impact of existing programmes and to design new initiatives for health policies in Zambia.

The primary objectives of the 2013-14 ZDHS are:

- To collect up-to-date information on fertility, infant and child mortality, and family planning.
- To collect information on health-related matters such as breastfeeding, antenatal care, children's immunisations, and childhood diseases.
- To assess knowledge of contraceptive practices among women.
- To assess the nutritional status of mothers and children.
- To improve understanding of variations in HIV seroprevalence levels according to social and economic characteristics and behavioural risk factors.
- To estimate levels of HIV incidence in the general population of adults.<sup>1</sup>
- To estimate unmet need for antiretroviral treatment.

In the case of HIV/AIDS, the testing component of the 2013-14 ZDHS was undertaken to provide information to address the monitoring and evaluation needs of government and nongovernmental programmes dealing with HIV/AIDS. It also provides programme managers and policymakers with the information they need to effectively plan and implement future interventions. The overall objective was to collect high-quality and representative data on knowledge, attitudes, and behaviours regarding HIV/AIDS and other STIs and on the prevalence and incidence of HIV among women and men.

### **1.6.2 Organisation**

The 2013-14 ZDHS was implemented by the Central Statistical Office in partnership with the Ministry of Health, the University of Zambia Teaching Hospital (UTH) Virology Laboratory, the Tropical Diseases Research Centre (TDRC), and the Department of Population Studies at the University of Zambia (UNZA) under the overall guidance of the National Steering Committee. A technical committee provided technical guidance to the survey. The TDRC and the UTH Virology Laboratory provided technical support in the implementation of HIV testing. The government of Zambia, through the Ministry of Health and the Ministry of Finance, provided funding for the survey. Cooperating partners, namely the U.S. Centers for Disease Control and Prevention (CDC), the United Nations Children's Fund (UNICEF), and the United Nations Population Fund (UNFPA), provided additional funds. The Demographic and Health Surveys Program at ICF International, which is funded by the United States Agency for International Development (USAID), provided technical assistance in the areas of survey design, sample design, questionnaire design, interviewer training, fieldwork logistics, blood specimen collection, laboratory testing, and data processing and analysis. The CDC provided technical assistance with HIV protocol development, as well as technical support to the TDRC and the UTH Virology Laboratory during laboratory testing.

While significantly expanded in size and content, the 2013-14 ZDHS is a follow-up to the 1992, 1996, 2001-02, and 2007 ZDHS surveys and provides updated estimates of basic demographic and health indicators covered in the earlier surveys. The 2013-14 survey is the third ZDHS to measure HIV prevalence in Zambia and the first to measure HIV incidence. It is also the third survey that includes information on violence against women.

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<sup>1</sup> The HIV incidence results are published in a separate addendum to this report.

## 1.7 SAMPLE DESIGN

The sample for the 2013-14 ZDHS was designed to provide estimates at the national and provincial levels, as well as for rural and urban areas within the provinces. This is the first time the ZDHS has been designed to provide estimates at such disaggregated levels for many of the survey indicators. The updated list of enumeration areas (EAs) for the 2010 Population and Housing Census provided the sampling frame for the survey. The frame comprises 25,631 EAs and 2,815,897 households. An EA is a convenient geographical area with an average size of 130 households or 600 people. For each EA, information is available on its location, type of residence (rural or urban), number of households, and total population. Each EA has a cartographical map with delimited boundaries and main landmarks of the area. A 2013-14 ZDHS cluster is essentially representative of an EA.

A representative sample of 18,052 households was drawn for the 2013-14 ZDHS. The survey used a two-stage stratified cluster sample design, with EAs (or clusters) selected during the first stage and households selected during the second stage. In the first stage, 722 EAs (305 in urban areas and 417 in rural areas) were selected with probability proportional to size. Zambia is now administratively divided into 10 provinces (Central, Copperbelt, Eastern, Luapula, Lusaka, Muchinga,<sup>2</sup> Northern, North Western, Southern, and Western). Stratification was achieved by separating each province into urban and rural areas. Therefore, the 10 provinces were stratified into 20 sampling strata. In the second stage, a complete list of households served as the sampling frame in the selection of households for enumeration. An average of 25 households was selected in each EA. It was during the second stage of selection that a representative sample of 18,052 households was selected.

Prior to selection, EAs were stratified by province and then into urban and rural areas. A complete listing of households in each selected cluster, along with a mapping exercise, was conducted from November 2012 to January 2013 by listers and mappers from the CSO Geographic Information Branch. All private households were listed. The listing excluded people living in institutional dwelling units (such as army barracks, hospitals, police camps, and boarding schools). The listing teams recorded geographic coordinates for each sampled cluster (centroid) using Global Positioning System (GPS) receivers.

All women age 15-49 and men age 15-59 who were either permanent residents of the households or visitors present in the households on the night before the survey were eligible to be interviewed. In addition, a subsample of one eligible woman in each household was randomly selected to be asked additional questions on domestic violence.

All women and men who were eligible for interviews were asked if they would voluntarily give a finger prick blood sample to allow HIV prevalence estimation from dried blood spot (DBSs). If they consented to DBS collection, they were also offered home-based counselling and testing for HIV with rapid HIV tests. Venous blood was also collected for CD4 counts. Venous blood was processed in the field laboratory, and respondents were given their CD4 count results. Both DBS and venous blood samples were transferred to either the UTH Virology Laboratory or the TDRC laboratory for HIV testing.

As a means of assessing nutritional status, height and weight measurements were taken for all children age 0-59 months and women age 15-49 who were usual residents of or visitors in the household.

## 1.8 QUESTIONNAIRES

Three questionnaires were used in the 2013-14 ZDHS: the Household Questionnaire, the Woman's Questionnaire, and the Man's Questionnaire. The three instruments were based on the questionnaires developed by the Demographic and Health Surveys Program and adapted to Zambia's specific data needs. The questionnaires were translated into seven major languages: Bemba, Kaonde, Lozi,

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<sup>2</sup> Muchinga is a new province in Zambia; some of the province's districts were part of Northern and Eastern in the 2007 ZDHS.

Lunda, Luvala, Nyanja, and Tonga. Questionnaires and field procedures were pretested prior to implementation of the main survey.

The Household Questionnaire was used to collect data such as:

- Age, sex, marital status, and education of all usual members and visitors
- Current school attendance and survivorship of parents among children under age 18
- Characteristics of the structural dwelling/housing unit
- Sanitation facilities and source of water
- Ownership of durable goods, land, and livestock
- Ownership and use of mosquito nets

The Household Questionnaire was also used to record biomarker data, including height and weight data for children and women and HIV and CD4 testing information for women and men. Data on age and sex of household members were used to identify the women and men eligible for individual interviews.

The Woman's Questionnaire was used to collect information from all women age 15-49. Women were asked questions on the following main topics:

- Background characteristics (age, religion, education, literacy, media exposure, etc.)
- Reproductive history
- Knowledge, use, and source of family planning methods
- Fertility preferences
- Maternal health (antenatal, delivery, and postnatal care)
- Fistula prevalence
- Breastfeeding and infant feeding practices
- Child immunisation and childhood illnesses
- Treatment of malaria
- Child mortality
- Marriage and sexual activity
- Women's work and husbands' background characteristics
- Awareness of AIDS and other STIs
- Other health issues (e.g., tuberculosis, injection safety, and smoking)
- Maternal mortality
- Domestic violence

The Man's Questionnaire was administered to all men age 15-59. It collected much of the same information as the Woman's Questionnaire but it did not contain a detailed reproductive history or questions on maternal and child health or nutrition.

## **1.9 HIV AND CD4 CELL COUNT TESTING**

In the 2013-14 ZDHS, dried blood spot (DBS) samples were collected for voluntary HIV testing for prevalence from all consenting, eligible women and men in all selected survey households. In addition, venous blood specimens were collected from consenting men and women who tested HIV-positive on a rapid diagnostic test (RDT) in the household. The protocol for blood specimen collection, CD4 measurement, and HIV testing was reviewed and approved by the TDRC Ethical Review Committee, the Institutional Review Board of ICF International, and the CDC.

### **1.9.1 CD4 Measurement and Blood Collection for HIV Incidence Testing**

A nurse/nurse counsellor and a laboratory technician were part of each of the 24 ZDHS field teams to provide testing and counselling for HIV in the household using rapid tests (among consenting



men and women) and CD4 cell count measurement. The nurse/nurse counsellors and laboratory technicians were recruited through the Ministry of Health and had experience in venous blood collection and testing. According to the ZDHS protocol, rapid HIV testing was conducted in the field by the nurse counsellor, following the national HIV testing algorithm. To ascertain HIV infection status, a blood sample obtained from a fingertip using a retractable, safety lancet from consenting respondents was used for concurrent HIV testing with Determine™ HIV-1/2 (Alere Healthcare) and Uni-Gold™ HIV-1/2 (Trinity Biotechnology). Field rapid HIV testing was performed only among respondents who had also consented to provide a blood sample for HIV prevalence testing in a central laboratory, and who had agreed to the rapid HIV test in a separate consent statement.

If a respondent consented to HIV testing and either of the rapid HIV tests was HIV reactive (positive), permission to conduct a venous blood draw for CD4 cell count measurement was requested. The blood specimens were given a bar code label unique to the respondent; this label was identical to the one attached to the individual's questionnaire and to the filter paper card with the dried blood spots used for laboratory HIV prevalence testing. CD4 cell count testing was performed in a field laboratory using the PIMA Point of Care CD4 machine (Alere Healthcare, Waltham, Massachusetts, USA). HIV positive respondents were referred to the nearest health facility to present their CD4 cell count and for further assessment (if they were not already receiving treatment). Plasma was separated from the left-over venous whole blood samples that were collected from all HIV-positive blood samples, stored in cryo vials, and labelled with appropriate bar codes. The plasma samples were then frozen in liquid nitrogen tanks and transported to the CSO for logging in and, subsequently, the UTH Virology and the Tropical Diseases Research Centre (TDRC) laboratories for HIV incidence testing.

### **1.9.2 HIV Prevalence Testing**

The protocol for blood specimen collection and analysis was based on the anonymous linked protocol developed by ICF International. This protocol allows for the merging of HIV test results with sociodemographic data collected in the individual questionnaires, provided that information that could potentially identify an individual is destroyed before the linking takes place. Eligible women and men who consented to HIV testing were asked to voluntarily provide five drops of blood from a finger prick for anonymous testing.

Interviewers explained the procedure, the confidentiality of the data, and the fact that the DBS-based HIV test results for prevalence would not be made available to the respondent. They also explained to respondents that they had the option of having their DBS sample stored for use in additional future testing. If a respondent consented to the testing, blood obtained from a finger prick was used to prepare five blood spots on a filter paper card labelled with a bar code unique to the respondent. If the respondent did not consent to additional testing using his or her sample, the words "no further testing" were written on the filter paper card. Each household, whether individuals consented to HIV testing or not, was given an information brochure on HIV/AIDS and a list of nearby sites providing voluntary counselling and testing services.

Each DBS sample was given a bar code label, and a duplicate label was attached to the Woman's or Man's Questionnaire. A third copy of the bar code was affixed to the blood sample transmittal form to track the blood samples from the field to the laboratory. Blood spots prepared on pre-marked circles on filter paper cards were dried overnight, and the resulting DBS was packaged for storage the following morning. Samples were periodically collected in the field along with the completed questionnaires and transported to CSO headquarters in Lusaka to be logged in, checked, and then transported to the UTH Virology Laboratory in Lusaka (for testing of samples collected in Central, Eastern, Lusaka, Central, Southern, and Western provinces) or the Immunology Laboratory at the TDRC in Ndola (for testing of samples collected in Copperbelt, Luapula, Muchinga, Northern, and North Western provinces).

The processing of DBS samples for HIV testing at the TDRC and UTH Virology laboratories was handled by 10 laboratory personnel. Each DBS sample was logged into the CSPro HIV Test Tracking System (CHTTS) database, assigned a unique laboratory number, and stored at -20°C. HIV prevalence testing on all samples was conducted between April and October 2014. Testing followed the completion of data processing, ensuring that all unique identifiers other than the bar code number had been removed from the questionnaire file.

Before commencement of HIV prevalence testing, laboratory staff were trained (by an HIV prevalence testing expert from ICF International) on DBS elution, enzyme-linked immunosorbent assay (ELISA) protocols, and Western blot HIV testing. During the HIV testing period, selected ELISA test results from the TDRC and UTH Virology laboratories were reviewed by the HIV prevalence testing expert.

Fourth-generation ELISA HIV test kits were used for screening and confirmatory testing of the DBS samples. All samples were tested on the first assay, Vironostika® HIV Antigen/Antibody Combination Assay (Biomerieux). A negative result on the first test was considered negative and no further testing was done on the sample, unless it was selected for internal quality control. All samples with positive results on the first test were subjected to a second ELISA, Enzygnost® HIV Integral II Assay (Dade Behring), for confirmatory testing. Positive samples on the second test were considered positive.<sup>3</sup> Ten percent of samples that were negative on Vironostika were retested on the Enzygnost. If the results of the first and second tests were discordant, the sample was retested on both the Vironostika and Enzygnost ELISA tests. If the results of both the repeated first and second tests were negative, the sample was rendered negative. If both were positive, the sample was rendered positive. If there was still a discrepancy in the results after the repeated tests, a third test, the Western Blot 2.2 (Abbott Labs), was used to resolve the discordance. The final result was rendered positive if the Western Blot 2.2 confirmed the result as positive, and it was rendered negative if the Western blot was negative. If the result of the Western blot was indeterminate, the final result of the sample was indeterminate.

To ensure the quality and validity of the test results, positive and negative serum controls supplied by the manufacturer with the test kits were included on each plate of samples tested. In addition, known HIV-negative, low-positive, and high-positive DBS controls obtained from the CDC were included on each plate of samples tested. The HIV test results for the 2013-14 ZDHS were entered into a CHTTS database with the bar code as the unique identifier. Data from the HIV testing and linked demographic and health data are included in this report.

### **1.9.3 HIV Incidence Testing**

#### *HIV Incidence Testing*

Although the “gold standard method” for HIV incidence testing is follow-up of a cohort of HIV-negative persons with periodic repeated testing, recent infection testing algorithms based on measuring a biomarker indicating recent HIV infection among individuals participating in a cross-sectional survey offer another way to estimate incidence. To distinguish recent from long-term HIV infections, plasma specimens were tested using the Sedia LAg-Avidity EIA (LAG).

Respondents from whom plasma specimens were collected during the 2013-14 ZDHS were offered counselling and testing for HIV in the household using rapid tests based on the national HIV testing algorithm. The specimens were further tested at the central lab using Vironostika HIV

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<sup>3</sup> Since the time that the 2013-14 Zambia DHS HIV testing protocol was approved by MoH, concerns have been raised that ELISA tests may overestimate HIV prevalence and that a more specific third test be used to confirm all samples rendered positive by ELISA tests (CDC, 2014). To the extent that this concern is valid it would also apply to the 2001-02 and 2007 Zambia DHS surveys that included HIV testing based on the same protocol as the 2013-14 ZDHS.

Antigen/Antibody Combination Assay to confirm the presence of HIV. Only those plasma specimens that were confirmed as HIV-1 positive were tested using the Sedia LAg-Avidity EIA.

Classification of HIV-1 positive plasma specimens as recent or long-term HIV infection was dependent on the normalised optical density (ODn) from screening and confirmatory LAg testing. LAg-screened specimens with ODn greater than 2.0 were classified as long-term infection. LAg-screened specimens with ODn less than or equal to 2.0 were confirmed in triplicate. LAg-confirmed specimens with median ODn of less than or equal to 1.5 were classified as preliminary recent infection; those with median ODn greater than 1.5 were classified as long-term infection. Specimens whose screening and confirmatory LAg results were significantly discordant were retested in triplicate. The HIV serostatus of specimens with final ODn of less than or equal to 0.4 was confirmed by retesting the sample using Alere Determine™ HIV-1/2 because testing of HIV-negative specimens with the LAg test will result in misclassification of these specimens as recent HIV infections. Any HIV-negatives were moved to the HIV negative category for incidence calculation.

Elite controllers and those on ART can potentially misclassify as recent HIV infection; for this reason, all confirmed HIV-1 positive specimens preliminarily classified as recent by LAg testing were further tested for HIV-1 viral load (COBAS AmpliPrep/COBAS TaqMan HIV-1 Test, Version 2.0). Those identified to have a viral load less than 1000 copies/mL may represent elite controllers or individuals on ART and were reclassified as long-term infection. Specimens with LAg ODn less than or equal to 1.5 and a viral load greater than or equal to 1000 copies/mL were finally classified as recent HIV infection. Annualised HIV incidence estimates (overall and by province) were computed using a modified Welte formula.

To ensure the credibility of LAg testing, technicians at the TDRC and UTH Virology laboratories were trained for five days by an HIV incidence testing expert from the CDC. During the training, laboratory staff were assessed with respect to their competency and proficiency in LAg testing and data management. Additionally, all HIV incidence test results from the TDRC and UTH Virology laboratories were reviewed by incidence testing experts at the CDC.

The HIV incidence results are published in a separate addendum to this report.

## **1.10 PRETEST ACTIVITIES**

The 2013-14 ZDHS was significantly expanded in content and included collection of samples for HIV prevalence testing as well as samples for HIV incidence testing and CD4 measurement. Venous blood samples for HIV incidence testing and CD4 measurement were collected only from consenting respondents who tested positive for HIV on an RDT performed at the household. A pretest was conducted to assess the survey instruments and procedures to be used in the main survey. The training and fieldwork for the pretest took place from November 4 to December 1, 2012. Fifteen interviewers (nine women and six men) were trained to administer the questionnaires, take anthropometric measurements, and collect blood samples for HIV testing. In addition, three laboratory technicians and three HIV nurse counsellors were trained to collect venous blood samples for CD4 measurement and HIV incidence testing. Representatives from the CDC and from the TDRC and UTH Virology laboratories assisted in training interviewers to perform finger pricks to collect samples for HIV testing. Furthermore, nurse counsellors were trained on proper handling and storage of dried blood spots and plasma prepared from venous blood. Resource personnel included professionals from the CDC, UNZA, CSO, MoH, Ministry of Gender, ICF International, National AIDS Council, TDRC, and Young Women's Christian Association (YWCA).

The pretest fieldwork was conducted in two urban and three rural clusters covering 104 households. Debriefing sessions were held with the pretest field staff, and modifications to the questionnaires were made based on lessons drawn from the exercise.

## **1.11 TRAINING OF FIELD STAFF**

The CSO and MoH recruited and trained 306 participants. The MoH provided nurses, HIV counsellors, and laboratory technicians, while the CSO provided non-medical interviewers and data processing staff. Training on the survey methodology was conducted over a five-week period in May and June 2013 by resource personnel from the CDC, CSO, MoH, TDRC, UTH Virology, and UNZA Population Studies. Prior to the training of field staff, a two-week training workshop was conducted for resource personnel (training of trainers). Field staff were trained to serve as supervisors, field editors, and interviewers. The training course consisted of instruction on interviewing techniques and field procedures, a detailed review of questionnaire items, instruction and practice in weighing and measuring children, mock interviews between participants in the classroom, and practice interviews with real respondents in areas outside the 2013-14 ZDHS sample clusters. Field practice in rapid HIV testing, CD4 measurement, and DBS specimen preparation for HIV testing was also conducted. During this period, field editors and team supervisors were provided with additional training in methods of field editing, data quality control procedures, and fieldwork coordination. Twenty-four supervisors, 24 editors, 72 female interviewers, 48 HIV counsellors, 24 laboratory technicians, and 48 male interviewers made up the 24 data collection teams (each comprising 10 people) for the 2013-14 ZDHS.

## **1.12 FIELDWORK**

The survey was undertaken by 24 field teams. The 24 interviewing teams carrying out data collection each consisted of one supervisor (team leader), one field editor, three female interviewers, two male interviewers, two nurses/nurse counsellors, one laboratory technician, and one driver. Four senior staff members from the CSO, assisted by seven other staff members, coordinated supervision of fieldwork activities. Three staff members from UNZA assisted in field supervision and monitoring. In addition, two ICF International staff members conducted field supervision activities. To monitor implementation of the 2013-14 ZDHS biomarker components, laboratory staff from the TDRC and UTH Virology periodically supervised and monitored field laboratory technicians with respect to their compliance with survey biomarker procedures. Data collection took place over an eight-month period, from August 2013 to April 2014.

## **1.13 DATA PROCESSING**

All questionnaires for the 2013-14 ZDHS were returned to the CSO headquarters in Lusaka for data processing, which consisted of office editing, coding of open-ended questions, data entry, and editing of computer-identified errors. Data processing staff included two data processing supervisors, 24 data entry clerks, five office editors, four secondary editors, one questionnaire administrator, and one biomarker administrator.

The processing of the data began in September 2013, one month after data collection commenced, and continued concurrently with the fieldwork. This offered an advantage because data were consistently checked and feedback was given to field teams, thereby improving data quality. Before being sent to the data processing centre in Lusaka, completed questionnaires were edited in the field by the field editors and checked by the supervisors. At the processing centre, data were edited and coded by office editors. Data were then entered using the CSPro computer package. All data were entered twice for 100 percent verification. This double entry of data enabled easy comparisons and identification of errors and inconsistencies. Inconsistencies were resolved by tallying the data with the paper questionnaire entries. Further inconsistencies that were identified were resolved through secondary editing of the data. The data files (excluding HIV testing data) were finalised in June 2014 after data cleaning.

## 1.14 RESPONSE RATES

The household and individual response rates for the 2013-14 ZDHS are shown in Table 1.2. A total of 18,052 households were selected from 722 clusters, of which 16,258 were occupied at the time of the fieldwork. Of the occupied households, 15,920 were successfully interviewed, yielding a household response rate of 98 percent.

In the interviewed households, a total of 17,064 women age 15-49 were identified as eligible for individual interviews, and 96 percent of these women were successfully interviewed. A total of 16,209 men age 15-59 were identified as eligible for interviews, and 91 percent were successfully interviewed. Individual response rates were slightly lower in urban areas than in rural areas.

Table 1.2 Results of the household and individual interviews			
Number of households, number of interviews, and response rates, according to residence (unweighted), Zambia 2013-14			
Result	Residence		Total
	Urban	Rural	
<b>Household interviews</b>			
Households selected	7,637	10,415	18,052
Households occupied	7,063	9,195	16,258
Households interviewed	6,957	8,963	15,920
Household response rate <sup>1</sup>	98.5	97.5	97.9
<b>Interviews with women age 15-49</b>			
Number of eligible women	8,212	8,852	17,064
Number of eligible women interviewed	7,871	8,540	16,411
Eligible women response rate <sup>2</sup>	95.8	96.5	96.2
<b>Interviews with men age 15-59</b>			
Number of eligible men	7,660	8,549	16,209
Number of eligible men interviewed	6,828	7,945	14,773
Eligible men response rate <sup>2</sup>	89.1	92.9	91.1

<sup>1</sup> Households interviewed/households occupied

<sup>2</sup> Respondents interviewed/eligible respondents

<sup>1</sup> Households interviewed/households occupied

<sup>2</sup> Respondents interviewed/eligible respondents



## Key Findings

- In Zambia, 65 percent of households have access to an improved source of drinking water.
- Twenty-five percent of households have an improved toilet facility that is not shared with other households.
- Twenty-eight percent of households have electricity.
- Fourteen percent of households are exposed daily to secondhand smoke.
- Half of the Zambian population is under age 15.

This chapter provides an overview of demographic and socioeconomic characteristics of the household population, including information on housing facilities and characteristics, household assets, wealth status, and education; these data serve as a basis for understanding the socioeconomic status of households. The chapter also presents information on birth registration, children's living arrangements, and children's educational attainment, helping to provide an understanding of the general social environment in which children live.

In the 2013-14 ZDHS, a household is defined as a person or a group of related and unrelated persons who usually live together in the same dwelling unit(s) or in connected premises, who acknowledge one adult member as the head of the household, and who have common cooking and eating arrangements.

Information was collected from all usual residents of a selected household (de jure population) as well as persons who had stayed in the selected household the night before the interview (de facto population). The difference between these two populations is very small, and all tables in this report refer to the de facto population unless otherwise specified, to maintain comparability with other DHS reports.

## 2.1 HOUSEHOLD CHARACTERISTICS

Access to basic utilities, sources of drinking water and water treatment practices, access to sanitation facilities, housing structure and crowdedness of dwelling spaces, and type of fuel used for cooking are physical characteristics of a household that are used to assess the general well-being and socioeconomic status of household members. Millennium Development Goal (MDG) 7, which focuses on environmental sustainability, is measured by the percentage of the population using solid fuels, the percentage with sustainable access to an improved water source, and the percentage with access to improved sanitation.

This section provides information from the 2013-14 ZDHS on household drinking water and sanitation facilities, hand-washing practices, housing characteristics, and possession of basic amenities and utilities.

### 2.1.1 Water and Sanitation

The basic determinants of better health, such as access to water, and sanitation, are still in a critical state in Zambia. Limited access to water and sanitation facilities accompanied by poor hygiene is associated with skin diseases, acute respiratory infections (ARIs), and diarrhoeal diseases, the leading preventable diseases. ARI and diarrhoeal diseases are among the leading causes of child deaths in Zambia (MoH, 2012a).

Table 2.1 presents the percent distribution of households and the de jure population, according to urban or rural setting, by source of drinking water, time taken to obtain drinking water, and water treatment practices adopted by households.

**Table 2.1 Household drinking water**

Percent distribution of households and de jure population by source of drinking water, time to obtain drinking water, and treatment of drinking water, according to residence, Zambia 2013-14

Characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Source of drinking water</b>						
<b>Improved source</b>	89.5	46.6	64.5	89.2	46.9	63.4
Piped into dwelling/yard/plot	40.8	1.9	18.1	41.4	1.6	17.2
Public tap/standpipe	33.5	2.1	15.2	31.9	2.0	13.7
Tube well or borehole	7.4	32.5	22.1	8.0	32.9	23.2
Protected dug well	6.7	9.4	8.3	6.9	9.6	8.5
Protected spring	0.3	0.6	0.5	0.3	0.7	0.5
Rainwater	0.0	0.1	0.0	0.0	0.1	0.0
Bottled water	0.8	0.0	0.3	0.7	0.0	0.3
<b>Non-improved source</b>	8.5	53.2	34.5	8.7	53.0	35.7
Unprotected dug well	6.8	30.3	20.5	6.9	30.5	21.3
Unprotected spring	0.8	5.4	3.5	0.9	5.4	3.6
Tanker truck/cart with small tank	0.0	0.2	0.1	0.1	0.2	0.1
Surface water	0.8	17.3	10.4	0.9	16.9	10.6
<b>Other</b>	1.8	0.0	0.7	2.0	0.0	0.8
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>Time to obtain drinking water (round trip)</b>						
Water on premises	46.8	9.5	25.1	47.6	9.8	24.6
Less than 30 minutes	40.1	59.7	51.5	39.1	59.3	51.4
30 minutes or longer	12.5	28.2	21.7	12.7	28.6	22.3
Don't know	0.6	2.3	1.6	0.6	2.1	1.6
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>Method for storing water</b>						
Does not store water	0.4	0.3	0.3	0.3	0.2	0.3
Closed container/jerry can	89.8	86.5	87.9	89.9	86.8	88.0
Open container/bucket	9.8	13.2	11.7	9.8	12.9	11.7
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>Water treatment prior to drinking<sup>1</sup></b>						
Boiled	25.3	7.6	15.0	25.5	7.6	14.6
Bleach/chlorine/chlorin added	33.2	16.7	23.6	35.4	17.3	24.4
Strained through cloth	0.1	0.2	0.2	0.2	0.2	0.2
Ceramic, sand or other filter	0.2	0.1	0.1	0.2	0.1	0.1
Other	1.2	0.8	1.0	1.2	0.8	0.9
No treatment	50.0	77.7	66.2	48.5	77.2	65.9
Percentage using an appropriate treatment method <sup>2</sup>	49.2	21.6	33.1	50.8	22.2	33.4
Number	6,640	9,280	15,920	31,977	49,698	81,675

Note: Totals may not sum to 100 percent because households with missing information have been deleted.

<sup>1</sup> Respondents may report multiple treatment methods, so the sum of treatment may exceed 100 percent.

<sup>2</sup> Appropriate water treatment methods include boiling, bleaching, filtering, and solar disinfecting.

Most households in Zambia (65 percent) obtain drinking water from an improved source. Households in urban areas have greater access to an improved source of drinking water than households in rural areas (90 percent versus 47 percent). There has been a notable increase in the percentage of households with access to an improved source of drinking water from 24 percent in 2007 to 65 percent in 2013-14.. The most common improved source of drinking water in urban areas is piped water. Water piped into a dwelling, yard, or plot was a source for 41 percent of households, while 34 percent accessed water from a public tap/standpipe. In contrast, a tube well or borehole is the most common improved source of drinking water in rural areas (33 percent). The most common non-improved source of drinking water is an unprotected dug well (21 percent). It is much more common in rural areas (30 percent) than in urban areas (7 percent).

Fifty-two percent of households spend less than 30 minutes to obtain drinking water, while 22 percent of households spend 30 minutes or longer. Accessing drinking water takes longer in rural areas (28 percent) than urban areas (13 percent).



Households that do not treat drinking water account for 66 percent. Rural households are more likely not to treat water before drinking (78 percent) compared with urban areas (50 percent). Adding bleach/chlorine/chlorin is the most common treatment method (24 percent), followed by boiling water prior to drinking (15 percent).

Ensuring adequate sanitation facilities is another MDG indicator that Zambia monitors like other countries. A household is classified as having an improved toilet if the toilet is used only by members of one household (i.e., it is not shared) and if the facility used by the household separates the waste from human contact (WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2012).

Table 2.2 presents information on household sanitation facilities by type of toilet/latrine. Among households interviewed, one in four (25 percent) has access to an improved (not shared) facility; one in five (20 percent) has access to a shared toilet facility; while 55 percent have access to a non-improved facility. Sixteen percent of households still use a bush or open field for defecation, but this is an improvement since 2007, when one in four households had no toilet facility. Rural households are more likely than urban households not to have a toilet facility (27 percent versus 2 percent).

**Table 2.2 Household sanitation facilities**

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Zambia 2013-14

Type of toilet/latrine facility	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Improved, not shared facility</b>						
Flush/pour flush to piped sewer system	17.3	0.4	7.5	18.8	0.3	7.6
Flush/pour flush to septic tank	6.8	0.6	3.2	7.7	0.6	3.4
Flush/pour flush to pit latrine	0.6	0.1	0.3	0.7	0.1	0.3
Ventilated improved pit (VIP) latrine	3.1	9.2	6.7	3.6	10.1	7.5
Pit latrine with slab	7.2	8.1	7.7	8.3	8.6	8.5
Total	35.0	18.5	25.4	39.2	19.7	27.3
<b>Shared facility<sup>1</sup></b>						
Flush/pour flush to piped sewer system	6.3	0.2	2.7	6.0	0.1	2.4
Flush/pour flush to septic tank	2.6	0.1	1.2	2.4	0.1	1.0
Flush/pour flush to pit latrine	1.1	0.1	0.5	0.9	0.1	0.4
Ventilated improved pit (VIP) latrine	7.6	3.6	5.2	6.7	3.3	4.6
Pit latrine with slab	20.4	3.3	10.4	17.8	2.9	8.7
Total	38.0	7.2	20.1	33.9	6.5	17.2
<b>Non-improved facility</b>						
Flush/pour flush not to sewer/septic tank/pit latrine	0.2	0.0	0.1	0.3	0.0	0.1
Pit latrine without slab/open pit	25.2	47.1	37.9	25.1	47.8	38.9
Hanging toilet/hanging latrine	0.0	0.2	0.1	0.0	0.2	0.1
No facility/bush/field	1.5	26.8	16.2	1.4	25.7	16.2
Total	27.0	74.2	54.5	26.9	73.9	55.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	6,640	9,280	15,920	31,977	49,698	81,675

Note: Totals may not sum up 100 percent because households with missing information have been deleted.

<sup>1</sup> Facilities that would be considered improved if they were not shared by two or more households.

## 2.1.2 Housing Characteristics

Housing characteristics and household assets can be used as a measure of the socioeconomic status of household members. Cooking practices and cooking fuels also affect the health of family members and the environment. For example, use of biomass fuels exposes household members to indoor pollution, which has a direct bearing on their health and surroundings.

Table 2.3 presents information on the availability of electricity, type of flooring material, number of rooms for sleeping, type of fuel used for cooking, and place where cooking is done. The table shows that 28 percent of households in Zambia have access to electricity, an improvement since 2007, when only 19 percent of households had access to electricity. Access to electricity has increased in urban areas in the last six years, with 62 percent of urban households having electricity in 2013-14 compared with 48 percent in 2007. Access to electricity in rural areas has not improved much, however, in the last six years.

Earth and sand are the most common flooring materials used in Zambian households (51 percent), and these materials are predominantly used in rural areas (78 percent). The use of cement has increased in the past six years from 35 percent to 41 percent, with increases seen in rural areas and a slight decline in urban areas.

The number of rooms used for sleeping indicates the extent of crowding in households. Overcrowding increases the risk of contracting infectious diseases such as acute respiratory infections and skin diseases, which particularly affect children and the elderly. The proportion of households using one room for sleeping has decreased from 47 percent to 34 percent in the last six years.

The presence and extent of indoor pollution depend on places used for cooking and types of fuel used. According to the 2013-14 ZDHS, 26 percent of households cook inside the house, while 35 percent cook in a separate building and 38 percent cook outdoors. The percentage of households that cook within the dwelling unit is higher in urban areas (50 percent) than in rural areas (10 percent). Fifty-seven percent of households in rural areas cook in a separate building.

Almost all households use wood, charcoal, or electricity for cooking. Use of wood is more common in rural areas (82 percent) than in urban areas (6 percent). On the other hand, use of charcoal is much more common in urban (67 percent) than in rural areas (16 percent). There has been a sharp increase in the use of charcoal for cooking from 25 percent in 2007 to 37 percent in 2013-14. Electricity is used for cooking in only 27 percent of urban households despite its recent growth in availability to 62 percent of these households.

A major concern for the government of Zambia is the effect of secondhand smoke on the health of children and neonates. The purpose of the Tobacco Act CAP 237 in Zambia is to control tobacco and tobacco-related product use and distribution (GRZ, 1994).

**Table 2.3 Household characteristics**

Percent distribution of households by housing characteristics, percentage using solid fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Zambia 2013-14

Housing characteristic	Residence		Total
	Urban	Rural	
<b>Electricity</b>			
Yes	61.5	3.8	27.9
No	38.5	96.0	72.0
Total	100.0	100.0	100.0
<b>Flooring material</b>			
Earth, sand	13.8	78.2	51.3
Dung	0.7	5.4	3.5
Wood/planks	0.1	0.0	0.1
Palm/bamboo/leeds	0.1	0.0	0.1
Parquet or polished wood	1.9	0.2	0.9
Vinyl or asphalt strips	0.5	0.0	0.2
Ceramic/terrazzo tiles	5.1	0.2	2.3
Concrete cement	76.8	15.7	41.2
Carpet	0.9	0.1	0.4
Total	100.0	100.0	100.0
<b>Rooms used for sleeping</b>			
One	30.3	36.7	34.0
Two	41.7	41.8	41.7
Three or more	27.4	20.7	23.5
Total	100.0	100.0	100.0
<b>Place for cooking</b>			
In the house	49.7	9.8	26.4
In a separate building	5.9	56.5	35.4
Outdoors	44.3	33.5	38.0
No food cooked in household	0.0	0.1	0.1
Other	0.0	0.1	0.1
Total	100.0	100.0	100.0
<b>Cooking fuel</b>			
Electricity	26.9	1.8	12.3
Charcoal	67.2	15.6	37.1
Wood	5.8	82.0	50.2
Straw/shrubs/grass	0.0	0.3	0.2
Animal dung	0.0	0.2	0.1
No food cooked in household	0.0	0.1	0.1
Total	100.0	100.0	100.0
Percentage using solid fuel for cooking <sup>1</sup>	73.0	98.1	87.6
<b>Frequency of smoking in the home</b>			
Daily	10.6	16.5	14.0
Weekly	2.4	3.4	3.0
Monthly	0.3	0.3	0.3
Less than monthly	0.8	0.9	0.8
Never	85.9	78.9	81.8
Total	100.0	100.0	100.0
Number	6,640	9,280	15,920

Note: Totals may not sum to 100 percent because households with missing information have been deleted.

<sup>1</sup> Includes coal/lignite, wood/straw/shrubs/grass, and animal dung

Information on smoking was collected in the 2013-14 ZDHS to assess the percentage of households exposed to SHS, which is a risk factor for children and adults who do not smoke. Pregnant women who are exposed to SHS have a higher risk of giving birth to a low birth weight baby (Windham et al., 1999). Also, children who are exposed to SHS are at a higher risk of respiratory and ear infections and poor lung development (U.S. Department of Health and Human Services, 2006). Table 2.3 provides information on household exposure to SHS according to frequency of smoking, used here as a proxy for level of SHS exposure. Fourteen percent of households are exposed daily to SHS, and rural households (17 percent) are more likely to be exposed than urban households (11 percent).

### 2.1.3 Household Possessions

Possession of durable consumer goods is another useful indicator of household socioeconomic status. The possession and use of household durable goods have multiple effects and implications. Having access to a radio or television exposes household members to updated daily events, information, and educational materials. Similarly, a refrigerator prolongs food storage and keeps food fresh and hygienic. A means of transportation allows greater access to services away from the local area and enhances social and economic activities. The 2013-14 ZDHS collected information on possession of durable commodities, means of transportation, and ownership of agricultural land and farm animals.

Table 2.4 shows that radio and mobile telephones are very common information and communication devices possessed by most households. Possession of mobile phones has sharply increased from 28 percent in 2007 to 66 percent in 2013-14. Nearly 9 in 10 households in urban areas and half of households in rural areas possess mobile phones. Fifty-seven percent of households have a radio, with two-thirds of urban households and half of rural households having a radio. Thirty-seven percent of households have a television (66 percent urban and 16 percent rural). Ownership of a television has increased from 24 percent in 2007 to 37 percent. A refrigerator is available in 20 percent of households, with urban households more than 15 times as likely (44 percent) as rural households (3 percent) to own one.

**Table 2.4 Household possessions**

Percentage of households possessing various household effects, means of transportation, agricultural land and livestock/farm animals by residence, Zambia 2013-14

Possession	Residence		Total
	Urban	Rural	
<b>Household effects</b>			
Radio	68.3	48.5	56.7
Television	66.0	16.1	36.9
Mobile telephone	89.3	50.0	66.4
Non-mobile telephone	3.0	0.4	1.5
Refrigerator	43.9	2.9	20.0
Bed	89.8	59.4	72.1
Chair	75.9	47.2	59.2
Table	77.5	46.5	59.4
Cupboard	57.3	16.4	33.4
Sofa	64.0	14.4	35.1
Clock	37.8	7.8	20.3
Fan	30.9	1.8	13.9
Sewing machine	9.0	3.6	5.9
Cassette player	18.1	13.2	15.3
Plough	3.5	21.5	14.0
VCR/DVD	48.9	9.4	25.9
Tractor	0.5	0.4	0.5
Hammer mill	0.6	1.3	1.0
Computer	11.2	1.0	5.3
Internet	11.8	1.1	5.5
Microwave	10.4	0.5	4.6
<b>Means of transport</b>			
Bicycle	28.9	53.6	43.3
Animal drawn cart	0.7	8.5	5.2
Motorcycle/scooter	1.4	1.7	1.6
Car/truck	13.2	2.5	7.0
Boat with a motor	0.3	0.2	0.2
Banana boat	0.6	4.6	2.9
<b>Ownership of agricultural land</b>	24.8	88.1	61.7
<b>Ownership of farm animals<sup>1</sup></b>	16.5	72.0	48.8
<b>Ownership of bank/savings account<sup>2</sup></b>	46.2	8.8	24.4
Number	6,640	9,280	15,920

<sup>1</sup> Traditional cattle, dairy cattle, beef cattle, horses, donkeys, mules, goats, sheep, pigs, chickens, rabbits, or other poultry or livestock.

<sup>2</sup> At least one household member has an account.

Bicycles continue to be the most common means of transportation in Zambia; 43 percent of households in Zambia use bicycles as a means of transport, with more households in rural areas (54 percent) than urban households (29 percent) using bicycles. Ownership of a car/truck is much more common in urban areas (13 percent) than in rural areas (3 percent).

Zambia is predominantly agricultural, with a large proportion of the population engaged in this sector. The 2013-14 ZDHS data indicate that 62 percent of households own agricultural land, with rural households more likely to own land (88 percent) than urban households (25 percent). Forty-nine percent of households in the country possess farm animals; 72 percent in rural areas and 17 percent in urban areas.

## 2.2 SOCIOECONOMIC STATUS INDEX

The wealth index used in this survey is a measure that has been used in many DHS and other country-level surveys to indicate inequalities in household characteristics, use of health care and other services, and health outcomes (Rutstein and Johnson, 2004). It serves as an indicator of level of wealth that is consistent with expenditure and income measures (Rutstein, 1999). The index was constructed using household asset data via a principal components analysis.

In its current form, which takes better account of urban-rural differences in scores and indicators of wealth, the wealth index is created in three steps. In the first step, a subset of indicators common to urban and rural areas is used to create wealth scores for households in both areas. Categorical variables to be used are transformed into separate dichotomous (0-1) indicators. These indicators and those that are continuous are then examined using a principal components analysis to produce a common factor score for each household. In the second step, separate factor scores are produced for households in urban and rural areas using area-specific indicators. The third step combines the separate area-specific factor scores to produce a nationally applicable combined wealth index by adjusting area-specific scores through a regression on the common factor scores. This three-step procedure permits greater adaptability of the wealth index in both urban and rural areas. The resulting combined wealth index has a mean of zero and a standard deviation of one. Once the index is computed, national-level wealth quintiles (from lowest to highest) are obtained by assigning the household score to each de jure household member, ranking each person in the population by his or her score, and then dividing the ranking into five equal categories, each comprising 20 percent of the population.

Table 2.5 presents distributions across the five wealth quintiles by place of urban or rural residence and by province. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed, according to geographic area.

Forty-eight percent of urban residents are from the richest quintile, while a much lower proportion of rural residents (2 percent) fall in the same category. Rural households are mostly distributed in the lowest, second, and middle wealth quintiles (33 percent, 31 percent, and 24 percent, respectively). One in two households in the more urban provinces of Lusaka (50 percent) and Copperbelt (46 percent) are in the highest wealth quintile. About one in two households (44 percent) in Western are in the lowest wealth quintile.

Table 2.5 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini Coefficient, according to residence and province, Zambia 2013-14

Residence/province	Wealth quintile					Total	Number of persons	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
<b>Residence</b>								
Urban	0.6	2.8	13.4	35.6	47.6	100.0	31,977	0.23
Rural	32.5	31.0	24.3	10.0	2.2	100.0	49,698	0.43
<b>Province</b>								
Central	16.3	26.1	29.0	18.8	9.8	100.0	7,873	0.49
Copperbelt	3.3	7.4	16.1	27.7	45.5	100.0	12,732	0.30
Eastern	31.5	26.8	22.6	14.9	4.2	100.0	10,271	0.49
Luapula	30.5	35.0	22.2	8.3	4.0	100.0	6,327	0.44
Lusaka	1.5	2.2	8.0	38.5	49.8	100.0	13,429	0.20
Muchinga	38.4	26.1	17.8	11.8	5.9	100.0	4,676	0.52
Northern	43.2	26.4	17.2	8.6	4.5	100.0	6,745	0.54
North Western	26.4	30.6	22.9	12.0	8.1	100.0	3,875	0.51
Southern	11.9	23.5	33.4	19.4	11.8	100.0	10,565	0.46
Western	44.0	26.9	15.6	8.7	4.8	100.0	5,181	0.54
Total	20.0	20.0	20.0	20.0	20.0	100.0	81,675	0.49

Table 2.5 also includes the Gini coefficient for each area, which indicates the level of concentration of wealth (0 being an equal distribution and 1 a totally unequal distribution). This ratio is expressed as a proportion between 0 and 1. Wealth inequality, as measured by the Gini coefficient, is

higher in rural than urban areas. Inequality in wealth is highest in Northern and Western (0.54) and lowest in Lusaka (0.20).

## 2.3 HAND WASHING

Table 2.6 provides information on designated places for hand washing in households and the use of water and cleansing agents for washing hands according to place of residence, province, and wealth quintile.

Interviewers were instructed to observe the place where household members usually washed their hands. They looked for regularity of water supply and observed whether households had cleansing agents near the place of hand washing. Only 40 percent of households were observed to have a place for washing hands.

**Table 2.6 Hand washing**

Percentage of households in which the place most often used for washing hands was observed, and among households in which the place for hand washing was observed, percent distribution by availability of water, soap, and other cleansing agents, Zambia 2013-14

Background characteristic	Percentage of households where place for washing hands was observed	Number of households	Among households where place for hand washing was observed, percentage with:								Number of households with place for hand washing observed
			Soap and water <sup>1</sup>	Water and cleansing agent <sup>2</sup> other than soap only	Water only	Soap but no water <sup>3</sup>	Cleansing agent other than soap only <sup>2</sup>	No water, no soap, no other cleansing agent	Missing	Total	
<b>Residence</b>											
Urban	56.9	6,640	42.8	0.5	27.6	4.1	0.3	24.4	0.2	100.0	3,780
Rural	28.2	9,280	17.3	2.5	24.6	5.4	3.0	46.2	0.9	100.0	2,615
<b>Province</b>											
Central	23.1	1,472	29.8	0.6	39.9	0.9	0.5	27.2	1.1	100.0	339
Copperbelt	65.9	2,455	41.7	1.8	22.8	4.6	0.9	28.1	0.2	100.0	1,619
Eastern	30.1	1,938	20.9	0.9	44.7	1.4	0.3	30.3	1.4	100.0	583
Luapula	33.7	1,265	19.8	0.9	13.6	6.7	0.4	57.3	1.3	100.0	427
Lusaka	60.3	2,925	39.1	0.6	30.3	3.7	0.0	26.2	0.2	100.0	1,765
Muchinga	16.8	881	13.0	1.7	15.0	2.8	14.8	51.2	1.5	100.0	148
Northern	29.2	1,269	21.2	1.7	9.8	13.1	7.0	46.5	0.8	100.0	370
North Western	27.1	724	15.9	1.5	19.0	2.7	2.0	58.6	0.3	100.0	196
Southern	35.6	1,934	21.3	3.0	22.5	8.2	2.7	42.2	0.1	100.0	689
Western	24.6	1,057	48.1	0.3	31.5	1.3	0.0	17.8	0.9	100.0	260
<b>Wealth quintile</b>											
Lowest	23.0	3,514	10.3	1.4	23.0	4.4	3.0	56.6	1.2	100.0	808
Second	25.7	3,055	13.5	2.0	22.4	6.3	3.8	50.7	1.2	100.0	787
Middle	33.9	2,958	17.4	3.9	23.0	6.1	2.7	46.5	0.4	100.0	1,001
Fourth	47.0	3,252	26.3	0.8	31.6	5.1	0.6	35.5	0.1	100.0	1,529
Highest	72.3	3,141	57.5	0.2	27.0	3.2	0.0	11.7	0.3	100.0	2,270
Total	40.2	15,920	32.4	1.3	26.4	4.6	1.4	33.3	0.5	100.0	6,396

<sup>1</sup> Soap includes soap or detergent in bar, liquid, powder, or paste form. This column includes households with soap and water only as well as those that had soap and water and another cleansing agent.

<sup>2</sup> Cleansing agents other than soap include locally available materials such as ash, mud, or sand

<sup>3</sup> Includes households with soap only as well as those with soap and another cleansing agent

Among households that were observed to have a place for washing hands, 32 percent had soap and water at the place where household members washed their hands, 26 percent had water only, and 5 percent had soap but no water. Overall, one-third (33 percent) of households did not have either water or any other cleansing agent.

Forty-three percent of households in urban areas had soap and water, compared with 17 percent of rural households. Western had the highest proportion of households that had soap and water (48 percent). Muchinga had the lowest percentage of households with soap and water (13 percent). Soap and water was most common (58 percent) among households in the highest wealth quintile and least common in households in the lowest wealth quintile (10 percent).

## 2.4 HOUSEHOLD POPULATION BY AGE AND SEX

Age and sex are important demographic variables and are the primary basis of demographic classification. They are also very important variables in the study of mortality, fertility, and nuptiality. Table 2.7 shows the distribution of the de facto household population by age and sex according to urban and rural residence. The 2013-14 ZDHS enumerated a total of 78,803 persons (40,628 females and 38,175 males). Half of the Zambian population (50 percent) is under age 15, and 17 percent of the population is under age 5. These proportions have remained the same over the last six years. Persons age 65 and older account for about 3 percent of the total population. There is a smaller proportion of children under age 5 in urban than rural areas.

**Table 2.7 Household population by age, sex, and residence**

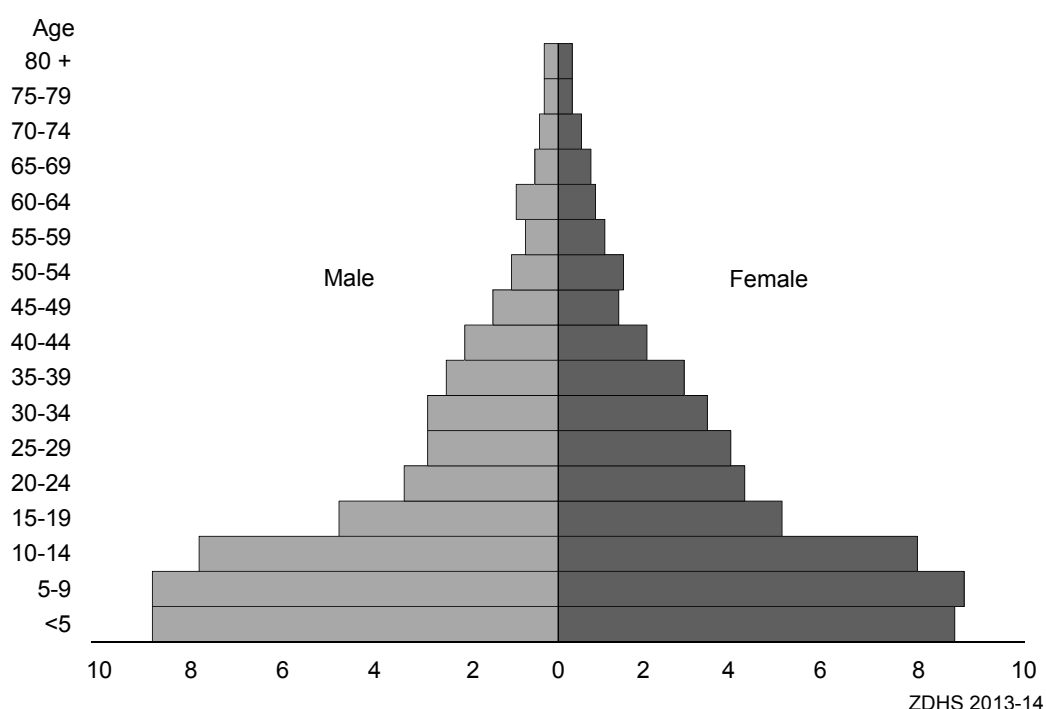
Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Zambia 2013-14

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	15.7	14.0	14.8	19.4	18.2	18.7	17.9	16.5	17.2
5-9	15.5	14.5	15.0	19.4	18.3	18.8	17.9	16.8	17.3
10-14	13.6	14.1	13.9	17.5	15.5	16.5	16.0	15.0	15.5
15-19	10.8	11.1	11.0	8.9	8.2	8.5	9.7	9.4	9.5
20-24	8.9	9.8	9.4	5.4	6.5	6.0	6.8	7.8	7.3
25-29	7.2	8.5	7.9	4.7	6.2	5.5	5.7	7.1	6.4
30-34	7.1	7.3	7.2	4.8	5.6	5.2	5.7	6.3	6.0
35-39	5.8	5.8	5.8	4.4	4.8	4.6	5.0	5.2	5.1
40-44	4.8	3.7	4.2	3.7	3.7	3.7	4.1	3.7	3.9
45-49	3.1	2.7	2.9	2.9	2.6	2.7	3.0	2.6	2.8
50-54	2.2	2.7	2.5	2.0	2.8	2.4	2.1	2.8	2.5
55-59	1.3	1.9	1.6	1.5	1.9	1.7	1.4	1.9	1.7
60-64	1.8	1.4	1.6	1.7	1.6	1.7	1.8	1.5	1.6
65-69	0.9	1.0	1.0	1.2	1.5	1.3	1.1	1.3	1.2
70-74	0.6	0.8	0.7	0.8	1.0	0.9	0.7	0.9	0.8
75-79	0.3	0.4	0.3	0.7	0.8	0.8	0.6	0.6	0.6
80 +	0.3	0.4	0.4	0.8	0.9	0.8	0.6	0.7	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	14,921	16,181	31,102	23,254	24,447	47,701	38,175	40,628	78,803

Figure 2.1 illustrates the age structure of the household population in a population pyramid. A feature of population pyramids is their strength in illustrating whether a population is “young” or “old.” The broad base of the pyramid indicates that Zambia’s population is young. This scenario is typical of countries with higher fertility rates. The pyramid also shows that there are slightly more females than males, especially at age 15 and older.

The overall sex ratio (the number of males per 100 females) is 94, slightly higher than the sex ratio in the 2007 ZDHS (93). The sex ratio also differs by residence. Rural areas have a higher sex ratio (95) than urban areas (92).

**Figure 2.1 Population pyramid**



## 2.5 HOUSEHOLD COMPOSITION

Information on household composition is critical for understanding family size, household headship, and orphanhood and for implementing meaningful population-based policies and programmes. Household composition is also a determinant of health status and well-being. Female-headed households are, for example, typically poorer than male-headed households. Economic resources are often more limited in larger households. Moreover, where the size of the household is large, crowding can also lead to health problems.

Table 2.8 presents information on household composition. The majority (73 percent) of households are headed by men, although the proportion of female-headed households has risen from 24 percent in 2007 to 27 percent in 2013-14, with the rise more marked in urban than rural areas. The average household size is 5.1 persons, as compared with 4.9 in 2007; household sizes are larger in rural (5.4) than urban (4.8) areas. This decrease in overall household size is consistent with findings from the 2010 Census of Population and Housing (CSO, 2013).

The 2013-14 ZDHS also collected information on the presence in households of foster children and orphans. Foster children are children under age

**Table 2.8 Household composition**

Percent distribution of households by sex of head of household and by household size; mean size of household, and percentage of households with orphans and foster children under 18 years of age, according to residence, Zambia 2013-14

Characteristic	Residence		Total
	Urban	Rural	
<b>Household headship</b>			
Male	73.7	73.2	73.4
Female	26.3	26.8	26.6
Total	100.0	100.0	100.0
<b>Number of usual members</b>			
1	8.7	6.1	7.2
2	10.1	8.3	9.1
3	14.1	11.1	12.4
4	15.8	14.4	15.0
5	15.1	15.0	15.0
6	13.2	13.8	13.6
7	9.2	12.0	10.8
8	5.9	8.1	7.2
9+	7.8	11.1	9.7
Total	100.0	100.0	100.0
Mean size of households	4.8	5.4	5.1
<b>Percentage of households with orphans and foster children under 18 years of age</b>			
Foster children <sup>1</sup>	30.4	29.0	29.6
Double orphans	4.9	3.8	4.2
Single orphans <sup>2</sup>	15.7	14.8	15.2
Foster and/or orphan children	35.8	33.9	34.7
Number of households	6,640	9,280	15,920

Note: Table is based on de jure household members, i.e., usual residents.

<sup>1</sup> Foster children are those under age 18 living in households with neither their mother nor their father present.

<sup>2</sup> Includes children with one dead parent and an unknown survival status of the other parent.

18 living in households with neither their mother nor their father present; orphans are children with one (single orphans) or both parents (double orphans) dead. Foster children and orphans are of concern because they may be at increased risk of neglect or exploitation when their mothers, fathers, or both are not present to assist them. Overall, 35 percent of households have foster or orphan children. There is little difference in the distribution of foster children by rural and urban areas. Single orphans are present in 15 percent of households, whereas double orphans are present in 4 percent of households.

## 2.6 BIRTH REGISTRATION

Birth registration is the formal inscription of the facts of a birth into an official log kept at the registrar's office. A birth certificate is issued at the time of registration or later as proof of the registration of the birth. Birth registration is basic to ensuring a child's legal status and, thus, basic rights and services (UNICEF, 2006; United Nations General Assembly, 2002).

Although Zambia has a legal and administrative structure stipulating official registration of births, according to standard procedures, few births are registered officially. The practice of formally registering births is not widely adhered to in the country, even though the registration system was implemented more than 40 years ago and enforced with the Birth and Death Registration Act CAP 51 of the Laws of Zambia (GRZ, 1973).

Table 2.9 presents the percentage of the de jure population under age 5 whose births are registered with the civil authorities, according to background characteristics. Birth registration information was solicited for children age 0-4. The table shows that only 11 percent of children age 0-4 are registered with the civil authority. Four percent of children under age 5 have a birth certificate. The table also shows that birth registration is much higher in urban (20 percent) than rural (7 percent) areas. It is highest in Copperbelt (24 percent), followed by Lusaka (21 percent), and lowest in Northern (2 percent). Children from the highest wealth quintile are six times more likely to have their births registered (29 percent) than children in the lowest quintile (5 percent).

Table 2.9 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Zambia 2013-14

Background characteristic	Children whose births are registered			Number of children
	Percentage who had a birth certificate	Percentage who did not have a birth certificate	Percentage registered	
<b>Age</b>				
<2	3.5	6.9	10.5	5,321
2-4	4.4	7.4	11.8	8,394
<b>Sex</b>				
Male	4.2	7.4	11.7	6,922
Female	3.9	7.0	10.9	6,793
<b>Residence</b>				
Urban	9.1	11.3	20.4	4,633
Rural	1.5	5.2	6.7	9,082
<b>Province</b>				
Central	2.2	2.4	4.6	1,333
Copperbelt	13.7	9.9	23.6	1,796
Eastern	3.2	10.2	13.4	1,731
Luapula	0.7	5.0	5.7	1,197
Lusaka	6.6	14.1	20.8	1,987
Muchinga	0.4	3.3	3.7	812
Northern	0.8	1.5	2.3	1,311
North Western	3.0	2.4	5.4	719
Southern	1.8	10.1	12.0	1,908
Western	1.9	0.7	2.6	922
<b>Wealth quintile</b>				
Lowest	1.2	3.7	4.9	3,323
Second	1.1	4.2	5.3	3,126
Middle	2.3	7.4	9.7	2,798
Fourth	5.4	8.8	14.2	2,370
Highest	14.1	15.2	29.2	2,099
<b>Total</b>	<b>4.1</b>	<b>7.2</b>	<b>11.3</b>	<b>13,715</b>



## 2.7 CHILDREN'S LIVING ARRANGEMENTS, ORPHANHOOD, AND SCHOOL ATTENDANCE

The 2013-14 ZDHS collected information on living arrangements of children with and without parents. Living arrangements should be monitored for both because of their significant effects on the comprehensive development of children. Table 2.10 shows the percent distribution of children under age 18 by living arrangements and survivorship of parents. The proportion of Zambian children under age 18 with one or both parents dead is 11 percent. Orphanhood increases with children's age, from 2 percent of children under age 2 to 24 percent of children age 15-17. There are no marked differences in the proportion of orphans according to sex. The proportion of orphans is higher in urban areas (13 percent) than rural areas (10 percent). Copperbelt has the highest proportion of orphans (15 percent), while Eastern, Northern, North Western, and Southern have the lowest (10 percent). Orphanhood by wealth quintile shows no major variations.

Table 2.10 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead, according to background characteristics, Zambia 2013-14

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead <sup>1</sup>	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/mother				
<b>Age</b>														
0-4	71.3	20.1	1.9	0.9	0.1	4.3	0.5	0.4	0.3	0.3	100.0	5.4	3.1	13,715
<2	74.2	22.5	1.4	0.2	0.0	1.1	0.3	0.0	0.0	0.3	100.0	1.4	1.7	5,321
2-4	69.4	18.7	2.2	1.3	0.1	6.3	0.6	0.6	0.5	0.3	100.0	7.9	4.1	8,394
5-9	62.5	13.4	4.2	3.2	0.5	10.8	1.3	2.2	1.5	0.4	100.0	15.7	9.7	13,901
10-14	51.1	10.8	6.3	4.9	1.0	15.1	2.3	4.3	3.4	0.8	100.0	25.0	17.3	12,477
15-17	44.1	8.8	8.6	4.6	1.1	16.4	3.2	5.4	5.3	2.5	100.0	30.3	23.7	4,767
<b>Sex</b>														
Male	60.9	14.2	4.5	3.5	0.6	9.6	1.3	2.6	2.1	0.7	100.0	15.6	11.1	22,459
Female	59.2	14.3	4.7	2.7	0.5	11.5	1.7	2.6	2.0	0.8	100.0	17.8	11.5	22,402
<b>Residence</b>														
Urban	55.1	14.9	5.3	3.5	0.6	12.3	1.7	2.9	2.8	0.9	100.0	19.6	13.4	15,789
Rural	62.7	13.9	4.2	2.9	0.5	9.7	1.4	2.4	1.7	0.6	100.0	15.1	10.2	29,071
<b>Province</b>														
Central	59.0	13.7	5.1	3.0	0.3	11.5	2.1	2.6	2.1	0.6	100.0	18.3	12.2	4,467
Copperbelt	54.2	14.1	5.6	3.8	0.8	12.3	2.0	3.2	3.0	1.1	100.0	20.5	14.6	6,386
Eastern	63.5	13.4	3.8	2.3	0.4	10.3	1.1	2.8	1.7	0.8	100.0	15.8	9.7	5,731
Luapula	57.7	19.3	4.7	3.1	0.2	7.9	1.3	2.5	2.9	0.4	100.0	14.6	11.6	3,777
Lusaka	58.7	13.9	4.9	2.9	0.4	12.2	1.4	2.4	2.3	0.8	100.0	18.3	11.6	6,522
Muchinga	67.8	11.6	4.4	1.5	0.8	7.8	1.5	2.0	1.9	0.6	100.0	13.2	10.8	2,678
Northern	68.8	12.4	3.9	1.7	0.3	7.1	1.4	2.4	1.6	0.4	100.0	12.5	9.7	4,040
North Western	58.2	16.8	4.1	3.2	0.5	11.9	1.2	1.9	1.8	0.5	100.0	16.9	9.5	2,268
Southern	63.1	11.2	3.7	4.3	0.9	11.1	1.3	2.2	1.5	0.7	100.0	16.0	9.7	6,074
Western	49.7	20.7	5.3	5.0	0.9	11.4	1.5	3.3	1.3	0.8	100.0	17.5	12.5	2,919
<b>Wealth quintile</b>														
Lowest	57.5	19.9	5.7	2.0	0.6	8.0	1.7	2.1	1.8	0.7	100.0	13.6	11.9	9,508
Second	66.2	12.4	4.6	2.8	0.4	7.9	1.2	2.3	1.7	0.5	100.0	13.1	10.3	9,638
Middle	61.8	13.8	4.2	3.1	0.5	10.9	1.1	2.3	1.8	0.7	100.0	16.0	9.8	9,474
Fourth	58.7	12.5	4.2	3.6	0.8	12.3	1.5	3.1	2.4	0.9	100.0	19.3	12.1	8,613
Highest	55.0	12.2	3.9	4.4	0.7	14.9	2.2	3.1	2.8	0.9	100.0	23.0	12.8	7,627
Total <15	62.0	14.9	4.1	2.9	0.5	9.9	1.3	2.2	1.7	0.5	100.0	15.1	9.8	40,093
Total <18	60.1	14.2	4.6	3.1	0.6	10.6	1.5	2.6	2.1	0.7	100.0	16.7	11.3	44,861

Note: Table is based on de jure members, i.e., usual residents.

<sup>1</sup> Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent.

About 60 percent of children younger than age 18 live with both of their parents. The proportion of children living with both parents decreases with age. Children who are younger than age 2 are more likely to live with both parents (74 percent) than children age 15-17 (44 percent). Children in rural areas (63 percent) are more likely to live with both parents than children in urban areas (55 percent). Only one in two children in Western (50 percent) lives with both parents, compared with two in three children in Northern (69 percent) and Muchinga (68 percent). The percentage of children living with both parents is highest in the second wealth quintile (66 percent) and lowest in the highest quintile (55 percent).

Table 2.10 also shows that the percentage of children not living with a biological parent increases with their age. Children age 15-17 (30 percent) are most likely not to live with a biological parent. The highest proportion of children not living with a biological parent is observed in Copperbelt (21 percent), while the lowest proportion is found in Northern and Muchinga (13 percent).

Orphaned children may be at greater risk of dropping out of school than children with biological parents. This can happen for various reasons, such as the inability to pay school fees, the need to help with household chores, or the need to care for sick parents or younger siblings. Table 2.11 shows data on school attendance rates among children age 10-14 by survivorship of parents. Double orphans (i.e., children whose father and mother are dead) are less likely than children whose parents are both alive and living with at least one parent to be currently in school (79 percent and 91 percent, respectively).

**Table 2.11 School attendance by survivorship of parents**

For de jure children age 10-14, the percentage attending school by parental survival and the ratio of the percentage attending, by parental survival, according to background characteristics, Zambia 2013-14

Background characteristic	Percentage attending school by survivorship of parents				
	Both parents deceased	Number	Both parents alive and living with at least one parent	Number	Ratio <sup>1</sup>
<b>Sex</b>					
Male	78.7	220	90.5	4,286	0.87
Female	78.3	201	91.5	4,057	0.86
<b>Residence</b>					
Urban	86.2	182	95.0	2,670	0.91
Rural	72.6	238	89.1	5,673	0.81
<b>Province</b>					
Central	(84.1)	43	90.9	837	0.93
Copperbelt	77.0	76	94.4	1,080	0.82
Eastern	47.2	45	80.9	1,168	0.58
Luapula	82.1	59	89.6	797	0.92
Lusaka	(86.9)	58	94.9	1,113	0.92
Muchinga	(81.6)	25	90.6	524	0.90
Northern	(82.8)	31	90.8	810	0.91
North Western	(85.9)	21	90.9	427	0.94
Southern	(84.7)	46	96.2	1,115	0.88
Western	*	16	89.7	472	0.82
<b>Wealth quintile</b>					
Lowest	66.6	92	79.3	1,666	0.84
Second	73.6	83	90.3	1,889	0.82
Middle	75.8	63	94.6	1,872	0.80
Fourth	79.2	98	94.0	1,619	0.84
Highest	97.5	84	97.9	1,297	1.00
<b>Total</b>	<b>78.5</b>	<b>420</b>	<b>91.0</b>	<b>8,343</b>	<b>0.86</b>

Note: Table is based only on children who usually live in the household. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Ratio of the percentage with both parents deceased to the percentage with both parents alive and living with a parent

## 2.8 EDUCATION OF HOUSEHOLD POPULATION

Studies have shown that education is one of the major socioeconomic factors that influence a person's behaviours and attitudes. In general, the higher the level of education of a woman, the more knowledgeable she is about the use of health facilities, family planning methods, and the health of her children. Zambia is addressing poor access to education through MDG 2. In 2002, the Ministry of Education enacted the Free Basic Education policy, which has subsequently led Zambia to dedicate substantially more domestic resources to education. From 2006 to 2010, funding to the education sector steadily increased from 3 percent to 4 percent of gross domestic product. Zambia improved school infrastructure, including water and sanitation. Teacher training programmes increased the supply of

teachers to match the expansion of school enrollment. The number of teachers in all schools increased from 79,874 in 2010 to 93,194 in 2013 (DFID, 2011).

## 2.8.1 Educational Attainment of Household Population

Tables 2.12.1 and 2.12.2 show the percent distribution of the de facto female and male household population age 6 and older by level of education and background characteristics. Table 2.12.1 shows that, 16 percent of females have never been to school, 46 percent have some primary education, 11 percent have completed primary school, 19 percent have some secondary education, 4 percent have completed secondary education, and 3 percent have more than a secondary school education. The proportion of females with no education increases with age, indicating that older women are less likely to be educated than younger women. This trend also indicates improvement in the level of education over the last six decades. Table 2.12.2 shows a similar trend for males and also indicates that males are more educated than females. For example, more females than males have no education (16 percent and 13 percent respectively). Men are also twice as likely to complete secondary level schooling as women (8 percent and 4 percent, respectively). The median years of schooling for females is 4.3 years, while it is 5.1 years for males. The percentage of females and males with no education has decreased over the last six years from 20 percent to 16 percent of females and 14 percent to 13 percent of males.

**Table 2.12.1 Educational attainment of the female household population**

Percent distribution of the de facto female household population age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Zambia 2013-14

Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Don't know/missing	Total	Number	Median years completed
<b>Age</b>										
6-9	38.1	61.1	0.0	0.0	0.0	0.0	0.7	100.0	5,649	0.0
10-14	4.6	84.6	4.4	6.1	0.1	0.0	0.4	100.0	6,083	3.4
15-19	2.5	27.8	14.3	50.1	4.7	0.3	0.3	100.0	3,803	7.0
20-24	5.4	23.2	12.6	38.4	15.9	4.5	0.1	100.0	3,178	7.7
25-29	10.0	30.7	15.3	24.0	11.2	8.4	0.4	100.0	2,900	6.6
30-34	10.3	34.6	17.7	22.2	6.3	8.6	0.3	100.0	2,544	6.3
35-39	11.5	35.8	20.0	22.2	4.7	5.5	0.3	100.0	2,105	6.1
40-44	13.8	36.0	20.9	19.9	3.8	5.2	0.4	100.0	1,510	6.0
45-49	15.7	33.1	26.1	16.0	3.3	5.5	0.3	100.0	1,061	6.0
50-54	17.9	31.6	24.5	16.2	2.9	6.1	0.9	100.0	1,128	6.0
55-59	22.2	33.8	21.4	15.8	1.3	4.0	1.5	100.0	765	4.7
60-64	34.3	36.8	10.4	11.9	1.1	4.8	0.7	100.0	609	2.9
65+	55.1	33.1	3.6	3.7	0.6	2.2	1.8	100.0	1,417	0.0
<b>Residence</b>										
Urban	8.3	35.9	12.1	28.4	8.5	6.5	0.3	100.0	13,526	6.4
Rural	21.3	53.3	10.6	11.9	1.4	0.8	0.6	100.0	19,231	3.0
<b>Province</b>										
Central	17.3	48.0	12.1	16.2	3.7	2.3	0.3	100.0	3,180	3.9
Copperbelt	8.5	38.1	11.4	28.0	7.2	6.5	0.3	100.0	5,366	6.2
Eastern	24.4	52.0	8.8	10.9	1.8	0.9	1.3	100.0	4,081	2.6
Luapula	20.7	55.6	8.2	12.5	1.6	0.9	0.5	100.0	2,532	2.8
Lusaka	9.5	34.7	13.5	27.3	8.4	6.3	0.3	100.0	5,652	6.4
Muchinga	16.9	55.5	9.5	14.3	2.3	1.0	0.6	100.0	1,785	3.4
Northern	19.8	57.2	8.9	11.9	1.0	0.7	0.4	100.0	2,612	2.8
North Western	21.6	48.9	8.0	15.2	3.7	2.1	0.5	100.0	1,528	3.2
Southern	12.8	47.2	15.5	18.6	3.3	2.1	0.6	100.0	3,958	4.7
Western	24.8	46.7	10.2	13.0	3.3	1.8	0.2	100.0	2,063	3.1
<b>Wealth quintile</b>										
Lowest	30.6	54.3	7.9	6.3	0.2	0.0	0.7	100.0	6,515	1.6
Second	21.2	55.6	11.3	10.9	0.6	0.0	0.4	100.0	6,158	2.9
Middle	15.7	52.2	12.8	16.7	1.8	0.3	0.5	100.0	6,317	3.9
Fourth	9.7	43.2	14.4	25.3	5.0	1.8	0.5	100.0	6,670	5.6
Highest	4.1	27.9	9.9	32.4	13.0	12.4	0.3	100.0	7,096	7.8
<b>Total</b>	16.0	46.2	11.2	18.7	4.3	3.1	0.5	100.0	32,757	4.3

<sup>1</sup> Completed 7th grade at the primary level

<sup>2</sup> Completed 12th grade at the secondary level

Females and males in rural areas are less educated than their urban counterparts. The median years of schooling are 3.0 and 3.7 years for females and males, respectively, in rural areas compared with 6.4 and 7.2 years, respectively, in urban areas.

One in four females in Western (25 percent) and Eastern (24 percent) has no education. Lusaka and Copperbelt have the lowest proportion of females with no education (10 percent and 9 percent, respectively). Twenty-three percent of males in Eastern have no education compared with 7 percent of males in Copperbelt and Lusaka.

Wealth exerts a positive influence on educational attainment. Females from the highest wealth quintile are more likely to be educated than those from other quintiles. Females from the highest wealth quintile have completed at least 7.8 years of schooling compared with 1.6 years among females in the lowest wealth quintile. Similarly the median years of schooling among males in the highest wealth quintile is 8.7 years compared with 2.4 years among males in the lowest wealth quintile.

**Table 2.12.2 Educational attainment of the male household population**

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Zambia 2013-14

Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Don't know/missing	Total	Number	Median years completed
<b>Age</b>										
6-9	43.0	56.2	0.0	0.0	0.0	0.0	0.7	100.0	5,544	0.0
10-14	6.1	84.8	3.6	5.2	0.0	0.0	0.3	100.0	6,094	3.1
15-19	2.7	31.7	13.4	46.1	5.3	0.3	0.5	100.0	3,686	6.8
20-24	2.7	14.1	11.4	42.3	23.4	5.9	0.3	100.0	2,597	8.5
25-29	4.5	20.8	13.2	29.8	20.8	10.6	0.4	100.0	2,175	8.2
30-34	5.9	24.6	16.9	24.5	15.6	11.9	0.6	100.0	2,170	7.3
35-39	6.5	22.5	16.7	29.4	13.2	11.2	0.4	100.0	1,900	7.7
40-44	5.0	23.2	19.7	29.4	11.3	10.8	0.6	100.0	1,584	7.2
45-49	7.7	23.8	23.4	21.9	11.5	11.1	0.5	100.0	1,136	6.8
50-54	6.7	20.1	26.2	25.2	12.0	9.5	0.3	100.0	807	6.9
55-59	3.5	20.9	28.1	26.8	6.1	13.1	1.6	100.0	548	6.9
60-64	13.4	25.9	20.4	20.7	7.8	11.0	0.9	100.0	674	6.5
65+	18.1	45.5	11.3	15.0	4.3	4.4	1.4	100.0	1,138	4.0
<b>Province</b>										
Urban	6.7	31.0	8.9	28.1	15.3	9.6	0.4	100.0	12,144	7.2
Rural	16.7	50.6	11.8	15.8	3.0	1.5	0.7	100.0	17,912	3.7
<b>Province</b>										
Central	12.2	48.0	11.9	18.7	6.1	2.9	0.2	100.0	2,809	4.7
Copperbelt	6.9	32.9	8.8	28.3	13.3	9.3	0.5	100.0	4,836	6.9
Eastern	22.9	47.5	9.5	13.3	3.9	1.8	1.1	100.0	3,873	3.2
Luapula	16.3	52.0	8.6	17.2	3.5	1.5	0.9	100.0	2,280	3.6
Lusaka	7.2	30.3	10.2	27.1	15.5	9.5	0.2	100.0	5,277	7.1
Muchinga	10.9	50.2	12.3	19.2	4.2	2.4	0.8	100.0	1,649	4.6
Northern	13.7	50.9	11.6	18.5	3.2	1.8	0.4	100.0	2,334	4.1
North Western	16.0	45.3	9.3	19.7	6.1	3.1	0.5	100.0	1,344	4.3
Southern	11.5	45.2	14.4	19.1	6.0	3.1	0.6	100.0	3,921	5.0
Western	18.8	50.4	9.4	14.3	3.6	3.0	0.4	100.0	1,734	3.3
<b>Wealth quintile</b>										
Lowest	23.2	53.7	10.8	10.3	1.0	0.1	0.9	100.0	5,357	2.4
Second	17.3	51.4	12.6	15.9	2.2	0.1	0.5	100.0	5,916	3.6
Middle	13.1	49.0	12.4	20.4	3.9	0.5	0.6	100.0	6,123	4.4
Fourth	8.0	36.5	11.7	28.1	11.1	4.1	0.4	100.0	6,336	6.4
Highest	3.7	25.4	5.7	27.1	19.9	17.9	0.4	100.0	6,324	8.7
<b>Total</b>	12.7	42.7	10.6	20.7	7.9	4.8	0.5	100.0	30,056	5.1

<sup>1</sup> Completed 7th grade at the primary level

<sup>2</sup> Completed 12th grade at the secondary level

## 2.8.2 School Attendance Ratios

The net attendance ratio (NAR) indicates participation in primary schooling for the population age 7-13 and secondary schooling for the population age 14-18. The gross attendance ratio (GAR) measures participation at each level of schooling among those of any age from 5 to 24 years. The GAR is almost always higher than the NAR for the same level because the GAR includes participation by those who may be older or younger than the official age range for that level. A NAR of 100 percent would indicate that all of those in the official age range for that level are attending at that level. The GAR can exceed 100 percent if there is significant overage or underage participation at a given level of schooling. The gender parity index (GPI) assesses sex-related differences in school attendance rates and is calculated by dividing the GAR for females by the GAR for males. A GPI less than 1 indicates a gender disparity in favour of males (i.e., a higher proportion of males than females attends that level of schooling). A GPI greater than 1 indicates a gender disparity in favour of females. A GPI of 1 indicates parity or equality between the rates of participation for males and females.

Table 2.13 provides data on net attendance ratios and gross attendance ratios by sex and level of schooling and gender parity index, according to background characteristics. The Net Attendance Ratio (NAR) at the primary level is 80 percent and is half that percentage (40 percent) at the secondary level. The NAR in rural areas is lower than in urban areas (79 percent versus 84 percent). The NAR at the primary level and secondary level is lowest in Eastern (70 percent and 22 percent, respectively). The NAR at the primary level is highest in Lusaka and Southern (85 percent), while the NAR at the secondary level is highest in Copperbelt (60 percent). The GAR is higher than the NAR for both males and females at the primary and secondary levels.

The NAR at the primary level has remained the same since 2007 but the NAR at the secondary level has increased from 37 percent to 40 percent over the same period. Over the past six years, the rise in the NAR and GAR at the secondary level for females has been noticeable, with the NAR increasing from 35 percent in 2007 to 41 percent in 2013-14 and the GAR increasing from 46 percent in 2007 to 57 percent in 2013-14.

Table 2.13 also shows the Gender Parity Index (GPI), which represents the ratio of the NAR and GAR for females to the NAR and GAR for males. The gender parity index shows the disparities in access to education between males and females. The index helps in addressing unequal access to education among females. It is a more precise indicator of gender differences in the schooling system. The indexes for NAR at the primary and secondary levels are slightly higher than one (1.04 and 1.05, respectively), indicating that more males than females attend primary and secondary school. The GPI for the GAR is slightly lower than 1, indicating more females are attending school than males. However, the gender gap in attendance has remained almost unchanged at the primary level but has narrowed over the past few years at the secondary level.

Table 2.13 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling; and the Gender Parity Index (GPI), according to background characteristics, Zambia 2013-14

Background characteristic	Net attendance ratio <sup>1</sup>				Gross attendance ratio <sup>2</sup>			
	Male	Female	Total	Gender Parity Index <sup>3</sup>	Male	Female	Total	Gender Parity Index <sup>3</sup>
PRIMARY SCHOOL								
<b>Residence</b>								
Urban	82.8	84.3	83.6	1.02	105.2	103.5	104.3	0.98
Rural	76.8	80.3	78.5	1.05	101.4	98.5	99.9	0.97
<b>Province</b>								
Central	82.1	82.9	82.5	1.01	106.8	103.1	104.9	0.97
Copperbelt	79.4	82.5	81.1	1.04	100.4	100.7	100.5	1.00
Eastern	63.3	76.5	69.9	1.21	88.9	95.0	92.0	1.07
Luapula	78.8	75.9	77.4	0.96	97.9	92.5	95.2	0.95
Lusaka	84.5	85.9	85.2	1.02	110.2	105.3	107.6	0.96
Muchinga	81.6	81.8	81.7	1.00	107.7	101.7	104.8	0.94
Northern	77.5	80.3	78.9	1.04	101.4	97.2	99.2	0.96
North Western	83.0	80.8	81.8	0.97	108.5	100.0	104.1	0.92
Southern	82.5	87.9	85.2	1.07	109.5	106.8	108.2	0.98
Western	80.5	77.2	78.9	0.96	98.3	95.1	96.8	0.97
<b>Wealth quintile</b>								
Lowest	68.9	70.2	69.6	1.02	89.9	86.7	88.3	0.96
Second	76.1	81.6	78.8	1.07	101.8	97.8	99.8	0.96
Middle	80.0	85.8	82.8	1.07	105.2	106.9	106.0	1.02
Fourth	84.4	86.1	85.3	1.02	107.6	105.0	106.3	0.98
Highest	86.7	85.4	86.0	0.99	110.4	105.7	107.9	0.96
Total	78.8	81.7	80.3	1.04	102.7	100.3	101.5	0.98
SECONDARY SCHOOL								
<b>Residence</b>								
Urban	58.0	58.5	58.3	1.01	91.1	83.2	86.9	0.91
Rural	26.9	26.9	26.9	1.00	41.1	35.6	38.5	0.87
<b>Province</b>								
Central	34.5	35.8	35.2	1.04	53.6	47.8	50.6	0.89
Copperbelt	56.5	62.6	59.7	1.11	93.6	86.0	89.6	0.92
Eastern	19.5	25.5	22.3	1.31	36.2	36.1	36.2	1.00
Luapula	36.3	26.7	31.9	0.74	56.5	41.0	49.4	0.73
Lusaka	54.4	53.4	53.9	0.98	79.8	76.1	77.8	0.95
Muchinga	32.4	28.7	30.6	0.89	47.6	40.9	44.3	0.86
Northern	31.9	25.9	28.9	0.81	49.5	34.7	42.0	0.70
North Western	42.0	39.5	40.8	0.94	63.2	55.7	59.3	0.88
Southern	33.0	37.3	35.0	1.13	46.2	49.8	47.8	1.08
Western	35.6	33.8	34.6	0.95	55.3	44.1	49.1	0.80
<b>Wealth quintile</b>								
Lowest	15.0	13.3	14.1	0.89	27.4	16.6	21.7	0.60
Second	23.5	24.7	24.0	1.05	35.1	30.8	33.1	0.88
Middle	30.7	32.8	31.7	1.07	47.2	43.0	45.3	0.91
Fourth	50.5	47.4	49.0	0.94	75.0	68.2	71.6	0.91
Highest	67.8	70.6	69.3	1.04	107.8	100.8	104.0	0.94
Total	39.3	41.3	40.3	1.05	61.1	57.3	59.2	0.94

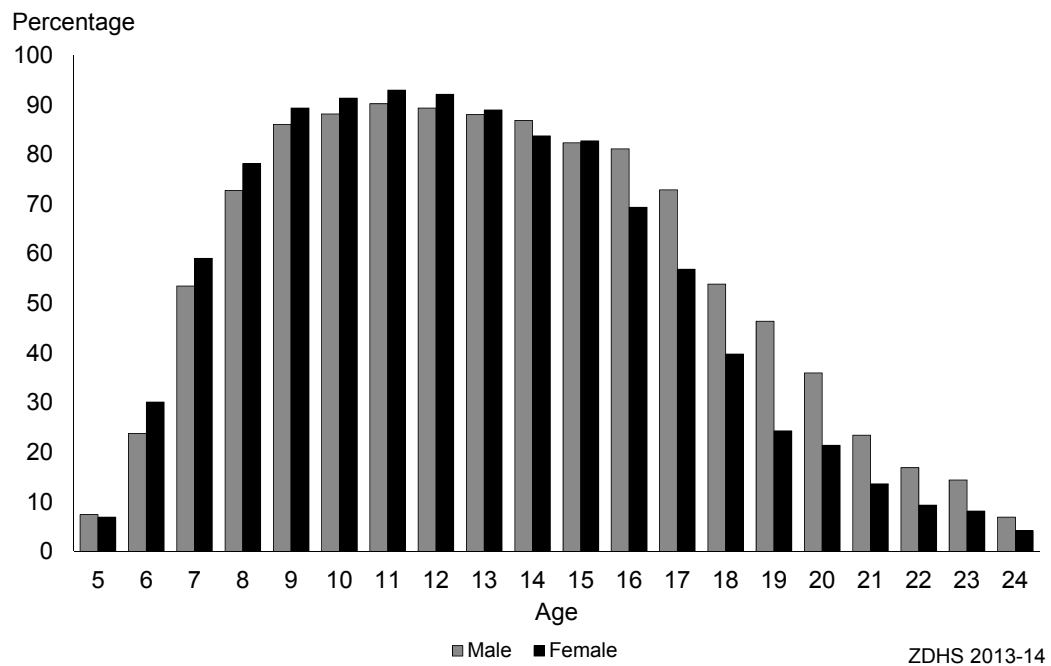
<sup>1</sup> The NAR for primary school is the percentage of the primary-school age (7-13 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school age (14-18 years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent.

<sup>2</sup> The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.

<sup>3</sup> The Gender Parity Index for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The Gender Parity Index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

Figure 2.2 shows the age-specific attendance rates (ASAR) for the population age 5 to 24 years—that is, the percentage of a given age cohort that attends school, regardless of the level attended (primary, secondary, or higher). The ASAR rises up to age 11 and then declines gradually, with steeper declines observed at older ages. Females are more likely than males to be in school up to age 13, after which males are substantially more likely to attend school than females.

**Figure 2.2 Age-specific attendance rates of the de facto population 5 to 24 years**







## CHARACTERISTICS OF RESPONDENTS

### Key Findings

- Eight percent of women and 4 percent of men age 15-49 have no education, a slight decrease from the figures of 10 percent and 5 percent reported in the 2007 ZDHS. Forty-five percent of women and 57 percent of men have a secondary education or higher.
- About seven in ten women (68 percent) and more than eight in ten men (83 percent) in Zambia are literate.
- Twelve percent of women and 22 percent of men age 15-49 are exposed to three types of mass media (newspaper, television, and radio) at least once a week. Thirty-four percent of women and 22 percent of men are not exposed to any of these mass media.
- Forty-nine percent of women and 73 percent of men age 15-49 were employed at the time of the survey.
- The agricultural sector remains the primary employer in Zambia, with 48 percent of women and 49 percent of men engaged in agricultural occupations.

The purpose of this chapter is to create a demographic and socioeconomic profile of the respondents interviewed in the 2013-14 ZDHS. This information helps in the interpretation of findings presented later in the report and provides an indication of the representativeness of the survey. The chapter begins by describing basic background characteristics, including age, marital status, religion, ethnicity, and wealth status. It then provides more detailed information on education, media exposure, employment, and tobacco use.

Throughout this report, numbers in tables reflect weighted numbers. Percentages based on 25 to 49 unweighted cases are shown in parentheses, and percentages based on fewer than 25 unweighted cases are suppressed and replaced with an asterisk, to caution readers when interpreting data that a percentage based on fewer than 50 cases may not be statistically reliable.<sup>1</sup>

### 3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1 shows the background characteristics of the 16,411 women and 13,530 men age 15-49 interviewed in the 2013-14 ZDHS. A high proportion of women (40 percent) and men (42 percent) are in the 15-24 age group. The proportion of women and men in each age group decreases with increasing age, reflecting the comparatively young age structure of the population in Zambia.

The vast majority of women (80 percent) and men (78 percent) are Protestant. Eighteen percent of women and 20 percent of men are Catholic, and less than 1 percent each of women and men are Muslim.

Table 3.1 shows that about three in ten women (28 percent) and more than four in ten men (44 percent) have never been married. The majority of women (60 percent) and men (51 percent) are currently married; less than 1 percent each are cohabiting with someone as if married. The data further show that female respondents are more likely than male respondents to be divorced or separated (9 percent versus 4 percent) or widowed (4 percent versus less than 1 percent). More than half of women and men (54 percent

<sup>1</sup> Parentheses are used if mortality rates are based on 250 to 499 children exposed to the risk of mortality in any of the component rates; mortality rates are suppressed if they are based on fewer than 250 children exposed to the risk of mortality in any of the component rates.

and 53 percent, respectively) live in rural areas. By province, the largest proportion of female and male respondents (20 percent and 21 percent, respectively) live in Lusaka, while the smallest proportion reside in North Western (4 percent each).

Only 8 percent of women and 4 percent of men age 15-49 in Zambia have no formal education (a slight decrease from 10 percent and 5 percent, respectively, in 2007). Forty-seven percent of women and 40 percent of men have a primary education, and 45 percent of women and 57 percent of men have a secondary education or higher. High dropout rates among girls at the secondary level may explain some of the differences in educational attainment between women and men. The government of Zambia has taken measures to enhance girls' retention rates in school. One such measure allows girls who drop out of school due to pregnancy to return and continue their education after they have delivered.

**Table 3.1 Background characteristics of respondents**

Percent distribution of women and men age 15-49 by selected background characteristics, Zambia 2013-14

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
<b>Age</b>						
15-19	22.1	3,625	3,686	24.6	3,337	3,344
20-24	18.3	3,006	3,040	17.2	2,335	2,306
25-29	17.1	2,813	2,789	14.3	1,944	1,934
30-34	15.1	2,475	2,435	14.2	1,927	1,894
35-39	12.2	2,009	1,975	12.3	1,664	1,671
40-44	8.9	1,464	1,466	10.2	1,384	1,387
45-49	6.2	1,018	1,020	7.1	970	994
<b>Religion</b>						
Catholic	18.2	2,988	2,895	19.7	2,671	2,650
Protestant	80.4	13,191	13,298	78.2	10,599	10,592
Muslim	0.6	101	79	0.8	105	96
Other	0.6	94	98	1.0	136	137
Missing	0.2	38	41	0.4	50	55
<b>Marital status</b>						
Never married	27.9	4,572	4,753	44.1	5,985	5,908
Married	59.5	9,759	9,552	51.4	6,965	7,020
Living together	0.6	100	97	0.5	70	80
Divorced/separated	8.6	1,406	1,438	3.6	488	476
Widowed	3.5	574	571	0.4	54	46
<b>Residence</b>						
Urban	46.2	7,585	7,871	46.6	6,326	6,337
Rural	53.8	8,826	8,540	53.4	7,235	7,193
<b>Province</b>						
Central	8.9	1,467	1,401	8.5	1,153	1,088
Copperbelt	17.3	2,836	1,770	17.7	2,395	1,488
Eastern	11.8	1,930	2,035	12.6	1,710	1,820
Luapula	7.0	1,143	1,585	6.3	855	1,259
Lusaka	19.9	3,266	1,913	21.0	2,844	1,722
Muchinga	5.3	868	1,455	5.0	680	1,144
Northern	7.3	1,200	1,580	6.9	929	1,301
North Western	4.3	713	1,570	4.1	557	1,234
Southern	12.2	2,007	1,732	13.1	1,771	1,548
Western	6.0	980	1,370	4.9	668	926
<b>Education</b>						
No education	8.4	1,375	1,360	3.7	500	492
Primary	46.8	7,685	7,658	39.6	5,365	5,376
Secondary	39.7	6,521	6,546	49.0	6,638	6,604
More than secondary	5.1	830	847	7.8	1,058	1,058
<b>Wealth quintile</b>						
Lowest	17.4	2,859	2,838	15.0	2,038	2,102
Second	17.4	2,861	3,000	18.1	2,448	2,606
Middle	18.8	3,077	3,491	18.8	2,547	2,834
Fourth	21.4	3,510	3,442	23.0	3,124	2,987
Highest	25.0	4,103	3,640	25.1	3,405	3,001
Total 15-49	100.0	16,411	16,411	100.0	13,561	13,530
50-59	na	na	na	na	1,212	1,243
Total 15-59	na	na	na	na	14,773	14,773

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.  
na = Not applicable

## 3.2 EDUCATIONAL ATTAINMENT

Educational attainment is one of the most influential factors affecting people's knowledge, attitudes, and behaviours in various facets of life. Tables 3.2.1 and 3.2.2 show the distribution of women and men age 15-49, respectively, by their educational attainment, according to background characteristics. Table 3.2.1 shows that 8 percent of women have no education, 31 percent have only some primary education, 16 percent have completed primary school, 32 percent have some secondary education, 8 percent have completed secondary school, and 5 percent have more than a secondary education. The proportion of women with no education increases steadily with age, from 2 percent among those age 15-19 to 16 percent among those age 45-49. Women who reside in rural areas are much more likely than urban women to have no education (13 percent versus 3 percent) or some primary education (43 percent versus 16 percent). By contrast, women in urban areas are six times as likely as those in rural areas to have a secondary education or higher (24 percent versus 4 percent).

Among provinces, the percentage of women with no education is highest in Eastern (18 percent) and lowest in Copperbelt (3 percent). Conversely, Copperbelt has the highest percentage of women with more than a secondary education (10 percent), while Eastern and Northern have the lowest percentage (1 percent each). Women's educational attainment is directly related to their economic status. For example, 21 percent of women in the highest wealth quintile have completed secondary school and 17 percent have more than a secondary education, as compared with 1 percent or less of women in the lowest two quintiles.

Table 3.2.1 shows that women have completed a median of 6.6 years of schooling. Median number of years of schooling completed is higher among women age 15-19 (7.3) and age 20-24 (7.9) than among women age 40-49 (5.8). Urban women have completed a median of 8.2 years, as compared with 5.5 years among rural women. Median number of years of schooling is highest among women from Copperbelt (8.2) and lowest among women from Eastern (4.8). The median increases with increasing wealth, from 4.0 years in the lowest quintile to 9.0 years in the highest quintile.

A similar educational attainment pattern is found among men (Table 3.2.2). However, men are more educated than women in all categories. Overall, 4 percent of men age 15-49 have no education, 23 percent have some primary education, 35 percent have some secondary education, and 22 percent have a secondary education or higher. Men age 45-49 are more likely to have no education (7 percent) than men age 15-24 (2 percent). Men from urban areas have higher levels of educational attainment than their rural counterparts. Thirty-seven percent of urban men have a secondary education or higher (as compared with 8 percent of rural men), and only 1 percent have no formal education (as compared with 6 percent of their rural counterparts).

Overall, men age 15-49 have completed a median of 7.6 years of schooling. Median number of years of schooling is highest among men age 20-24 (8.7), urban men (8.9 years), men in Lusaka (8.9), and men in the highest wealth quintile (11.1).

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Zambia 2013-14

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary			
<b>Age</b>									
15-24	3.1	23.6	13.6	46.2	11.0	2.5	100.0	7.5	6,631
15-19	1.9	23.8	14.8	52.9	6.3	0.4	100.0	7.3	3,625
20-24	4.6	23.3	12.1	38.2	16.7	5.1	100.0	7.9	3,006
25-29	9.9	32.5	13.9	24.9	10.6	8.2	100.0	6.5	2,813
30-34	10.8	35.2	17.3	22.3	6.0	8.4	100.0	6.2	2,475
35-39	12.2	38.8	18.4	21.4	3.8	5.3	100.0	5.9	2,009
40-44	14.5	37.3	21.4	18.6	3.2	4.9	100.0	5.8	1,464
45-49	16.2	35.6	24.0	16.2	3.3	4.7	100.0	5.8	1,018
<b>Residence</b>									
Urban	3.4	16.2	15.2	41.7	14.1	9.4	100.0	8.2	7,585
Rural	12.7	43.2	16.9	22.9	3.0	1.3	100.0	5.5	8,826
<b>Province</b>									
Central	8.8	31.4	18.4	30.4	7.2	3.9	100.0	6.5	1,467
Copperbelt	2.7	17.9	15.0	41.5	13.2	9.7	100.0	8.2	2,836
Eastern	18.2	42.7	13.2	20.5	4.0	1.4	100.0	4.8	1,930
Luapula	10.9	47.4	14.7	21.6	4.0	1.5	100.0	5.1	1,143
Lusaka	4.9	16.4	16.2	40.6	13.0	8.9	100.0	8.1	3,266
Muchinga	9.8	43.9	14.4	25.1	4.8	1.9	100.0	5.7	868
Northern	9.7	49.0	14.2	23.5	2.4	1.2	100.0	5.1	1,200
North Western	11.4	36.5	13.0	27.4	7.7	4.0	100.0	6.2	713
Southern	5.2	29.6	22.1	33.4	6.0	3.7	100.0	6.7	2,007
Western	15.0	35.5	17.1	22.9	6.4	3.0	100.0	5.9	980
<b>Wealth quintile</b>									
Lowest	19.4	53.3	14.2	12.8	0.3	0.0	100.0	4.0	2,859
Second	12.5	46.3	18.4	21.5	1.3	0.0	100.0	5.3	2,861
Middle	8.4	37.5	19.3	30.5	3.8	0.5	100.0	6.2	3,077
Fourth	4.6	22.5	19.3	41.3	9.4	3.0	100.0	7.2	3,510
Highest	1.1	6.0	10.8	44.3	20.5	17.3	100.0	9.0	4,103
<b>Total</b>	<b>8.4</b>	<b>30.7</b>	<b>16.1</b>	<b>31.6</b>	<b>8.1</b>	<b>5.1</b>	<b>100.0</b>	<b>6.6</b>	<b>16,411</b>

<sup>1</sup> Completed 7th year at the primary level

<sup>2</sup> Completed 12th year at the secondary level

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Zambia 2013-14

Background characteristic	Highest level of schooling						Total	Median years completed	Number of men
	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary			
<b>Age</b>									
15-24	1.7	20.9	14.5	46.2	13.4	3.3	100.0	7.8	5,672
15-19	1.6	26.8	16.0	49.1	6.1	0.4	100.0	7.1	3,337
20-24	1.9	12.5	12.2	42.1	24.0	7.4	100.0	8.7	2,335
25-29	4.0	21.1	13.6	29.2	21.7	10.4	100.0	8.2	1,944
30-34	5.1	26.3	16.6	25.9	13.6	12.4	100.0	7.2	1,927
35-39	5.7	26.8	16.9	27.5	11.3	11.9	100.0	7.0	1,664
40-44	4.6	26.6	19.9	29.8	9.5	9.6	100.0	6.9	1,384
45-49	6.8	24.6	25.5	23.8	8.7	10.5	100.0	6.7	970
<b>Residence</b>									
Urban	1.1	9.4	11.9	41.0	22.7	14.0	100.0	8.9	6,326
Rural	6.0	35.4	20.1	30.3	5.7	2.4	100.0	6.4	7,235
<b>Province</b>									
Central	2.7	27.6	19.8	33.4	11.2	5.4	100.0	6.9	1,153
Copperbelt	1.2	11.7	10.6	43.4	20.2	12.9	100.0	8.7	2,395
Eastern	11.7	39.9	14.6	24.1	6.9	2.8	100.0	5.8	1,710
Luapula	3.9	34.3	19.1	32.7	7.6	2.4	100.0	6.6	855
Lusaka	1.7	9.1	14.0	39.0	21.9	14.3	100.0	8.9	2,844
Muchinga	2.3	30.4	21.3	33.8	7.8	4.3	100.0	6.7	680
Northern	4.0	31.5	19.0	35.2	6.8	3.6	100.0	6.7	929
North Western	4.8	25.2	14.9	36.9	12.5	5.8	100.0	7.4	557
Southern	1.7	25.8	23.0	33.8	10.8	5.0	100.0	6.9	1,771
Western	7.4	34.2	15.7	30.0	8.3	4.4	100.0	6.5	668
<b>Wealth quintile</b>									
Lowest	9.9	45.3	21.8	20.6	2.3	0.1	100.0	5.6	2,038
Second	6.2	38.3	20.5	31.0	3.9	0.1	100.0	6.2	2,448
Middle	3.4	29.0	21.6	37.7	7.7	0.6	100.0	6.7	2,547
Fourth	1.4	13.9	15.9	44.7	18.0	6.1	100.0	8.3	3,124
Highest	0.4	3.6	6.3	36.7	28.0	24.9	100.0	11.1	3,405
Total 15-49	3.7	23.3	16.3	35.3	13.7	7.8	100.0	7.6	13,561
50-59	4.8	21.5	27.0	27.5	8.6	10.6	100.0	6.9	1,212
Total 15-59	3.8	23.1	17.2	34.7	13.2	8.0	100.0	7.5	14,773

<sup>1</sup> Completed 7th grade at the primary level

<sup>2</sup> Completed 12th grade at the secondary level

### 3.3 LITERACY

The ability to read is an important personal asset allowing women and men increased opportunities in life. In addition, knowledge of the literacy level of the population can help programme managers, especially those working in health and family planning, decide how to reach women and men with their messages. In the 2013-14 ZDHS, the literacy status of respondents was determined by assessing their ability to read all or part of a simple sentence in any of Zambia's seven major language groups.<sup>2</sup> The literacy test was administered only to respondents who had less than a secondary education. The findings are shown in Tables 3.3.1 and 3.3.2 for women and men, respectively.

Table 3.3.1 shows that about seven in ten women age 15-49 (68 percent) in Zambia are literate, an increase from the figure of 64 percent reported in the 2007 ZDHS. The level of literacy is higher among women age 15-24 (77 percent) than among women in the older age groups (59-63 percent), suggesting that younger women have more opportunities for learning. Literacy varies notably by place of residence. Eighty-three percent of women residing in urban areas are literate, as compared with only 54 percent of rural women. Literacy is highest among women in Copperbelt (84 percent) and lowest among those in Luapula (48 percent). Literacy increases substantially with increasing household wealth, ranging from 38 percent among women in the lowest wealth quintile to 93 percent among those in the highest quintile. This finding reaffirms the positive association between economic status and literacy.

<sup>2</sup> The major language groups are Bemba, Kaonde, Lozi, Lunda, Luvale, Nyanja, and Tonga.

Men are more likely to be literate than women (Table 3.3.2). Eighty-three percent of Zambian men age 15-49 are literate, a slight increase from the figure of 82 percent reported in 2007. Literacy patterns among men are similar to those observed for women. Literacy is highest among men age 15-24 (85 percent), urban men (93 percent), and men living in Lusaka (93 percent). Similar to educational attainment, literacy is positively associated with wealth, with men in the lowest quintile having the lowest rate (62 percent) and those in the highest quintile having the highest rate (98 percent).

**Table 3.3.1 Literacy: Women**

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Zambia 2013-14

Background characteristic	No schooling or primary school						Missing	Total	Percentage literate <sup>1</sup>	Number of women
	Secondary school or higher	Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/visually impaired				
<b>Age</b>										
15-24	59.7	10.5	7.1	22.1	0.2	0.0	0.5	100.0	77.3	6,631
15-19	59.5	11.7	7.6	20.3	0.2	0.0	0.6	100.0	78.8	3,625
20-24	59.9	9.0	6.5	24.2	0.1	0.0	0.2	100.0	75.4	3,006
25-29	43.7	10.9	8.5	36.5	0.1	0.0	0.2	100.0	63.2	2,813
30-34	36.7	13.3	10.4	38.9	0.5	0.1	0.1	100.0	60.4	2,475
35-39	30.5	17.0	11.2	40.3	0.5	0.2	0.4	100.0	58.7	2,009
40-44	26.8	22.7	10.9	38.8	0.2	0.2	0.4	100.0	60.4	1,464
45-49	24.2	26.1	10.2	38.3	0.4	0.5	0.4	100.0	60.5	1,018
<b>Residence</b>										
Urban	65.2	9.9	7.7	16.5	0.4	0.0	0.2	100.0	82.8	7,585
Rural	27.3	17.2	9.9	44.9	0.2	0.1	0.5	100.0	54.3	8,826
<b>Province</b>										
Central	41.5	14.4	12.3	31.6	0.0	0.0	0.3	100.0	68.2	1,467
Copperbelt	64.4	12.5	6.7	15.8	0.4	0.1	0.1	100.0	83.7	2,836
Eastern	26.0	17.0	6.3	50.5	0.0	0.1	0.1	100.0	49.3	1,930
Luapula	27.0	6.7	14.3	51.2	0.1	0.1	0.5	100.0	48.1	1,143
Lusaka	62.5	8.0	9.6	18.9	0.7	0.0	0.3	100.0	80.1	3,266
Muchinga	31.9	15.9	6.7	44.8	0.4	0.1	0.3	100.0	54.4	868
Northern	27.1	13.6	8.4	50.4	0.0	0.1	0.3	100.0	49.1	1,200
North Western	39.1	11.3	10.6	37.9	0.1	0.1	1.0	100.0	60.9	713
Southern	43.1	21.0	7.9	26.7	0.2	0.2	0.8	100.0	72.0	2,007
Western	32.4	23.8	9.6	33.7	0.1	0.2	0.3	100.0	65.8	980
<b>Wealth quintile</b>										
Lowest	13.1	14.7	9.9	61.6	0.1	0.2	0.5	100.0	37.6	2,859
Second	22.8	18.0	10.9	47.5	0.3	0.1	0.4	100.0	51.7	2,861
Middle	34.8	19.5	10.6	34.4	0.2	0.1	0.4	100.0	64.9	3,077
Fourth	53.6	13.4	10.5	21.9	0.3	0.1	0.2	100.0	77.5	3,510
Highest	82.1	6.4	4.1	6.6	0.4	0.0	0.3	100.0	92.7	4,103
<b>Total</b>	<b>44.8</b>	<b>13.8</b>	<b>8.9</b>	<b>31.8</b>	<b>0.3</b>	<b>0.1</b>	<b>0.3</b>	<b>100.0</b>	<b>67.5</b>	<b>16,411</b>

<sup>1</sup> Refers to women who attended secondary school or higher and women who can read a whole sentence or part of a sentence

Table 3.3.2 Literacy: Men

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Zambia 2013-14

Background characteristic	No schooling or primary school						Missing	Total	Percentage literate <sup>1</sup>	Number of men
	Secondary school or higher	Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/visually impaired				
<b>Age</b>										
15-24	62.9	12.4	9.6	14.5	0.3	0.0	0.3	100.0	84.9	5,672
15-19	55.5	14.8	12.0	16.9	0.3	0.1	0.4	100.0	82.3	3,337
20-24	73.4	8.9	6.3	11.1	0.1	0.0	0.2	100.0	88.6	2,335
25-29	61.2	11.3	8.4	18.4	0.5	0.0	0.2	100.0	81.0	1,944
30-34	52.0	16.8	11.6	19.3	0.0	0.0	0.3	100.0	80.4	1,927
35-39	50.6	19.9	9.8	19.2	0.1	0.2	0.1	100.0	80.3	1,664
40-44	48.9	21.8	11.9	16.9	0.2	0.0	0.3	100.0	82.6	1,384
45-49	43.1	25.4	13.0	17.9	0.3	0.1	0.3	100.0	81.5	970
<b>Residence</b>										
Urban	77.6	8.7	6.9	6.2	0.2	0.1	0.3	100.0	93.2	6,326
Rural	38.5	21.8	13.2	26.0	0.3	0.0	0.3	100.0	73.4	7,235
<b>Province</b>										
Central	49.9	16.2	14.0	19.5	0.2	0.0	0.2	100.0	80.2	1,153
Copperbelt	76.5	9.4	5.1	8.2	0.6	0.1	0.2	100.0	90.9	2,395
Eastern	33.8	23.8	8.6	33.5	0.1	0.0	0.1	100.0	66.3	1,710
Luapula	42.7	9.7	25.7	21.4	0.3	0.0	0.2	100.0	78.1	855
Lusaka	75.2	8.4	9.5	6.5	0.0	0.0	0.3	100.0	93.2	2,844
Muchinga	46.0	21.1	9.0	23.6	0.0	0.0	0.3	100.0	76.1	680
Northern	45.6	23.5	6.6	23.9	0.0	0.2	0.2	100.0	75.6	929
North Western	55.1	12.5	16.2	15.2	0.0	0.0	1.0	100.0	83.8	557
Southern	49.6	21.7	10.0	17.8	0.5	0.0	0.5	100.0	81.3	1,771
Western	42.7	25.4	11.6	20.0	0.0	0.1	0.2	100.0	79.6	668
<b>Wealth quintile</b>										
Lowest	23.0	24.6	14.7	37.3	0.1	0.1	0.2	100.0	62.4	2,038
Second	35.0	21.7	15.0	27.5	0.4	0.0	0.5	100.0	71.6	2,448
Middle	45.9	20.9	12.5	19.9	0.5	0.0	0.3	100.0	79.3	2,547
Fourth	68.8	13.4	8.7	8.6	0.1	0.1	0.3	100.0	91.0	3,124
Highest	89.6	4.2	3.9	2.0	0.2	0.0	0.2	100.0	97.6	3,405
Total 15-49	56.8	15.7	10.2	16.8	0.2	0.0	0.3	100.0	82.7	13,561
50-59	46.7	29.2	11.2	11.9	0.5	0.3	0.2	100.0	87.1	1,212
Total 15-59	55.9	16.8	10.3	16.4	0.2	0.1	0.3	100.0	83.0	14,773

<sup>1</sup> Refers to men who attended secondary school or higher and men who can read a whole sentence or part of a sentence

### 3.4 EXPOSURE TO MASS MEDIA

In the 2013-14 ZDHS, exposure to media was assessed by asking respondents whether they listened to the radio, watched television, or read a newspaper or magazine at least once a week. This information is useful for programme managers and planners in determining which media are most effective in disseminating health-related information to targeted audiences. Tables 3.4.1 and 3.4.2 show the percentage of women and men who were exposed to different types of media at least once a week by background characteristics.

Overall, 12 percent of women and 22 percent of men have access to all three types of media at least once a week. Radio is the most commonly used form of mass media among both women and men (51 percent and 67 percent, respectively), followed by television (40 percent and 46 percent, respectively). Twenty-two percent of women and 34 percent of men report reading a newspaper at least once a week. About one-third of women (34 percent) and one-fifth of men (22 percent) have no access to any of the three specified media at least once a week.

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Zambia 2013-14

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
<b>Age</b>						
15-19	25.8	43.1	49.1	11.7	30.9	3,625
20-24	23.4	43.5	51.6	12.5	32.0	3,006
25-29	21.0	41.7	52.3	11.8	33.6	2,813
30-34	19.7	39.8	52.1	11.7	34.8	2,475
35-39	18.7	37.4	50.8	10.9	37.2	2,009
40-44	18.6	34.2	51.4	10.3	38.0	1,464
45-49	19.8	31.7	50.3	10.6	39.9	1,018
<b>Residence</b>						
Urban	29.8	69.9	60.0	20.7	17.1	7,585
Rural	14.8	14.7	43.4	3.8	48.7	8,826
<b>Province</b>						
Central	22.9	25.1	51.9	7.5	36.3	1,467
Copperbelt	24.1	65.4	56.6	16.2	20.3	2,836
Eastern	25.9	22.0	53.1	8.4	36.6	1,930
Luapula	13.9	12.4	37.0	3.1	55.9	1,143
Lusaka	31.9	76.6	61.8	24.8	15.3	3,266
Muchinga	11.2	23.5	50.7	5.6	41.3	868
Northern	9.0	18.0	44.3	3.5	50.1	1,200
North Western	17.9	20.8	44.9	5.5	44.6	713
Southern	21.5	29.3	47.2	8.4	38.7	2,007
Western	8.1	15.8	31.5	2.5	60.1	980
<b>Education</b>						
No education	1.4	13.3	35.3	0.3	60.0	1,375
Primary	10.2	24.2	44.2	2.8	45.3	7,685
Secondary	33.4	58.5	59.6	19.0	19.4	6,521
More than secondary	70.4	89.9	73.9	53.0	2.9	830
<b>Wealth quintile</b>						
Lowest	7.0	3.2	23.3	0.4	72.0	2,859
Second	12.3	6.1	44.8	0.9	49.1	2,861
Middle	16.7	16.7	51.3	3.4	39.9	3,077
Fourth	22.1	56.7	56.7	11.8	22.0	3,510
Highest	42.0	93.4	69.8	32.8	3.3	4,103
<b>Total</b>	<b>21.7</b>	<b>40.2</b>	<b>51.1</b>	<b>11.6</b>	<b>34.1</b>	<b>16,411</b>

There are no major variations in mass media exposure by age among women. Among men, those in the youngest age group are less likely to be exposed to all three media weekly (15 percent) than those in the older age groups (22-25 percent). There are wide gaps in exposure to mass media by place of residence. For example, 21 percent of urban women are exposed to all three media at least once a week, as compared with only 4 percent of rural women. Women and men residing in Lusaka are most likely to be exposed to all three media on a weekly basis (25 percent and 41 percent, respectively). Women in Luapula and Western (3 percent each) and men in Northern and Western (4 percent each) are least likely to be exposed to all three media each week.

Exposure to mass media increases with increasing educational attainment among both women and men. Less than 1 percent of women and men with no education are exposed to all three media at least once a week, as compared with 53 percent of women and 67 percent of men with more than a secondary education. A similar pattern is observed in the relationship between mass media exposure and wealth. For example, less than 1 percent of men in the lowest wealth quintile are exposed weekly to all three mass media, compared with 54 percent of men in the highest quintile.



Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Zambia 2013-14

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
<b>Age</b>						
15-19	27.8	46.3	60.2	15.3	24.7	3,337
20-24	37.1	52.4	67.6	24.9	20.2	2,335
25-29	36.0	45.9	67.7	23.3	23.0	1,944
30-34	34.7	47.1	67.6	22.8	21.5	1,927
35-39	36.0	44.3	71.1	24.6	20.4	1,664
40-44	33.2	41.0	68.9	21.7	23.2	1,384
45-49	33.8	39.9	71.7	22.7	22.1	970
<b>Residence</b>						
Urban	51.3	76.1	75.8	39.5	8.8	6,326
Rural	18.0	20.0	58.6	5.7	34.2	7,235
<b>Province</b>						
Central	28.6	38.2	67.4	16.8	22.7	1,153
Copperbelt	46.7	72.3	77.5	36.3	8.5	2,395
Eastern	33.5	27.4	65.1	10.9	23.8	1,710
Luapula	11.7	20.4	50.8	5.6	45.0	855
Lusaka	52.1	79.3	74.3	41.2	9.4	2,844
Muchinga	23.4	24.8	61.6	10.0	29.8	680
Northern	10.1	16.5	45.1	4.1	48.7	929
North Western	38.0	23.7	61.4	11.7	27.2	557
Southern	23.2	34.8	69.4	13.8	22.9	1,771
Western	10.5	17.7	50.4	3.9	43.8	668
<b>Education</b>						
No education	1.8	14.4	51.3	0.0	43.1	500
Primary	13.9	25.1	57.1	5.0	34.7	5,365
Secondary	44.0	58.5	72.7	29.1	14.1	6,638
More than secondary	82.3	90.3	84.3	67.2	1.8	1,058
<b>Wealth quintile</b>						
Lowest	12.1	6.1	37.2	0.5	55.4	2,038
Second	15.3	10.9	59.8	2.4	34.5	2,448
Middle	18.7	25.2	67.7	6.0	25.1	2,547
Fourth	40.5	64.7	75.5	27.0	11.2	3,124
Highest	64.2	94.2	80.3	54.2	1.9	3,405
Total 15-49	33.5	46.2	66.7	21.5	22.3	13,561
50-59	34.6	38.3	73.3	19.7	19.7	1,212
Total 15-59	33.6	45.5	67.2	21.3	22.1	14,773

### 3.5 EMPLOYMENT STATUS

The 2013-14 ZDHS asked respondents a number of questions regarding their employment status, including whether they were working in the seven days preceding the survey and, if not, whether they had been employed in the 12 months preceding the survey. Accurate assessment of employment status can be difficult because certain types of work, especially on family farms, in family businesses, or in the informal sector, are often not perceived as employment and hence not reported as such. To avoid underestimating employment status, respondents were asked several questions to probe for their status and to ensure complete coverage of employment in both the formal and informal sectors. The results are shown in Tables 3.5.1 and 3.5.2 for women and men, respectively.

Table 3.5.1 and Figure 3.1 show that 49 percent of women were employed at the time of the survey, 3 percent were not employed but had worked sometime in the past 12 months, and 48 percent were not employed during the 12 months preceding the survey. Current employment among women increases with age, from 19 percent among those age 15-19 to 69-70 percent among those age 40-49. Women who are divorced, separated, or widowed are most likely to be currently employed (69 percent), while women who have never been married are least likely to be employed (26 percent). The proportion of women who are currently employed increases steadily with number of living children, from 23 percent among those with no children to 65 percent among those with five or more children.

With respect to residence, rural women were more likely than urban women to be employed at the time of the survey (53 percent versus 43 percent). There are variations by province, with current

employment being highest among women in Northern (69 percent) and lowest among those in Eastern (38 percent).

Among women, there is no consistent relationship between education and current employment. Women with more than a secondary education are most likely to be currently employed (70 percent) and those with a secondary education least likely (38 percent). The proportion of women who are currently employed decreases with increasing wealth, from 58 percent among those in the lowest wealth quintile to 41 percent among those in the highest quintile.

Table 3.5.2 shows that about three-quarters of men age 15-49 (73 percent) were employed at the time of the survey, 7 percent were not employed but had worked at some time in the past 12 months, and 20 percent were not employed during the 12 months preceding the survey. Variations in men's current employment by background characteristics are similar to those observed among women. The percentage of men employed at the time of the survey is lower among those age 15-19 (37 percent) and age 20-24 (65 percent) than among those in the older age groups (87-92 percent). Married or cohabiting men are most likely to be currently employed (91 percent), while men who have never been married are least likely to be employed (50 percent). Similar to women, men with no children are less likely to be currently employed (51 percent) than men with one or more children (90-92 percent).

Current employment is higher among rural men than urban men (75 percent versus 70 percent). By province, current employment ranges from 53 percent in Eastern to 86 percent in Southern. Men with more than a secondary education are most likely to be currently employed (85 percent), and those with a secondary education are least likely (68 percent). Men in the highest wealth quintile are less likely to be currently employed (64 percent) than men in the lower quintiles (73-79 percent).

**Figure 3.1 Women's employment status (past 12 months)**

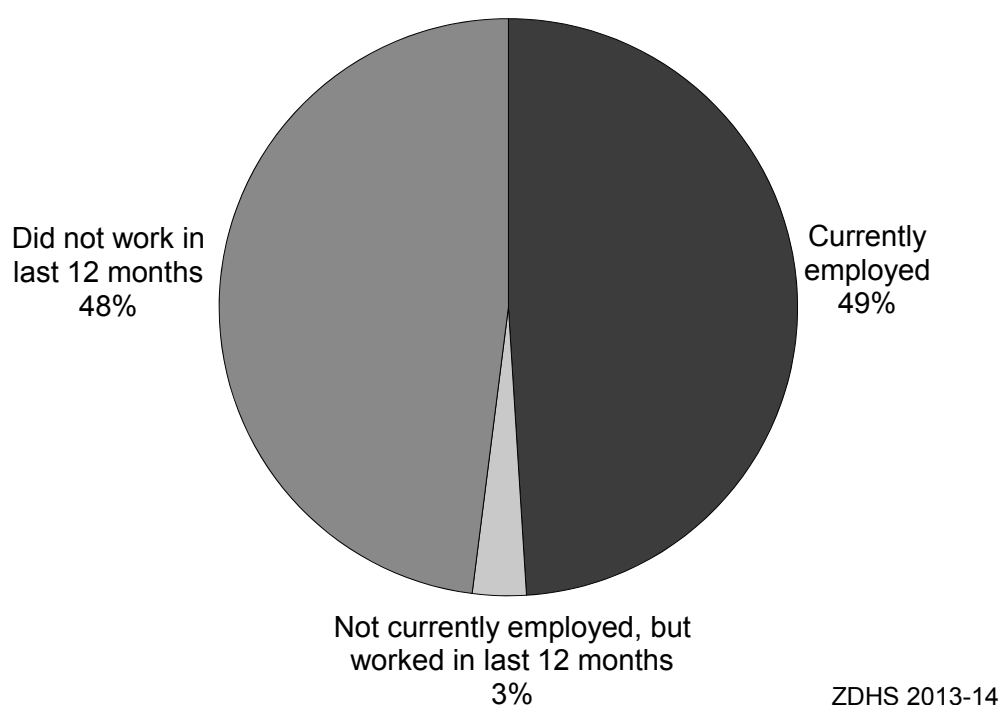


Table 3.5.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Zambia 2013-14

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of women
	Currently employed <sup>1</sup>	Not currently employed			
<b>Age</b>					
15-19	19.4	2.5	78.1	100.0	3,625
20-24	39.6	3.8	56.6	100.0	3,006
25-29	55.6	3.1	41.3	100.0	2,813
30-34	61.0	4.2	34.8	100.0	2,475
35-39	64.9	3.3	31.9	100.0	2,009
40-44	70.0	3.6	26.3	100.0	1,464
45-49	69.3	3.2	27.5	100.0	1,018
<b>Marital status</b>					
Never married	25.6	2.2	72.3	100.0	4,572
Married or living together	55.5	3.8	40.7	100.0	9,859
Divorced/separated/widowed	68.7	3.7	27.5	100.0	1,980
<b>Number of living children</b>					
0	23.4	2.4	74.2	100.0	4,112
1-2	49.7	3.7	46.7	100.0	4,821
3-4	59.1	3.4	37.5	100.0	3,750
5+	65.2	3.8	30.9	100.0	3,727
<b>Residence</b>					
Urban	43.4	2.1	54.5	100.0	7,585
Rural	53.4	4.4	42.2	100.0	8,826
<b>Province</b>					
Central	40.3	6.1	53.5	100.0	1,467
Copperbelt	40.6	2.0	57.4	100.0	2,836
Eastern	37.8	5.6	56.7	100.0	1,930
Luapula	66.0	0.9	33.0	100.0	1,143
Lusaka	41.3	1.5	57.2	100.0	3,266
Muchinga	58.0	3.9	38.1	100.0	868
Northern	68.8	2.3	28.8	100.0	1,200
North Western	56.5	6.6	36.8	100.0	713
Southern	52.2	5.0	42.8	100.0	2,007
Western	65.9	2.4	31.7	100.0	980
<b>Education</b>					
No education	55.5	4.9	39.6	100.0	1,375
Primary	54.3	3.5	42.2	100.0	7,685
Secondary	38.1	2.9	59.0	100.0	6,521
More than secondary	69.9	2.8	27.3	100.0	830
<b>Wealth quintile</b>					
Lowest	57.7	3.2	39.0	100.0	2,859
Second	55.0	4.7	40.3	100.0	2,861
Middle	50.8	4.3	44.9	100.0	3,077
Fourth	43.5	3.0	53.5	100.0	3,510
Highest	41.2	2.0	56.8	100.0	4,103
<b>Total</b>	<b>48.8</b>	<b>3.3</b>	<b>47.9</b>	<b>100.0</b>	<b>16,411</b>

<sup>1</sup> "Currently employed" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.5.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Zambia 2013-14

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of men
	Currently employed <sup>1</sup>	Not currently employed			
<b>Age</b>					
15-19	36.5	9.0	54.5	100.0	3,337
20-24	65.1	9.2	25.7	100.0	2,335
25-29	87.1	6.3	6.6	100.0	1,944
30-34	92.2	5.0	2.9	100.0	1,927
35-39	91.2	5.1	3.7	100.0	1,664
40-44	91.9	5.5	2.4	100.0	1,384
45-49	91.9	4.8	3.3	100.0	970
<b>Marital status</b>					
Never married	50.0	8.4	41.6	100.0	5,985
Married or living together	91.4	5.7	2.9	100.0	7,035
Divorced/separated/widowed	85.4	7.3	7.3	100.0	542
<b>Number of living children</b>					
0	50.8	8.6	40.6	100.0	6,083
1-2	89.7	5.8	4.4	100.0	2,689
3-4	92.1	4.7	3.1	100.0	2,146
5+	91.0	6.1	2.9	100.0	2,644
<b>Residence</b>					
Urban	70.2	3.9	25.9	100.0	6,326
Rural	75.3	9.6	15.1	100.0	7,235
<b>Province</b>					
Central	76.4	1.5	22.1	100.0	1,153
Copperbelt	70.4	5.3	24.3	100.0	2,395
Eastern	52.8	27.4	19.8	100.0	1,710
Luapula	82.6	2.2	15.2	100.0	855
Lusaka	70.0	2.8	27.2	100.0	2,844
Muchinga	77.6	6.6	15.7	100.0	680
Northern	81.4	3.0	15.6	100.0	929
North Western	76.1	3.5	20.3	100.0	557
Southern	85.8	5.6	8.6	100.0	1,771
Western	74.1	5.6	20.2	100.0	668
<b>Education</b>					
No education	76.0	15.4	8.6	100.0	500
Primary	76.3	8.7	15.0	100.0	5,365
Secondary	68.0	5.6	26.4	100.0	6,638
More than secondary	85.2	2.6	12.2	100.0	1,058
<b>Wealth quintile</b>					
Lowest	73.4	11.8	14.8	100.0	2,038
Second	78.9	8.6	12.5	100.0	2,448
Middle	77.0	7.5	15.5	100.0	2,547
Fourth	73.9	5.4	20.7	100.0	3,124
Highest	64.3	3.8	31.8	100.0	3,405
Total 15-49	72.9	6.9	20.1	100.0	13,561
50-59	86.6	8.0	5.4	100.0	1,212
Total 15-59	74.0	7.0	18.9	100.0	14,773

<sup>1</sup> "Currently employed" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

### 3.6 OCCUPATION

Respondents who were currently employed or had worked in the 12 months preceding the survey were asked to specify their occupation. The results for women and men are presented in Table 3.6.1 and Table 3.6.2, respectively, according to background characteristics.

The findings show that the agricultural sector remains the primary employer in Zambia, with 48 percent of women and 49 percent of men engaged in agricultural occupations. Sales and services are the second largest sector (40 percent of women and 18 percent of men). Six percent of women are in professional, technical, and managerial fields, and 2 percent are engaged in skilled or unskilled manual labour. Men are more likely than women to be employed as manual labourers; 15 percent are engaged in skilled manual labour and 6 percent in unskilled manual labour.

Table 3.6.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Zambia 2013-14

Background characteristic	Professional/technical/managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Missing	Total	Number of women
<b>Age</b>									
15-19	1.2	0.2	27.6	0.9	0.0	68.7	1.5	100.0	794
20-24	3.2	1.4	41.1	1.6	0.2	49.6	3.0	100.0	1,303
25-29	7.4	1.9	42.1	1.9	0.4	44.1	2.2	100.0	1,651
30-34	8.9	2.1	41.6	2.2	0.0	41.6	3.6	100.0	1,614
35-39	5.5	1.2	43.7	2.7	0.0	42.5	4.5	100.0	1,369
40-44	5.2	0.9	39.5	2.8	0.5	48.5	2.6	100.0	1,078
45-49	4.8	0.5	37.1	2.9	0.5	50.4	3.9	100.0	738
<b>Marital status</b>									
Never married	9.3	3.5	40.4	2.3	0.0	40.9	3.5	100.0	1,268
Married or living together	5.1	0.8	37.5	2.2	0.2	51.6	2.7	100.0	5,846
Divorced/separated/widowed	4.5	1.8	49.9	1.9	0.5	37.2	4.2	100.0	1,434
<b>Number of living children</b>									
0	8.9	3.3	38.2	2.7	0.0	43.6	3.3	100.0	1,060
1-2	8.7	2.3	42.9	1.7	0.4	40.5	3.4	100.0	2,571
3-4	5.7	0.6	45.3	2.5	0.1	42.7	3.2	100.0	2,344
5+	1.2	0.3	33.0	2.0	0.2	60.8	2.5	100.0	2,574
<b>Residence</b>									
Urban	11.1	3.0	69.3	3.6	0.3	8.4	4.3	100.0	3,450
Rural	1.9	0.3	20.2	1.2	0.1	74.1	2.2	100.0	5,098
<b>Province</b>									
Central	4.2	1.5	43.1	1.9	0.0	46.6	2.6	100.0	681
Copperbelt	11.7	1.3	60.3	3.8	0.3	18.1	4.5	100.0	1,209
Eastern	2.4	0.9	24.1	1.7	0.0	66.6	4.3	100.0	836
Luapula	1.8	0.3	27.9	0.9	0.4	67.0	1.6	100.0	765
Lusaka	11.1	4.5	71.3	4.0	0.5	4.6	4.1	100.0	1,397
Muchinga	2.4	0.4	21.4	1.1	0.1	72.6	2.1	100.0	537
Northern	1.6	0.2	20.4	1.2	0.2	75.7	0.7	100.0	854
North Western	4.2	0.8	24.6	1.0	0.2	65.9	3.3	100.0	450
Southern	4.5	0.7	34.4	1.5	0.1	56.2	2.6	100.0	1,149
Western	4.0	0.2	28.4	1.3	0.2	62.5	3.4	100.0	669
<b>Education</b>									
No education	0.1	0.0	27.7	0.9	0.2	69.4	1.8	100.0	830
Primary	0.1	0.0	36.1	1.6	0.2	59.3	2.6	100.0	4,442
Secondary	3.2	1.8	56.1	3.3	0.2	31.8	3.5	100.0	2,673
More than secondary	64.8	10.7	14.3	2.3	0.6	0.9	6.3	100.0	603
<b>Wealth quintile</b>									
Lowest	0.0	0.1	14.4	0.7	0.0	82.4	2.3	100.0	1,742
Second	0.3	0.0	21.7	1.2	0.2	74.5	2.0	100.0	1,707
Middle	1.2	0.2	39.5	1.4	0.2	55.0	2.4	100.0	1,697
Fourth	5.5	0.7	67.0	2.2	0.1	20.9	3.6	100.0	1,632
Highest	20.8	5.6	58.2	5.1	0.5	4.8	5.0	100.0	1,771
<b>Total</b>	5.7	1.4	40.0	2.1	0.2	47.6	3.1	100.0	8,548

Type of occupation varies by background characteristics. Respondents age 15-19 (69 percent of women and 71 percent of men) are more likely to work in agriculture than older respondents. As expected, rural women and men are substantially more likely to work in agriculture (74 percent and 77 percent, respectively) than their urban counterparts (8 percent and 12 percent, respectively). The opposite is true for the other types of occupations, especially sales and services, the sector that employs the majority of urban women (69 percent) and men (32 percent). Similarly, a much higher percentage of respondents living in rural provinces such as Luapula and Northern work in agriculture, while respondents in urban provinces such as Copperbelt and Lusaka are more likely to work in other occupations such as sales and services, skilled manual labour, or professional, technical, or managerial jobs.

Women and men with more than a secondary education (including a vocational or technical school education) are most likely to work in the professional, technical, and managerial sector (65 percent of women and 46 percent of men). By contrast, respondents with no education are most likely to work in the agricultural sector (69 percent of women and 75 percent of men). The reason is probably that women and men with no education have few employment opportunities other than in the agricultural sector, while it is easier for educated women and men to obtain employment in the nonagricultural sector.

More than eight in ten employed women (82 percent) and men (85 percent) in the lowest wealth quintile work in agriculture, whereas only 5 percent of women and 8 percent of men in the highest quintile do so. Women and men in the highest wealth quintile are most likely to be employed in sales and services (58 percent and 27 percent, respectively).

**Table 3.6.2 Occupation: Men**

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Zambia 2013-14

Background characteristic	Professional/technical/managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Missing	Total	Number of men
<b>Age</b>									
15-19	1.2	0.2	12.5	9.8	1.6	70.7	4.1	100.0	1,518
20-24	2.7	1.1	21.2	14.6	5.7	47.7	7.0	100.0	1,734
25-29	5.9	1.2	20.5	16.7	7.7	42.2	5.8	100.0	1,815
30-34	6.8	1.4	20.5	16.2	6.6	40.6	7.8	100.0	1,872
35-39	8.7	0.9	18.5	15.1	7.5	43.3	6.0	100.0	1,602
40-44	6.5	0.9	17.9	15.8	5.3	48.5	5.1	100.0	1,349
45-49	7.9	1.0	14.1	14.7	4.5	51.3	6.4	100.0	937
<b>Marital status</b>									
Never married	4.4	1.3	19.2	14.3	3.5	50.2	7.0	100.0	3,495
Married or living together	6.1	0.9	17.5	14.6	7.0	48.4	5.5	100.0	6,832
Divorced/separated/widowed	5.3	0.0	22.5	21.0	4.5	38.5	8.1	100.0	502
<b>Number of living children</b>									
0	4.9	1.3	18.7	14.0	3.6	50.6	6.9	100.0	3,615
1-2	8.2	1.0	22.1	16.9	8.2	37.7	6.0	100.0	2,569
3-4	6.2	1.1	18.9	16.5	8.4	42.3	6.7	100.0	2,078
5+	3.2	0.5	13.6	12.5	4.2	61.4	4.6	100.0	2,566
<b>Residence</b>									
Urban	9.1	2.0	32.0	24.0	10.6	11.9	10.3	100.0	4,686
Rural	2.8	0.2	7.9	7.7	2.0	76.5	2.9	100.0	6,143
<b>Province</b>									
Central	4.7	0.7	12.3	10.8	3.0	63.2	5.3	100.0	898
Copperbelt	7.9	1.2	25.2	22.5	9.8	22.1	11.3	100.0	1,812
Eastern	2.8	0.5	12.4	10.5	3.4	66.7	3.7	100.0	1,371
Luapula	2.4	0.2	7.5	5.0	2.2	80.9	1.7	100.0	725
Lusaka	8.9	2.2	33.8	23.0	11.6	12.5	8.1	100.0	2,070
Muchinga	4.5	0.7	10.4	10.7	2.7	67.3	3.6	100.0	573
Northern	4.0	0.7	10.5	8.9	1.4	72.5	1.9	100.0	784
North Western	4.0	0.6	12.1	15.3	5.1	58.9	4.0	100.0	444
Southern	4.9	0.6	13.1	11.5	3.4	59.9	6.6	100.0	1,619
Western	4.0	0.7	15.8	10.3	2.2	63.8	3.2	100.0	533
<b>Education</b>									
No education	0.2	0.0	13.3	6.4	3.2	74.6	2.3	100.0	458
Primary	0.7	0.1	13.9	11.9	2.7	66.6	4.0	100.0	4,560
Secondary	2.9	1.1	23.8	17.9	9.0	37.9	7.4	100.0	4,883
More than secondary	45.6	5.1	13.6	16.6	5.1	3.0	11.1	100.0	928
<b>Wealth quintile</b>									
Lowest	0.9	0.0	4.3	7.2	0.7	84.9	2.0	100.0	1,737
Second	0.9	0.1	9.2	8.4	1.5	77.1	2.8	100.0	2,141
Middle	1.2	0.2	15.3	13.4	2.6	61.5	5.9	100.0	2,153
Fourth	5.2	0.7	30.5	21.6	9.8	24.6	7.6	100.0	2,477
Highest	17.7	3.6	27.1	20.4	12.1	8.4	10.8	100.0	2,321
Total 15-49	5.5	1.0	18.3	14.8	5.7	48.5	6.1	100.0	10,829
50-59	7.6	0.8	13.5	13.2	3.8	56.6	4.6	100.0	1,146
Total 15-59	5.7	1.0	17.9	14.6	5.6	49.3	6.0	100.0	11,975

### 3.7 TYPE OF EMPLOYMENT

Tables 3.7.1 and 3.7.2 show the percent distribution of women and men employed in the 12 months preceding the survey by type of earnings, type of employer (among women only), and continuity of employment, according to type of employment (agricultural or nonagricultural).

More than six in ten women employed in agriculture (61 percent) are not paid for their work. By contrast, 85 percent of women who work in the nonagricultural sector are paid in cash, as compared with only 29 percent of women working in agriculture. Overall, more than one-third of employed women (35 percent) are not paid at all.

Seventy-two percent of women employed in the agricultural sector and 63 percent of those who work in the nonagricultural sector are self-employed. As expected, the majority of women who work in agriculture (83 percent) are seasonally employed, and only 13 percent work all year. Among women who do nonagricultural work, the majority (72 percent) are employed all year.

**Table 3.7.1 Type of employment: Women**

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Zambia 2013-14

Employment characteristic	Agricultural work	Nonagricultural work	Total
<b>Type of earnings</b>			
Cash only	28.9	85.4	58.3
Cash and in-kind	8.2	3.1	5.5
In-kind only	1.8	0.2	1.0
Not paid	60.9	10.7	34.8
Total	100.0	100.0	100.0
<b>Type of employer</b>			
Employed by family member	23.5	4.5	13.4
Employed by nonfamily member	4.7	32.2	19.3
Self-employed	71.6	62.9	66.9
Total	100.0	100.0	100.0
<b>Continuity of employment</b>			
All year	13.1	72.0	43.7
Seasonal	83.2	16.4	48.4
Occasional	3.4	11.0	7.4
Total	100.0	100.0	100.0
Number of women employed during the past 12 months	4,067	4,220	8,548

Note: Totals may not sum up to 100 percent because women with missing information have been deleted.

**Table 3.7.2 Type of employment: Men**

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Zambia 2013-14

Employment characteristic	Agricultural work	Nonagricultural work	Total
<b>Type of earnings</b>			
Cash only	41.7	91.4	66.8
Cash and in-kind	17.4	2.8	10.0
In-kind only	1.4	0.5	1.0
Not paid	39.3	5.3	22.1
Total	100.0	100.0	100.0
<b>Continuity of employment</b>			
All year	24.9	75.2	50.1
Seasonal	68.3	11.7	40.0
Occasional	6.8	13.1	9.8
Total	100.0	100.0	100.0
Number of men employed during the past 12 months	5,903	5,359	11,975

Note: Totals may not sum up to 100 percent because men with missing information have been deleted.

Table 3.7.2 shows that a lower percentage of employed men (22 percent) than employed women (35 percent) are not paid for their work. About four in ten men working in the agricultural sector (39 percent) are not paid at all for their work. On the other hand, the majority of men who work in the nonagricultural sector (91 percent) receive cash for their work; only 5 percent do not receive payment of any type. Sixty-eight percent of men who work in agriculture are seasonally employed, and 25 percent work throughout the year. Three-quarters of men in the nonagricultural sector are employed all year.

### 3.8 HEALTH INSURANCE COVERAGE

Access to health care improves when individuals are covered by some form of health insurance. Tables 3.8.1 and 3.8.2 show the percentage of women and men age 15-49 by the specific health insurance coverage they carry, according to background characteristics.

The vast majority of women and men in Zambia do not have any health insurance (97 percent each). Among women and men with health insurance, 2 percent have employer-based insurance and less than 1 percent has other types of health insurance such as social security, mutual health organisation or community-based coverage, or privately purchased commercial insurance.

There are no major variations in health insurance coverage by background characteristics.

**Table 3.8.1 Health insurance coverage: Women**

Percentage of women age 15-49 with specific types of health insurance coverage, according to background characteristics, Zambia 2013-14

Background characteristic	Employer-based insurance	Mutual health organisation/ community-based insurance	Privately purchased commercial insurance	Low cost pre-payment scheme/standard	High cost pre-payment scheme/premium	None	Number of women
<b>Age</b>							
15-19	0.6	0.2	0.1	0.2	0.3	98.6	3,625
20-24	1.3	0.1	0.1	0.1	0.2	98.1	3,006
25-29	2.5	0.2	0.2	0.2	0.6	96.4	2,813
30-34	2.1	0.3	0.2	0.3	0.5	96.5	2,475
35-39	1.9	0.3	0.3	0.3	0.4	96.8	2,009
40-44	1.7	0.1	0.3	0.4	0.5	97.1	1,464
45-49	2.1	0.3	0.3	0.3	0.4	96.6	1,018
<b>Residence</b>							
Urban	3.3	0.4	0.4	0.3	0.8	94.8	7,585
Rural	0.2	0.0	0.0	0.1	0.1	99.5	8,826
<b>Province</b>							
Central	1.1	0.1	0.0	0.0	0.3	98.5	1,467
Copperbelt	4.5	0.2	0.3	0.1	1.2	93.8	2,836
Eastern	0.4	0.1	0.1	0.0	0.0	99.3	1,930
Luapula	0.1	0.1	0.0	0.0	0.3	99.3	1,143
Lusaka	2.4	0.6	0.4	0.5	0.4	95.7	3,266
Muchinga	0.1	0.0	0.0	0.0	0.1	99.8	868
Northern	0.0	0.0	0.0	0.0	0.1	99.8	1,200
North Western	0.9	0.0	0.4	0.1	0.6	97.9	713
Southern	1.2	0.0	0.1	0.9	0.1	97.6	2,007
Western	0.3	0.0	0.4	0.0	0.1	99.2	980
<b>Education</b>							
No education	0.0	0.0	0.0	0.3	0.0	99.7	1,375
Primary	0.3	0.1	0.1	0.2	0.1	99.3	7,685
Secondary	2.0	0.3	0.2	0.2	0.4	96.9	6,521
More than secondary	14.2	0.5	2.4	0.3	4.2	78.6	830
<b>Wealth quintile</b>							
Lowest	0.0	0.0	0.0	0.0	0.0	100.0	2,859
Second	0.0	0.0	0.0	0.4	0.0	99.6	2,861
Middle	0.2	0.0	0.0	0.0	0.1	99.7	3,077
Fourth	0.6	0.1	0.1	0.3	0.1	98.8	3,510
Highest	5.9	0.6	0.8	0.5	1.3	90.9	4,103
<b>Total</b>	<b>1.6</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.4</b>	<b>97.3</b>	<b>16,411</b>



Table 3.8.2 Health insurance coverage: Men

Percentage of men age 15-49 with specific types of health insurance coverage, according to background characteristics, Zambia 2013-14

Background characteristic	Social security	Employer-based insurance	Mutual health organisation/ community-based insurance	Privately purchased commercial insurance	Low cost pre-payment scheme/ standard	High cost pre-payment scheme/ premium	Other	None	Number of men
<b>Age</b>									
15-19	0.0	0.4	0.1	0.2	0.1	0.1	0.1	99.1	3,337
20-24	0.1	0.4	0.2	0.2	0.0	0.4	0.0	98.7	2,335
25-29	0.1	1.4	0.3	0.3	0.0	0.0	0.0	97.8	1,944
30-34	0.1	3.1	0.2	0.2	0.4	0.2	0.1	95.7	1,927
35-39	0.1	2.7	0.4	0.3	0.2	0.5	0.2	95.7	1,664
40-44	0.0	1.4	0.8	0.5	0.6	0.5	0.0	96.2	1,384
45-49	0.1	2.5	0.5	0.5	0.6	0.6	0.5	94.9	970
<b>Residence</b>									
Urban	0.1	2.9	0.5	0.4	0.3	0.5	0.2	95.1	6,326
Rural	0.1	0.2	0.1	0.2	0.1	0.1	0.1	99.3	7,235
<b>Province</b>									
Central	0.2	0.7	0.2	0.2	0.2	0.3	0.0	98.2	1,153
Copperbelt	0.2	2.9	0.7	0.3	0.2	0.8	0.2	94.6	2,395
Eastern	0.1	0.2	0.1	0.1	0.2	0.1	0.2	99.1	1,710
Luapula	0.0	0.5	0.2	0.1	0.0	0.0	0.0	99.2	855
Lusaka	0.0	2.2	0.2	0.5	0.3	0.4	0.1	96.3	2,844
Muchinga	0.0	0.3	0.3	0.3	0.0	0.0	0.3	98.9	680
Northern	0.0	0.3	0.0	0.1	0.0	0.0	0.1	99.5	929
North Western	0.0	1.2	0.3	0.2	0.0	0.2	0.1	97.9	557
Southern	0.0	2.0	0.4	0.4	0.2	0.1	0.1	96.9	1,771
Western	0.0	0.3	0.1	0.2	0.0	0.0	0.0	99.4	668
<b>Education</b>									
No education	0.0	0.0	0.1	0.0	0.2	0.0	0.0	99.7	500
Primary	0.0	0.2	0.1	0.0	0.0	0.0	0.0	99.5	5,365
Secondary	0.0	1.2	0.2	0.2	0.2	0.2	0.1	97.9	6,638
More than secondary	0.5	10.3	1.6	2.0	1.0	2.5	0.7	81.8	1,058
<b>Wealth quintile</b>									
Lowest	0.0	0.1	0.1	0.0	0.0	0.0	0.0	99.8	2,038
Second	0.0	0.1	0.1	0.0	0.1	0.0	0.0	99.8	2,448
Middle	0.1	0.3	0.1	0.0	0.0	0.0	0.0	99.5	2,547
Fourth	0.1	0.6	0.3	0.4	0.1	0.1	0.1	98.4	3,124
Highest	0.2	4.9	0.6	0.8	0.5	1.1	0.3	91.6	3,405
Total 15-49	0.1	1.5	0.3	0.3	0.2	0.3	0.1	97.3	13,561
50-59	0.2	2.3	0.3	0.5	0.0	0.3	0.1	96.3	1,212
Total 15-59	0.1	1.5	0.3	0.3	0.2	0.3	0.1	97.3	14,773

### 3.9 TOBACCO USE

Smoking and other forms of tobacco use can cause a wide variety of diseases and can lead to death. Smoking is a risk factor for cardiovascular disease, lung cancer, and other forms of cancer, and it contributes to the severity of pneumonia, emphysema, and chronic bronchitis symptoms. Also, secondhand smoke may adversely affect the health of children and aggravate childhood illnesses.

In the 2013-14 ZDHS, women and men age 15-49 were asked whether they currently smoked cigarettes and, if so, how many cigarettes they had smoked in the past 24 hours. Those who reported not currently smoking cigarettes were asked whether they use any other forms of tobacco, such as a pipe, chewing tobacco, or snuff. Tables 3.9.1 and 3.9.2 show the percentage of women and men who smoke cigarettes or use other tobacco products according to background characteristics. Table 3.9.2 also shows the percent distribution of male cigarette smokers by number of cigarettes smoked in the preceding 24 hours.

The majority of women (98 percent) do not use tobacco. Among the 76 women who smoke (weighted number), 9 percent reported that they smoked more than 10 cigarettes in the 24 hours before the survey (data not shown).

Table 3.9.1 Use of tobacco: Women

Percentage of women age 15-49 who smoke cigarettes or use other tobacco products, according to background characteristics and maternity status, Zambia 2013-14

Background characteristic	Uses tobacco		Does not use tobacco	Number of women
	Cigarettes	Other tobacco		
<b>Age</b>				
15-19	0.1	0.0	99.9	3,625
20-24	0.3	0.2	99.5	3,006
25-29	0.3	1.2	98.6	2,813
30-34	0.5	1.0	98.5	2,475
35-39	0.4	2.1	97.7	2,009
40-44	0.9	3.3	96.0	1,464
45-49	2.1	3.8	94.8	1,018
<b>Maternity status</b>				
Pregnant	0.1	0.8	99.1	1,427
Breastfeeding (not pregnant)	0.4	1.0	98.6	4,297
Neither	0.5	1.3	98.3	10,687
<b>Residence</b>				
Urban	0.3	1.2	98.6	7,585
Rural	0.6	1.2	98.3	8,826
<b>Province</b>				
Central	0.6	0.5	98.9	1,467
Copperbelt	0.3	2.8	97.1	2,836
Eastern	0.9	0.5	98.9	1,930
Luapula	0.1	2.1	97.8	1,143
Lusaka	0.3	0.2	99.5	3,266
Muchinga	0.5	0.1	99.4	868
Northern	0.2	1.2	98.6	1,200
North Western	0.3	0.5	99.2	713
Southern	0.4	0.2	99.5	2,007
Western	1.3	5.0	94.3	980
<b>Education</b>				
No education	1.4	3.3	95.9	1,375
Primary	0.5	1.5	98.1	7,685
Secondary	0.3	0.5	99.2	6,521
More than secondary	0.2	0.2	99.6	830
<b>Wealth quintile</b>				
Lowest	1.1	2.7	96.5	2,859
Second	0.4	0.8	98.9	2,861
Middle	0.4	0.9	98.8	3,077
Fourth	0.3	0.8	99.0	3,510
Highest	0.3	0.9	98.8	4,103
<b>Total</b>	<b>0.5</b>	<b>1.2</b>	<b>98.4</b>	<b>16,411</b>

Tobacco use is more common among men. Table 3.9.2 shows that one in five men age 15-49 use tobacco, the majority of whom smoke cigarettes (19 percent of all men). The proportion of male cigarette smokers increases with age, from 3 percent in the 15-19 age group to 36 percent in the 45-49 age group. Men in rural areas are more likely to smoke cigarettes than men in urban areas (21 percent versus 17 percent). The percentage of men who smoke cigarettes ranges from 13 percent in Southern to 30 percent in Luapula. This percentage decreases with increasing education and wealth.

Among men who smoke, 26 percent smoked 1-2 cigarettes in the 24 hours preceding the survey, 38 percent smoked 3-5 cigarettes, 13 percent smoked 6-9 cigarettes, and 12 percent smoked 10 or more cigarettes. Eight percent reported not having smoked a cigarette in the last 24 hours.

Table 3.9.2 Use of tobacco: Men

Percentage of men age 15-49 who smoke cigarettes or a pipe or use other tobacco products and the percent distribution of cigarette smokers by number of cigarettes smoked in preceding 24 hours, according to background characteristics, Zambia 2013-14

Background characteristic	Uses tobacco				Number of men	Percent distribution of men who smoke cigarettes by number of cigarettes smoked in the past 24 hours						Total	Number of cigarette smokers
	Cigarettes	Pipe	Other tobacco	Does not use tobacco		0	1-2	3-5	6-9	10+	Don't know/missing		
<b>Age</b>													
15-19	3.1	0.0	0.2	96.8	3,337	11.2	38.2	30.5	8.7	5.7	5.7	100.0	103
20-24	13.4	0.1	0.4	86.5	2,335	8.0	32.9	37.1	7.1	8.9	6.1	100.0	313
25-29	24.9	0.5	0.4	75.0	1,944	11.5	31.5	34.4	10.5	9.5	2.7	100.0	484
30-34	26.0	0.7	1.2	73.5	1,927	8.8	26.7	35.6	15.0	10.6	3.3	100.0	501
35-39	24.8	0.7	0.7	75.1	1,664	5.6	22.1	38.6	13.1	17.0	3.6	100.0	412
40-44	30.4	0.6	1.3	68.9	1,384	4.5	20.3	39.1	17.7	15.4	3.0	100.0	421
45-49	35.5	0.8	1.7	63.9	970	6.8	17.8	44.2	15.5	10.0	5.7	100.0	344
<b>Residence</b>													
Urban	16.5	0.1	0.7	83.1	6,326	7.5	25.0	33.4	15.1	16.0	3.0	100.0	1,045
Rural	21.2	0.7	0.7	78.6	7,235	8.0	26.4	40.4	11.8	8.8	4.6	100.0	1,533
<b>Province</b>													
Central	15.7	0.0	0.1	84.3	1,153	11.8	26.5	36.0	14.5	9.4	1.8	100.0	181
Copperbelt	20.5	0.1	1.6	78.6	2,395	9.4	27.1	31.9	12.9	13.9	4.8	100.0	491
Eastern	19.3	0.2	0.7	80.6	1,710	2.8	21.5	47.1	17.1	8.0	3.4	100.0	329
Luapula	29.6	0.1	0.9	70.1	855	5.7	31.8	38.7	10.0	9.2	4.6	100.0	253
Lusaka	14.8	0.1	0.5	85.1	2,844	4.5	19.3	38.4	17.7	17.9	2.2	100.0	422
Muchinga	23.5	0.7	1.0	76.3	680	9.7	22.8	36.3	14.2	8.2	8.8	100.0	160
Northern	24.3	0.2	0.3	75.6	929	9.7	24.9	40.2	8.2	9.8	7.2	100.0	226
North Western	18.2	3.5	0.8	81.6	557	14.5	21.5	40.5	8.2	14.6	0.6	100.0	101
Southern	12.7	0.3	0.2	87.2	1,771	13.7	39.7	24.4	7.5	10.4	4.3	100.0	226
Western	28.5	2.2	0.6	71.2	668	4.5	25.6	45.7	13.8	9.5	1.0	100.0	191
<b>Education</b>													
No education	30.8	0.7	1.8	68.8	500	6.0	25.5	46.4	15.1	6.1	1.0	100.0	154
Primary	25.0	0.5	0.8	74.7	5,365	7.2	25.5	37.9	12.7	12.1	4.5	100.0	1,343
Secondary	14.9	0.4	0.6	84.8	6,638	8.8	26.5	35.6	13.5	12.1	3.6	100.0	991
More than secondary	8.4	0.0	0.0	91.5	1,058	9.1	24.1	39.1	11.9	11.0	4.7	100.0	89
<b>Wealth quintile</b>													
Lowest	33.8	1.2	1.0	65.9	2,038	7.9	25.6	42.5	9.6	8.3	6.0	100.0	688
Second	22.1	0.8	0.7	77.7	2,448	5.9	28.4	38.7	14.3	9.6	3.2	100.0	541
Middle	17.2	0.2	0.7	82.5	2,547	9.6	26.2	32.9	14.2	13.9	3.2	100.0	439
Fourth	17.4	0.2	0.9	82.1	3,124	7.2	24.2	36.2	15.3	14.9	2.1	100.0	545
Highest	10.7	0.0	0.2	89.1	3,405	9.3	24.5	34.1	13.6	13.8	4.8	100.0	366
Total 15-49	19.0	0.4	0.7	80.7	13,561	7.8	25.9	37.5	13.1	11.7	3.9	100.0	2,578
50-59	30.1	0.4	1.2	69.4	1,212	7.3	24.1	33.2	15.7	12.4	7.3	100.0	364
Total 15-59	19.9	0.4	0.7	79.8	14,773	7.8	25.6	37.0	13.5	11.8	4.4	100.0	2,942

### 3.10 KNOWLEDGE AND ATTITUDES REGARDING TUBERCULOSIS

Tuberculosis (TB) is a major public health concern worldwide, particularly in countries such as Zambia that have a widespread AIDS epidemic, which fuels the spread of TB as a result of lowered immunity among people living with HIV. The 2013-14 ZDHS collected information from eligible respondents on their knowledge of and attitudes toward TB. Specifically, respondents were asked whether they had ever heard of the illness, how it spreads from one person to another, whether it can be cured, and whether they would want to keep the information secret if a member of their family contracted TB. This information is useful in policy formulation and implementation of programmes designed to combat and limit the spread of the disease and address issues of discrimination. Findings are presented in Tables 3.10.1 and 3.10.2.

Knowledge of TB in Zambia is almost universal, with 97 percent of women and 98 percent of men age 15-49 reporting that they had heard of TB. Among respondents who had heard of TB, 70 percent of women and 77 percent of men correctly reported that the disease is spread through the air by coughing.

Knowledge that TB is spread through the air by coughing is lowest among women age 15-19 (66 percent), women residing in rural areas (61 percent), and women in Northern (47 percent). This knowledge increases with increasing education and wealth.

Table 3.10.1 Knowledge and attitudes concerning tuberculosis: Women

Percentage of women age 15-49 who have heard of tuberculosis (TB), and among women who have heard of TB, the percentage who know that TB is spread through the air by coughing, the percentage who believe that TB can be cured, the percentage who would want to keep secret that a family member has TB, and the percentage who would care for a family member with TB, by background characteristics, Zambia 2013-14

Background characteristic	Among all women:		Among women who have heard of TB:				
	Percentage who have heard of TB	Number of women	Percentage who report that TB is spread through the air by coughing	Percentage who believe that TB can be cured	Percentage who would want a family member's TB kept secret	Percentage who would care for a family member with TB	Number of women
<b>Age</b>							
15-19	94.7	3,625	66.3	66.5	48.0	89.8	3,433
20-24	97.9	3,006	69.1	79.4	50.4	93.4	2,942
25-29	97.6	2,813	70.6	80.1	48.2	93.8	2,745
30-34	98.0	2,475	71.5	83.3	49.1	94.7	2,427
35-39	98.9	2,009	73.5	85.8	46.7	94.8	1,987
40-44	98.6	1,464	71.4	85.7	46.4	95.0	1,443
45-49	99.2	1,018	73.6	86.1	43.8	95.9	1,010
<b>Residence</b>							
Urban	99.1	7,585	80.7	87.9	46.7	94.2	7,520
Rural	95.9	8,826	60.8	71.4	49.4	92.6	8,468
<b>Province</b>							
Central	97.2	1,467	58.5	66.8	60.7	93.3	1,426
Copperbelt	98.7	2,836	79.7	84.7	47.8	91.9	2,798
Eastern	96.9	1,930	62.8	71.9	48.5	96.0	1,870
Luapula	93.8	1,143	52.4	68.2	49.2	88.3	1,072
Lusaka	99.2	3,266	82.7	92.0	42.6	95.3	3,239
Muchinga	94.4	868	56.5	58.1	59.0	93.3	820
Northern	93.0	1,200	46.7	47.5	56.7	85.4	1,117
North Western	97.0	713	72.0	88.2	35.3	91.0	692
Southern	99.1	2,007	80.3	90.8	39.4	96.9	1,989
Western	98.5	980	67.8	88.7	54.6	95.4	966
<b>Education</b>							
No education	92.8	1,375	51.9	68.5	52.0	93.0	1,277
Primary	96.5	7,685	63.6	74.6	50.7	92.5	7,415
Secondary	99.2	6,521	78.0	84.2	46.3	94.2	6,469
More than secondary	99.7	830	95.0	97.0	32.2	95.6	828
<b>Wealth quintile</b>							
Lowest	93.1	2,859	53.2	64.3	49.4	90.0	2,661
Second	96.7	2,861	59.3	70.6	51.6	93.0	2,766
Middle	97.9	3,077	67.4	77.3	50.6	93.7	3,013
Fourth	98.6	3,510	75.9	85.7	49.3	94.3	3,460
Highest	99.6	4,103	85.7	90.5	42.0	94.7	4,088
<b>Total</b>	<b>97.4</b>	<b>16,411</b>	<b>70.1</b>	<b>79.1</b>	<b>48.1</b>	<b>93.4</b>	<b>15,988</b>

Among men, there are no major variations by age in knowledge that TB is spread through the air by coughing. Similar to women, rural men (69 percent) and those living in Northern (53 percent) are less likely than other men to report that TB is spread through the air by coughing, and this knowledge increases with increasing education and wealth.

Overall, 79 percent of women and 84 percent of men who had heard of TB believe that it can be cured. Knowledge that TB can be cured is generally higher among older respondents and those living in urban areas. By province, the percentage of women who believe that TB can be cured ranges from 48 percent in Northern to 92 percent in Lusaka. Among men, this percentage ranges from 67 percent in Northern to 91 percent each in Lusaka, North Western, and Southern. Knowledge that TB can be cured is highest among more educated respondents and those in the highest wealth quintile.

Forty-eight percent of women and 36 percent of men would want to keep it secret if a family member had TB. The majority of women (93 percent) and men (95 percent) expressed the desire to care for a family member who had TB.

Table 3.10.2 Knowledge and attitudes concerning tuberculosis: Men

Percentage of men age 15-49 who have heard of tuberculosis (TB), and among men who have heard of TB, the percentage who know that TB is spread through the air by coughing, the percentage who believe that TB can be cured, the percentage who would want to keep secret that a family member has TB, and the percentage who would care for a family member with TB, by background characteristics, Zambia 2013-14

Background characteristic	Among all men:		Among men who have heard of TB:				
	Percentage who have heard of TB	Number of men	Percentage who report that TB is spread through the air by coughing	Percentage who believe that TB can be cured	Percentage who would want a family member's TB kept secret	Percentage who would care for a family member with TB	Number of men
<b>Age</b>							
15-19	94.7	3,337	75.5	72.9	40.1	92.0	3,161
20-24	98.3	2,335	78.3	82.5	38.2	95.5	2,296
25-29	98.8	1,944	76.2	85.2	34.1	96.0	1,922
30-34	99.4	1,927	77.2	88.1	34.4	96.3	1,916
35-39	98.6	1,664	77.6	88.7	33.9	96.8	1,641
40-44	99.5	1,384	78.8	90.7	34.2	96.1	1,377
45-49	98.5	970	80.0	90.4	33.6	95.0	955
<b>Residence</b>							
Urban	98.7	6,326	86.4	90.0	32.3	96.1	6,247
Rural	97.0	7,235	69.1	77.9	39.7	94.1	7,021
<b>Province</b>							
Central	95.6	1,153	78.7	77.6	51.2	96.5	1,102
Copperbelt	98.9	2,395	85.9	89.1	39.3	95.6	2,369
Eastern	99.1	1,710	70.8	75.5	45.8	96.7	1,694
Luapula	95.4	855	72.6	71.9	41.8	88.8	816
Lusaka	98.4	2,844	88.7	91.4	26.0	96.5	2,798
Muchinga	96.5	680	53.7	68.2	47.4	94.6	656
Northern	95.0	929	52.9	67.1	39.1	93.8	882
North Western	97.6	557	81.8	90.5	24.6	94.2	543
Southern	98.6	1,771	78.3	90.6	31.9	92.7	1,746
Western	98.8	668	67.2	89.0	18.1	96.9	661
<b>Education</b>							
No education	97.2	500	58.7	68.9	40.0	93.4	487
Primary	96.4	5,365	67.5	76.5	39.0	93.9	5,174
Secondary	98.7	6,638	83.5	88.0	35.4	95.7	6,554
More than secondary	99.5	1,058	95.3	97.5	26.0	97.6	1,052
<b>Wealth quintile</b>							
Lowest	96.8	2,038	60.1	71.4	39.6	93.4	1,973
Second	96.2	2,448	68.9	77.5	38.3	93.9	2,355
Middle	97.7	2,547	73.2	80.7	40.4	95.1	2,488
Fourth	98.7	3,124	83.9	89.1	35.8	95.4	3,082
Highest	99.0	3,405	90.1	92.2	30.1	96.5	3,370
Total 15-49	97.8	13,561	77.3	83.6	36.2	95.1	13,268
50-59	99.3	1,212	82.3	91.2	31.8	96.1	1,203
Total 15-59	98.0	14,773	77.7	84.2	35.8	95.1	14,471



## MARRIAGE AND SEXUAL ACTIVITY

### Key Findings

- Teenage marriage (age 15-19) is more common among girls (17 percent) than boys (1 percent).
- Twelve percent of married women and 7 percent of married men are in polygynous unions.
- The percentage of women married by age 15 declined from 13 percent among those age 45-49 to 2 percent among those age 15-19.
- Zambian men marry on average five years later than women. The median age at first marriage among women currently age 25-49 was 18.4 years, and the median age among men now age 25-49 was 23.9 years.
- Zambian women generally initiate sexual intercourse a year before their first marriage, while men initiate sexual intercourse 5 years before their first marriage.

This chapter discusses the principal factors other than contraception that influence fertility. These factors include marriage and sexual activity. Marriage signals the onset of exposure to the risk of pregnancy for most women, and thus it is an important fertility indicator. Populations in which age at first marriage is low tend to have early childbearing and high fertility rates.

This chapter also includes information on more direct measures of the beginning of exposure to pregnancy. These include age at first sexual intercourse and frequency of recent sexual intercourse.

### 4.1 CURRENT MARITAL STATUS

The term “married” refers to legal or formal unions, while “living together” designates an informal union in which a man and a woman live together, even if a formal civil, religious, or traditional ceremony has not occurred. In the context of the 2013-14 ZDHS, marriage includes living with partners in a consensual but informal union. Respondents who are widowed, divorced, or separated are referred to as “ever married.”

Table 4.1 shows current marital status by age and sex. Sixty percent of women and 52 percent of men age 15-49 are currently married. A higher proportion of men (44 percent) than women (28 percent) have never been married. In combination, divorce, separation, and widowhood are three times as high among women as among men (12 percent and 4 percent, respectively).

The results further show that teenage marriage is more common among girls age 15-19 (17 percent) than boys (1 percent). The proportion of married women increases rapidly from 17 percent among women age 15-19 and peaks at age 30-34 at 79 percent. The proportion married at age 35-39 declines with age to 72 percent at age 45-49. The lower percentage of women in union at age 45-49 can be attributed to widowhood, which affects 13 percent in this age group.

Among men, the percentage married also rapidly increases from 22 percent at age 20-24 to 91 percent at age 45-49.

The proportion never married decreases sharply with age for both women and men. Among women, the proportion decreases from 81 percent at age 15-19 to 1 percent at age 45-49; among men, it decreases from 99 percent at age 15-19 to 2 percent at age 45-49.

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Zambia 2013-14

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
WOMEN									
15-19	81.4	16.5	0.4	0.9	0.7	0.1	100.0	16.9	3,625
20-24	36.4	55.4	0.7	4.4	2.6	0.6	100.0	56.0	3,006
25-29	10.9	76.6	0.9	7.4	2.8	1.3	100.0	77.5	2,813
30-34	5.4	79.0	0.8	9.0	2.6	3.2	100.0	79.8	2,475
35-39	2.8	77.6	0.7	9.7	2.5	6.7	100.0	78.3	2,009
40-44	1.7	75.0	0.3	9.5	2.0	11.5	100.0	75.3	1,464
45-49	0.6	71.5	0.3	12.4	2.2	13.0	100.0	71.8	1,018
Total 15-49	27.9	59.5	0.6	6.4	2.1	3.5	100.0	60.1	16,411
MEN									
15-19	98.7	1.0	0.1	0.2	0.0	0.0	100.0	1.1	3,337
20-24	75.5	21.9	0.6	0.7	1.4	0.0	100.0	22.4	2,335
25-29	31.1	63.0	0.5	2.8	2.4	0.2	100.0	63.5	1,944
30-34	10.3	83.0	0.7	3.8	1.7	0.4	100.0	83.7	1,927
35-39	4.3	89.1	0.8	3.2	1.5	1.1	100.0	89.9	1,664
40-44	2.6	89.4	0.8	4.5	2.0	0.8	100.0	90.1	1,384
45-49	1.7	90.5	0.7	3.8	1.9	1.4	100.0	91.2	970
Total 15-49	44.1	51.4	0.5	2.2	1.4	0.4	100.0	51.9	13,561
50-59	1.2	89.6	1.4	3.4	1.4	3.0	100.0	91.0	1,212
Total 15-59	40.6	54.5	0.6	2.3	1.4	0.6	100.0	55.1	14,773

## 4.2 POLYGyny

Marital unions are predominantly of two types, those that are monogamous and those that are polygynous. The distinction has social significance and probable fertility implications, although the association between union type and fertility is complex and not well understood. Polygyny, the practice of having more than one wife, has connotations for the frequency of sexual intercourse and thus may have an effect on fertility. The extent of polygyny was measured in the 2013-14 ZDHS by asking all currently married female respondents whether their husband or partner had other wives (co-wives) and, if so, how many. Currently married men were also asked whether they had one or more wives or partners with whom they were living.

Tables 4.2.1 and 4.2.2 show the percent distribution of currently married women with co-wives and the percentage of currently married men with two or more wives. The data show that the majority of Zambian women and men are in monogamous unions. Twelve percent of married women and 7 percent of married men are in polygynous unions.

Polygyny is more common in rural areas, with 17 percent of women and 10 percent of men reporting being in a polygamous union. Among provinces, polygyny is highest in Southern (26 percent of women and 16 percent of men). Lusaka has the lowest percentages of polygyny with 3 percent of women and 2 percent men in such a union. Among men, polygyny is also 2 percent in Copperbelt.

Education is negatively associated with polygyny. These unions are common among men and women with primary education or less. The proportion of women in polygynous union decreases from 18 percent among those with no education to 3 percent among those with more than secondary education. The proportion of men in a polygynous union decreases from 9 percent among men with no education and primary education to 1 percent among men with more than secondary education.

The data also show that the percentage of women and men in a polygynous union decreases with wealth from 17 percent and 8 percent, respectively, among respondents in the lowest wealth quintile to 3 percent and 1 percent among women and men, respectively, in the highest wealth quintile.



The proportion of currently married women in a polygynous union declined from 15 percent in 2007 to 12 percent in 2013-04. Comparable data for men show a smaller decrease for the same period.

**Table 4.2.1 Number of women's co-wives**

Percent distribution of currently married women age 15-49 by number of co-wives, according to background characteristics, Zambia 2013-14

Background characteristic	Number of co-wives					Total	Number of women
	0	1	2+	Don't know	Missing		
<b>Age</b>							
15-19	92.5	5.1	0.8	1.3	0.4	100.0	613
20-24	90.9	6.5	1.0	1.1	0.4	100.0	1,684
25-29	89.1	9.0	0.9	0.9	0.1	100.0	2,181
30-34	86.9	10.1	2.2	0.6	0.2	100.0	1,976
35-39	83.6	11.5	4.0	0.6	0.2	100.0	1,572
40-44	83.4	12.9	2.6	0.9	0.2	100.0	1,102
45-49	80.1	13.4	6.1	0.2	0.2	100.0	730
<b>Residence</b>							
Urban	94.3	3.6	0.5	1.5	0.1	100.0	3,953
Rural	82.1	13.9	3.4	0.3	0.3	100.0	5,905
<b>Province</b>							
Central	87.0	9.6	2.6	0.1	0.7	100.0	895
Copperbelt	92.4	3.6	1.1	2.9	0.1	100.0	1,477
Eastern	83.5	13.7	2.5	0.0	0.3	100.0	1,304
Luapula	90.3	8.5	0.8	0.2	0.1	100.0	740
Lusaka	95.8	2.3	0.3	1.4	0.2	100.0	1,780
Muchinga	83.8	12.6	3.5	0.0	0.1	100.0	575
Northern	83.5	14.1	1.7	0.5	0.2	100.0	820
North Western	90.5	8.0	0.6	1.0	0.0	100.0	407
Southern	73.8	18.8	6.9	0.1	0.4	100.0	1,351
Western	86.0	12.4	1.3	0.2	0.1	100.0	511
<b>Education</b>							
No education	81.3	14.0	3.7	0.8	0.2	100.0	1,081
Primary	84.4	11.8	2.8	0.8	0.2	100.0	5,422
Secondary	92.6	5.4	0.9	0.9	0.2	100.0	2,905
More than secondary	96.5	3.1	0.3	0.1	0.0	100.0	451
<b>Wealth quintile</b>							
Lowest	82.7	14.1	2.5	0.3	0.4	100.0	1,888
Second	84.7	12.7	1.9	0.3	0.4	100.0	2,003
Middle	82.2	12.9	4.2	0.6	0.2	100.0	1,953
Fourth	89.8	6.6	1.9	1.7	0.1	100.0	2,063
Highest	95.3	2.6	0.8	1.2	0.1	100.0	1,952
<b>Total</b>	<b>87.0</b>	<b>9.7</b>	<b>2.2</b>	<b>0.8</b>	<b>0.2</b>	<b>100.0</b>	<b>9,859</b>

Table 4.2.2 Number of men's wives

Percent distribution of currently married men age 15-49 by number of wives, according to background characteristics, Zambia 2013-14

Background characteristic	Number of wives		Total	Number of men
	1	2+		
<b>Age</b>				
15-19	(97.4)	(2.6)	100.0	36
20-24	98.7	1.3	100.0	523
25-29	96.6	3.4	100.0	1,235
30-34	94.4	5.6	100.0	1,613
35-39	91.4	8.6	100.0	1,496
40-44	89.9	10.1	100.0	1,247
45-49	89.4	10.6	100.0	884
<b>Residence</b>				
Urban	98.2	1.8	100.0	2,781
Rural	89.7	10.3	100.0	4,254
<b>Province</b>				
Central	94.4	5.6	100.0	602
Copperbelt	98.2	1.8	100.0	975
Eastern	90.7	9.3	100.0	989
Luapula	96.1	3.9	100.0	534
Lusaka	98.4	1.6	100.0	1,313
Muchinga	88.8	11.2	100.0	400
Northern	90.1	9.9	100.0	583
North Western	93.4	6.6	100.0	300
Southern	83.9	16.1	100.0	970
Western	93.3	6.7	100.0	370
<b>Education</b>				
No education	90.8	9.2	100.0	380
Primary	90.7	9.3	100.0	3,182
Secondary	94.7	5.3	100.0	2,840
More than secondary	99.2	0.8	100.0	634
<b>Wealth quintile</b>				
Lowest	91.6	8.4	100.0	1,333
Second	91.5	8.5	100.0	1,508
Middle	88.6	11.4	100.0	1,364
Fourth	94.8	5.2	100.0	1,488
Highest	98.9	1.1	100.0	1,342
Total 15-49	93.1	6.9	100.0	7,035
50-59	87.1	12.9	100.0	1,103
Total 15-59	92.2	7.8	100.0	8,137

Note: Figures in parentheses are based on 25-49 unweighted cases.

### 4.3 AGE AT FIRST MARRIAGE

Whether or not the start of marriage coincides with the initiation of sexual intercourse, and thus the beginning of exposure to the risk of pregnancy, it is an important social and demographic indicator and, in most societies, represents the point in a person's life when childbearing first becomes acceptable. Duration of exposure to the risk of pregnancy depends primarily on the age at which women first marry. Women who marry early, on average, are more likely to have their first child at a young age, give birth to more children overall, contribute to higher fertility rates, and experience possible maternal health implications.

Table 4.3 shows the percentages of women and men who marry by specific ages, according to current age. Age at first marriage is defined as the age at which the respondent begins living with her or his first spouse/partner. Marriage occurs relatively early in Zambia; among women age 25-49, 45 percent marry by age 18, and 65 percent marry by age 20. The median age at first marriage among women age 25-49 is 18.4 years. The proportion of women married by age 15 declines from 13 percent among those age 45-49 to 2 percent among those age 15-19 indicating some evidence of a rising age at first marriage.

Men in Zambia marry more than five years later than women. The median age at first marriage among men age 25-49 is 23.9 years. Thirteen percent of men age 25-29 were married by age 20, compared with 61 percent of women in the same age group. Only 2 percent of men age 20-24 were married by age 18, as compared with 31 percent of women in the same age group. By age 25, 62 percent of men age 45-49 are married, compared with 90 percent of women.

**Table 4.3 Age at first marriage**

Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Zambia 2013-14

	Percentage first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage
Current age	15	18	20	22	25			
WOMEN								
15-19	1.8	na	na	na	na	81.4	3,625	a
20-24	5.9	31.4	50.6	na	na	36.4	3,006	19.9
25-29	8.8	39.8	60.8	73.8	84.7	10.9	2,813	18.9
30-34	8.4	44.7	64.1	76.1	85.4	5.4	2,475	18.5
35-39	9.9	45.9	67.4	78.3	87.4	2.8	2,009	18.4
40-44	10.3	48.4	68.0	80.1	88.5	1.7	1,464	18.1
45-49	13.2	53.7	73.1	83.2	90.1	0.6	1,018	17.7
20-49	8.7	41.8	61.9	na	na	12.7	12,786	18.7
25-49	9.6	45.0	65.4	77.2	86.6	5.4	9,780	18.4
MEN								
15-19	0.1	na	na	na	na	98.7	3,337	a
20-24	0.1	2.2	9.9	na	na	75.5	2,335	a
25-29	0.1	4.2	13.0	27.1	54.1	31.1	1,944	24.5
30-34	0.2	5.0	16.8	34.3	59.7	10.3	1,927	23.6
35-39	0.2	5.0	14.3	32.5	62.4	4.3	1,664	23.7
40-44	0.2	5.0	15.0	34.4	60.5	2.6	1,384	23.8
45-49	0.2	5.5	15.8	32.2	61.6	1.7	970	23.6
20-49	0.2	4.2	13.8	na	na	26.3	10,224	a
25-49	0.2	4.8	14.9	31.9	59.2	11.8	7,890	23.9
20-59	0.2	4.3	13.9	na	na	23.7	11,436	a
25-59	0.2	4.8	15.0	32.1	59.6	10.4	9,101	23.9

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner

na = Not applicable due to censoring

a = Omitted because less than 50 percent of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

## 4.4 MEDIAN AGE AT FIRST MARRIAGE

Table 4.4 shows the median age at first marriage for women age 20-49, women age 25-49, and men age 25-59 by background characteristics.

Urban women age 25-49 marry one and a half years later than rural women. A comparison by province shows that there is a three-year difference in median age at first marriage between women age 25-49 in Western (20.5) compared with those in Eastern (17.5 years). A positive association is seen between median age at first marriage and level of education. Women with a secondary education marry nearly three years later than those with no education (20.0 years and 17.3 years, respectively). In addition, women from the highest wealth quintile marry about three years later than those from the other quintiles. Education and wealth clearly are delaying factors for age at first marriage.

A similar pattern is seen for men age 25-59. Men in Western marry nearly two years later than men in Eastern, 24.3 and 22.7 years, respectively. As is the case of women, a positive association is seen between median age at first marriage and level of education in men. Men with a secondary education marry nearly two years later than those with no education.

The median age at first marriage among women age 25-49 over the last nearly two decades has increased by less than one year from 17.7 years in 1996 to 18.4 years in 2013-14. In the case of men age 25-59, the median age at first marriage has only marginally increased from 23.5 years to 23.9 years over the same period.

## 4.5 AGE AT FIRST SEXUAL INTERCOURSE

Age at first marriage is often used as a proxy for the onset of women's exposure to the risk of pregnancy. However, because some women are sexually active before marriage, the age at which women initiate sexual intercourse more precisely marks the beginning of their exposure to pregnancy. Table 4.5 shows the percentages of women and men who had initiated first sexual intercourse by specific ages and the median age at first intercourse, irrespective of marital status. This information allows assessment of trends in age at first intercourse across age cohorts.

Thirteen percent of women age 25-49 had first sexual intercourse by age 15, 58 percent by age 18, and 75 percent by age 20. The median age at first sexual intercourse among women age 25-49 (17.3 years) is lower than the median age at first marriage (18.4 years), suggesting that Zambian women in general initiate sexual intercourse a year before their first marriage.

The median age at first sexual intercourse among men age 25-49 is one year higher (18.3 years) than among women in the same group, mostly because men tend to marry later than women. Eleven percent of men age 25-49 had first sexual intercourse by age 15, 46 percent by age 18, and 68 percent by age 20—much later than among women age 25-49. Zambian men initiate sexual intercourse five years earlier than their first marriage.

**Table 4.4 Median age at first marriage by background characteristics**

Median age at first marriage among women age 20-49 and age 25-49, and median age at first marriage among men age 25-59, according to background characteristics, Zambia 2013-14

Background characteristic	Women's age		Men's age
	20-49	25-49	25-59
<b>Residence</b>			
Urban	19.9	19.4	a
Rural	18.0	17.9	22.9
<b>Province</b>			
Central	18.4	18.1	23.4
Copperbelt	19.6	18.9	a
Eastern	17.7	17.5	22.7
Luapula	18.3	18.1	23.1
Lusaka	19.8	19.4	a
Muchinga	17.9	17.8	23.1
Northern	17.7	17.6	23.0
North Western	18.8	18.4	23.2
Southern	18.6	18.5	23.0
Western	a	20.5	24.3
<b>Education</b>			
No education	17.3	17.3	22.7
Primary	17.7	17.7	22.6
Secondary	a	20.0	24.6
<b>Wealth quintile</b>			
Lowest	18.0	17.9	22.8
Second	17.8	17.7	22.8
Middle	18.1	17.9	22.8
Fourth	18.8	18.4	24.6
Highest	a	21.0	a
Total	18.7	18.4	23.9

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner

a = Omitted because less than 50 percent of the respondents began living with their spouse/partners for the first time before reaching the beginning of the age group

**Table 4.5 Age at first sexual intercourse**

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Zambia 2013-14

Current age	Percentage who had first sexual intercourse by exact age:					Percentage who never had sexual intercourse	Number	Median age at first sexual intercourse
	15	18	20	22	25			
WOMEN								
15-19	11.7	na	na	na	na	50.9	3,625	a
20-24	11.7	54.4	76.4	na	na	9.6	3,006	17.7
25-29	12.7	56.5	73.8	82.8	88.4	1.6	2,813	17.5
30-34	13.8	59.9	76.1	83.6	87.4	0.4	2,475	17.2
35-39	12.9	58.1	75.7	82.8	86.2	0.3	2,009	17.3
40-44	13.0	58.7	75.3	83.2	86.6	0.0	1,464	17.3
45-49	14.8	58.5	75.5	82.2	86.2	0.1	1,018	17.4
20-49	12.9	57.4	75.5	na	na	2.7	12,786	17.4
25-49	13.3	58.3	75.2	83.0	87.2	0.6	9,780	17.3
15-24	11.7	na	na	na	na	32.2	6,631	a
MEN								
15-19	18.3	na	na	na	na	52.3	3,337	a
20-24	13.2	47.6	72.4	na	na	14.0	2,335	18.2
25-29	11.4	45.1	67.8	82.3	92.0	2.4	1,944	18.3
30-34	11.4	48.3	70.7	85.6	92.8	0.5	1,927	18.1
35-39	10.4	45.8	68.1	82.3	90.4	0.7	1,664	18.3
40-44	9.4	45.2	67.5	83.3	90.1	0.1	1,384	18.3
45-49	8.9	44.2	66.5	81.7	89.7	0.1	970	18.4
20-49	11.1	46.3	69.3	na	na	3.9	10,224	18.3
25-49	10.5	46.0	68.4	83.2	91.3	0.9	7,890	18.3
15-24	16.2	na	na	na	na	36.5	5,672	a
20-59	10.8	45.5	68.4	na	na	3.5	11,436	18.3
25-59	10.2	44.9	67.4	82.5	90.8	0.8	9,101	18.3

na = Not applicable due to censoring

a = Omitted because less than 50 percent of the respondents began living with their spouses/partners for the first time before reaching the beginning of the age group

## 4.6 MEDIAN AGE AT FIRST SEXUAL INTERCOURSE

Table 4.6 shows median age at first sexual intercourse among women and men by background characteristics.

For the most part, differences in the median age at first sexual intercourse among men age 25-59 by background characteristics are similar to those discussed for median age at first marriage. However, there are differences in median age by residence and province. Both urban women and urban men age initiate sexual intercourse one year later than their rural counterparts.

A comparison for women age 25-49 by province shows that women in Western initiate sexual intercourse 2 years earlier than those in Lusaka (16.2 versus 18.2 years). A positive association is also seen between median age at first sexual intercourse and level of education in women. Women with more than secondary education (20.9 years) initiate sexual intercourse four years later than those with no education (16.6 years). Women with secondary education initiate sexual intercourse two years later than those with no education. In addition, women from the highest wealth quintile initiate sexual intercourse about two years later than those from the other quintiles. Education and wealth clearly are delaying factors for age at first sexual intercourse.

Men age 25-59 in Western (16.6 years) commence sexual intercourse about two years earlier than men in Central, Copperbelt, Lusaka, Muchinga, and Northern. Men with more than secondary education initiate sexual intercourse about two years later than men with no education (19.9 years and 17.7 years, respectively). Similarly, men from the highest wealth quintile initiate sexual intercourse about two years later (19.2 years) than men from the lowest and second quintiles, 17.6 and 17.7 years, respectively.

## 4.7 RECENT SEXUAL ACTIVITY

In the absence of contraception, the possibility of pregnancy is related to the frequency of sexual intercourse. Thus, information on intercourse is important for refining measurement of exposure to pregnancy. All women and men were asked how long ago their last sexual contact occurred. Tables 4.7.1 and 4.7.2 show the percent distribution of women and men age 15-49 by the timing of their last sexual intercourse, according to background characteristics.

Table 4.7.1 shows that more than half of women in every age group except age 15-19 were sexually active during the four weeks preceding the survey. An additional 19 percent had been sexually active in the first 11 months of the year preceding the survey. Twelve percent had not been sexually active for one or more years. One in every eight women (13 percent) had never had sexual intercourse.

**Table 4.6 Median age at first sexual intercourse by background characteristics**

Median age at first sexual intercourse among women age 20-49 and age 25-49, and median age at first sexual intercourse among men age 20-59 and age 25-59, according to background characteristics, Zambia 2013-14

Background characteristic	Women's age		Men's age	
	20-49	25-49	20-59	25-59
<b>Residence</b>				
Urban	18.1	17.9	18.8	18.8
Rural	16.9	16.9	17.8	17.9
<b>Province</b>				
Central	17.0	17.0	18.7	18.8
Copperbelt	17.9	17.8	18.8	18.9
Eastern	17.2	17.2	17.8	17.9
Luapula	17.7	17.6	17.4	17.5
Lusaka	18.3	18.2	18.9	18.8
Muchinga	17.2	17.2	19.0	18.9
Northern	17.0	16.9	18.5	18.6
North Western	16.6	16.6	16.9	17.0
Southern	17.1	17.1	17.5	17.7
Western	16.2	16.2	16.4	16.6
<b>Education</b>				
No education	16.6	16.6	17.5	17.7
Primary	16.7	16.8	17.9	18.0
Secondary	18.3	18.3	18.4	18.5
More than secondary	a	20.9	19.8	19.9
<b>Wealth quintile</b>				
Lowest	16.8	16.8	17.5	17.6
Second	16.8	16.8	17.6	17.7
Middle	17.0	16.9	18.0	18.1
Fourth	17.4	17.3	18.5	18.5
Highest	18.9	18.8	19.2	19.2
Total	17.4	17.3	18.3	18.3

a = Omitted because less than 50 percent of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Table 4.7.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Zambia 2013-14

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of women
	Within the past 4 weeks	Within 1 year <sup>1</sup>	One or more years	Missing			
<b>Age</b>							
15-19	21.8	17.6	9.7	0.1	50.9	100.0	3,625
20-24	52.8	24.0	13.4	0.2	9.6	100.0	3,006
25-29	70.0	20.4	8.0	0.0	1.6	100.0	2,813
30-34	72.5	17.6	9.5	0.1	0.4	100.0	2,475
35-39	71.0	17.1	11.6	0.0	0.3	100.0	2,009
40-44	67.3	14.2	18.3	0.2	0.0	100.0	1,464
45-49	65.0	11.6	23.0	0.3	0.1	100.0	1,018
<b>Marital status</b>							
Never married	12.1	22.3	17.5	0.1	48.0	100.0	4,572
Married or living together	84.8	13.6	1.5	0.1	0.0	100.0	9,859
Divorced/separated/widowed	15.4	34.2	50.3	0.1	0.0	100.0	1,980
<b>Marital duration<sup>2</sup></b>							
0-4 years	81.6	16.7	1.6	0.1	0.0	100.0	2,042
5-9 years	83.8	14.7	1.4	0.0	0.0	100.0	1,768
10-14 years	85.2	13.3	1.5	0.0	0.0	100.0	1,547
15-19 years	85.6	12.1	2.1	0.1	0.0	100.0	1,160
20-24 years	85.6	13.0	1.2	0.2	0.0	100.0	803
25+ years	87.7	10.2	1.6	0.5	0.0	100.0	779
Married more than once	86.7	11.9	1.4	0.0	0.0	100.0	1,760
<b>Residence</b>							
Urban	51.0	17.8	13.6	0.1	17.5	100.0	7,585
Rural	60.6	19.1	10.4	0.1	9.8	100.0	8,826
<b>Province</b>							
Central	57.7	19.4	9.8	0.1	13.0	100.0	1,467
Copperbelt	51.0	15.2	13.9	0.1	19.8	100.0	2,836
Eastern	61.5	17.8	9.8	0.2	10.7	100.0	1,930
Luapula	56.3	21.3	12.4	0.0	9.9	100.0	1,143
Lusaka	52.4	17.9	12.6	0.1	17.0	100.0	3,266
Muchinga	58.1	15.7	11.1	0.0	15.1	100.0	868
Northern	58.8	18.3	11.0	0.1	11.9	100.0	1,200
North Western	55.0	21.5	15.2	0.1	8.2	100.0	713
Southern	65.0	17.8	7.9	0.2	9.2	100.0	2,007
Western	48.3	28.9	17.7	0.2	4.9	100.0	980
<b>Education</b>							
No education	66.5	19.2	12.2	0.0	2.2	100.0	1,375
Primary	64.0	17.4	10.0	0.1	8.5	100.0	7,685
Secondary	44.7	19.7	13.7	0.1	21.8	100.0	6,521
More than secondary	55.6	19.1	14.3	0.1	10.9	100.0	830
<b>Wealth quintile</b>							
Lowest	57.1	21.2	14.0	0.1	7.6	100.0	2,859
Second	63.0	19.0	9.3	0.1	8.7	100.0	2,861
Middle	60.8	19.4	9.8	0.0	10.0	100.0	3,077
Fourth	56.9	17.7	12.0	0.1	13.3	100.0	3,510
Highest	46.5	16.4	13.7	0.2	23.2	100.0	4,103
<b>Total</b>	<b>56.1</b>	<b>18.5</b>	<b>11.9</b>	<b>0.1</b>	<b>13.4</b>	<b>100.0</b>	<b>16,411</b>

<sup>1</sup> Excludes women who had sexual intercourse within the last 4 weeks<sup>2</sup> Excludes women who are not currently married

The proportion of women who were sexually active in the four weeks preceding the survey increases from 22 percent at age 15-19, peaks at 73 percent at age 30-34, and then declines to 65 percent by age 45-49. The majority of women age 15-19 have never had sexual intercourse (51 percent). Also as expected, almost half (48 percent) of never-married women have never had sexual intercourse. Eighty-five percent of women who are currently in a union (married or living together), were sexually active in the four weeks preceding the survey.

Recent sexual activity is relatively lower among women who live in the urban areas (51 percent) than in the rural areas (61 percent). Sixty-five percent of women living in Southern had recent sexual intercourse, compared with 48 percent in Western. Women with no education (67 percent) are more likely to have been sexually active in the past four weeks than those with a primary education (64 percent), secondary education (45 percent), and more than secondary education (56 percent). Recent sexual activity is highest among women in the second wealth quintile (63 percent) and lowest among women in the highest wealth quintile (47 percent).

Table 4.7.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Zambia 2013-14

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of men
	Within the past 4 weeks	Within 1 year <sup>1</sup>	One or more years	Missing			
<b>Age</b>							
15-19	15.2	17.2	15.3	0.0	52.3	100.0	3,337
20-24	38.1	29.4	18.5	0.1	14.0	100.0	2,335
25-29	67.6	22.0	7.8	0.1	2.4	100.0	1,944
30-34	78.6	15.7	5.1	0.1	0.5	100.0	1,927
35-39	82.3	12.8	4.3	0.0	0.7	100.0	1,664
40-44	83.4	11.6	4.8	0.2	0.1	100.0	1,384
45-49	81.6	12.7	5.5	0.0	0.1	100.0	970
<b>Marital status</b>							
Never married	19.2	25.4	19.4	0.1	35.8	100.0	5,985
Married or living together	88.5	10.7	0.8	0.0	0.0	100.0	7,035
Divorced/separated/widowed	30.4	39.4	30.2	0.0	0.0	100.0	542
<b>Marital duration<sup>2</sup></b>							
0-4 years	86.3	12.8	0.7	0.1	0.0	100.0	1,475
5-9 years	87.9	11.6	0.5	0.0	0.0	100.0	1,226
10-14 years	87.7	11.6	0.8	0.0	0.0	100.0	1,063
15-19 years	87.9	10.1	2.0	0.0	0.0	100.0	692
20-24 years	89.2	10.3	0.5	0.0	0.0	100.0	483
25+ years	88.2	10.2	1.5	0.0	0.0	100.0	167
Married more than once	91.1	8.3	0.6	0.0	0.0	100.0	1,928
<b>Residence</b>							
Urban	47.6	20.4	13.0	0.1	19.0	100.0	6,326
Rural	62.6	16.6	7.8	0.0	13.0	100.0	7,235
<b>Province</b>							
Central	55.2	18.0	10.8	0.1	15.9	100.0	1,153
Copperbelt	42.8	21.3	15.2	0.1	20.6	100.0	2,395
Eastern	64.3	16.1	8.4	0.0	11.2	100.0	1,710
Luapula	61.8	20.4	9.4	0.0	8.3	100.0	855
Lusaka	49.1	19.7	11.1	0.1	20.1	100.0	2,844
Muchinga	56.4	12.8	8.3	0.0	22.5	100.0	680
Northern	61.8	16.2	8.8	0.1	13.0	100.0	929
North Western	59.2	20.9	9.1	0.2	10.7	100.0	557
Southern	63.0	14.9	7.4	0.0	14.7	100.0	1,771
Western	67.6	21.3	5.1	0.0	5.9	100.0	668
<b>Education</b>							
No education	73.6	12.2	7.5	0.1	6.5	100.0	500
Primary	61.7	16.0	7.4	0.0	14.9	100.0	5,365
Secondary	48.6	20.0	12.4	0.1	18.9	100.0	6,638
More than secondary	60.4	22.3	12.0	0.0	5.3	100.0	1,058
<b>Wealth quintile</b>							
Lowest	66.6	15.9	7.2	0.0	10.3	100.0	2,038
Second	64.8	16.0	7.2	0.0	12.0	100.0	2,448
Middle	59.1	18.4	8.6	0.0	13.9	100.0	2,547
Fourth	52.5	19.5	11.1	0.1	16.8	100.0	3,124
Highest	42.7	20.3	14.5	0.1	22.4	100.0	3,405
Total 15-49	55.6	18.3	10.2	0.1	15.8	100.0	13,561
50-59	78.3	15.2	6.2	0.2	0.1	100.0	1,212
Total 15-59	57.5	18.1	9.9	0.1	14.5	100.0	14,773

<sup>1</sup> Excludes men who had sexual intercourse within the last 4 weeks<sup>2</sup> Excludes men who are not currently married

More than half (56 percent) of men age 15-49 were sexually active in the four weeks preceding the survey, 18 percent were sexually active in the past year but not in the past four weeks, and 10 percent had not been sexually active for one or more years (Table 4.7.2). One in six men had never had sexual intercourse.

Men age 15-49 in urban areas (48 percent) were less likely to have been sexually active in the four weeks prior to the survey than men in rural areas (63). Those in Copperbelt (43 percent) are least likely to be sexually active in the recent past compared with 68 percent of men in Western. Men with secondary education (49 percent) and men in the highest wealth quintile (43 percent) also reported less sexual activity in the four weeks prior to the interview than their counterparts.



The 2013-14 ZDHS data show that 19 percent of never-married men were sexually active in the four weeks preceding the survey, compared with less than 12 percent of never-married women. Overall, 36 percent of the never-married men had never had sexual intercourse, compared with the 48 percent of never-married women.

A comparison of data from the 2001, 2007, and 2013-14 ZDHS for currently married women shows a gradual increase in the percentage of women sexually active in the four weeks preceding the survey, from 49 percent in 2001 to 53 percent in 2007 and 56 percent in 2013-14. Married men age 15-49 show a similar pattern, with an increase from 38 percent in 2001 to 51 percent in 2007 and 56 in 2013-14.



**Key Findings**

- The total fertility rate for the three years preceding the survey is 5.3 births per woman, with rural women having about three children more than urban women.
- Fertility has decreased from 6.5 births per woman in 1992 to 5.3 births per woman in 2013-14, a more than one-child decline in about two decades.
- More than half of births (53 percent) occur within three years of a previous birth, with 16 percent occurring within 2 years after another birth.
- Childbearing begins early in Zambia, with more than one-third of women giving birth by age 18 and more than half giving birth by age 20.
- Twenty-nine percent of adolescent women age 15-19 are already mothers or pregnant with their first child.

A major objective of the 2013-14 ZDHS was to examine fertility levels, trends, and differentials in Zambia. The government's policy is to reduce the high level of fertility, particularly adolescent fertility, and to improve sexual and reproductive health, including family planning, so as to encourage small family size (MOFNP, 2007). Fertility helps to determine the size, structure, and composition of the population in any country. This chapter focuses on a number of fertility indicators: levels, patterns, and trends in both current and cumulative fertility; the length of birth intervals; and the age at which women begin childbearing. Birth intervals are important because short intervals are associated with high childhood mortality. The age at which childbearing begins can also have a major impact on the health and well-being of both the mother and the child.

To generate data on fertility, a birth history was collected from each woman interviewed in the 2013-14 ZDHS. Women were asked to report on the total number of sons and daughters to whom they had given birth in their lifetime. To ensure that all information was reported, women were asked separately about children still living at home, those living elsewhere, and those who had died. The sex, date of birth, and survival status of each child was obtained, and age at death for dead children was recorded.

## 5.1 CURRENT FERTILITY

Measures of current fertility are presented in Table 5.1 for the three-year period preceding the survey, which corresponds to the calendar period 2011-2013. A three-year period was chosen to calculate rates that would provide the most current information. Also rates could be calculated for enough cases to prevent compromise of the statistical precision of the estimate. Age-specific fertility rates (ASFRs), expressed as the number of births per thousand women in a specified age group, show the age pattern of fertility. Numerators for ASFRs are calculated by identifying live births that occurred in the three-year period preceding the survey, classified according to the age of the mother (in five-year age groups) at the time of the child's birth. The denominators of the rates represent the number of woman-years lived by the survey respondents in each of the five-year age groups during the specified period. The total fertility rate (TFR) is the number of live births a woman would have if she were subject to the current age-specific fertility rates throughout her reproductive years (15-49 years). The general fertility rate (GFR) is the number of live births occurring during a specified period per 1,000 women age 15-44. The crude birth rate (CBR) is the number of live births per 1,000 population during a specified period.

Table 5.1 shows current fertility in Zambia at the national level and by urban-rural residence. The TFR for the three years preceding the 2013-14 ZDHS is 5.3 births per woman. Fertility is considerably higher in rural areas (6.6 births per woman) than in urban areas (3.7 births per woman). The ASFRs show a higher rural fertility prevalent in all age groups. The urban-rural difference in fertility is most pronounced for women in the 20-24 age group (178 births per 1,000 women in urban areas compared with 299 births per 1,000 women in rural areas).

The overall age pattern of fertility, as reflected in the ASFRs, indicates that childbearing begins early. Fertility peaks at 239 births per 1,000 women age 20-24, and declines thereafter.

## 5.2 FERTILITY DIFFERENTIALS

This section examines the association between a woman's background characteristics and her fertility. Table 5.2 presents differentials in TFRs, the percentage of women age 15-49 who are currently pregnant, and the mean number of children ever born to women age 40-49 by urban-rural residence, province, education, and wealth quintile. Fertility ranges widely from a low of 3.7 births per woman in Lusaka to a high of 6.6 births per woman in Northern. The level of fertility is inversely related to women's educational attainment, decreasing rapidly from 7.2 births among women with no education to 3.0 births among women with more than secondary education. Fertility is also associated with wealth quintile. Women in the lowest wealth quintile have a TFR of 7.1 births, and those in the highest quintile have a TFR of 3.0 births.

Table 5.2 also allows a crude assessment of trends in the various subgroups by comparing current fertility with a measure of completed fertility: the mean number of children ever born to women age 40-49. The mean number of children ever born to older women who are nearing the end of their reproductive period is an indicator of average completed fertility of women who began childbearing during the three decades preceding the survey. If fertility remained constant over time and the reported data on both children ever born and births during the three years preceding the survey are reasonably accurate, the TFR and the mean number of children ever born to women age 40-49 are expected to be similar. When fertility levels have been falling, the TFR will be substantially lower than the mean number of children ever born to the older women. The comparison suggests that fertility has fallen by just one birth during the past 15 years, from 6.3 births per woman to 5.3 births per woman. The difference between current and completed fertility is highest among women in the fourth wealth quintile (1.7 births).

The percentage of women who reported being pregnant at the time of the survey is also presented in Table 5.2. This percentage may be underreported since women may not be aware of a pregnancy, especially at the early stages, and some women who are early in their pregnancy may not want to reveal that they are pregnant. Nine percent of women were pregnant at the time of the survey. Rural women are more likely to be pregnant than urban women (10 percent compared with 7 percent). The proportion of women who are currently pregnant is highest in Luapula (11 percent) and lowest in Copperbelt, Lusaka, and Western (8 percent). The proportion of women currently pregnant varies by education, with a higher percentage of current pregnancies among those with no education and a lower number among those with more than secondary education. The percentage currently pregnant ranges from a low of 6 percent among women in the highest wealth quintile to a high of 11 percent among women in the lowest wealth quintile.

**Table 5.1 Current fertility**

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Zambia 2013-14

Age group	Residence		Total
	Urban	Rural	
15-19	97	184	141
20-24	178	299	239
25-29	187	273	232
30-34	154	247	203
35-39	91	196	152
40-44	36	93	71
45-49	5	20	14
TFR(15-49)	3.7	6.6	5.3
GFR	135	226	184
CBR	32.2	40.3	37.2

Notes: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview.

TFR: Total fertility rate expressed per woman

GFR: General fertility rate expressed per 1,000 women age 15-44

CBR: Crude birth rate, expressed per 1,000 population

**Table 5.2 Fertility by background characteristics**

Total fertility rate for the three years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, by background characteristics, Zambia 2013-14

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
<b>Residence</b>			
Urban	3.7	7.2	5.2
Rural	6.6	10.0	7.1
<b>Province</b>			
Central	5.9	8.1	6.8
Copperbelt	4.0	7.6	5.5
Eastern	5.8	8.7	6.9
Luapula	6.4	11.4	6.6
Lusaka	3.7	7.7	5.1
Muchinga	6.3	10.3	7.2
Northern	6.6	10.4	7.6
North Western	6.2	9.2	6.7
Southern	6.2	9.2	6.9
Western	5.6	8.1	6.0
<b>Education</b>			
No education	7.2	11.9	7.2
Primary	6.3	9.3	6.9
Secondary	3.8	7.6	4.9
More than secondary	3.0	6.8	3.1
<b>Wealth quintile</b>			
Lowest	7.1	11.1	7.1
Second	7.0	10.4	7.2
Middle	6.0	8.7	7.1
Fourth	4.2	8.5	5.9
Highest	3.0	6.0	4.5
Total	5.3	8.7	6.3

Note: Total fertility rates are for the period 1-36 months prior to interview.

## 5.3 FERTILITY TRENDS

In addition to the comparison of current and completed fertility, trends in fertility can be assessed in two other ways. First, fertility trends can be investigated using retrospective data on pregnancy histories collected in the 2013-14 ZDHS. Second, the TFR from the 2013-14 ZDHS can be compared with estimates obtained in earlier surveys.

Trends in fertility over time are examined by comparing age-specific fertility rates from the 2013-14 ZDHS for successive five-year periods preceding the survey, as presented in Table 5.3.1. Because women age 50 and older were not interviewed in the survey, the rates for older age groups become progressively more truncated for periods more distant from the survey date. For example, rates cannot be calculated for women age 35-39 for the period 15-19 years before the survey because these women would have been over age 50 at the time of the survey and therefore not eligible to be interviewed. Nonetheless, the results in Table 5.3.1 show that with the exception of the age group 20-24 in the 10-14 years preceding the survey, fertility has fallen among all age groups over the past two decades. The decline is steepest among the cohort age 30-34, with a 17 percent decline between the period 10-14 years before the survey and the period 0-4 years before the survey.

**Table 5.3.1 Trends in age-specific fertility rates**

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Zambia 2013-14

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	145	159	170	164
20-24	251	280	280	290
25-29	242	264	271	281
30-34	212	238	255	[247]
35-39	160	189	[194]	
40-44	83	[133]		
45-49	[15]			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of interview.

Table 5.3.2 and Figure 5.1 compare fertility trends from estimates obtained in the 1992, 1996, 2001-2002, and 2007 ZDHS surveys with information gathered in the 2013-14 ZDHS. Fertility declined from 6.5 births per woman in the 1992 ZDHS to 5.3 births per woman in the 2013-14 ZDHS—a drop of just over one birth per woman in the nearly two decades.

**Table 5.3.2 Trends in age-specific and total fertility rates, various sources**

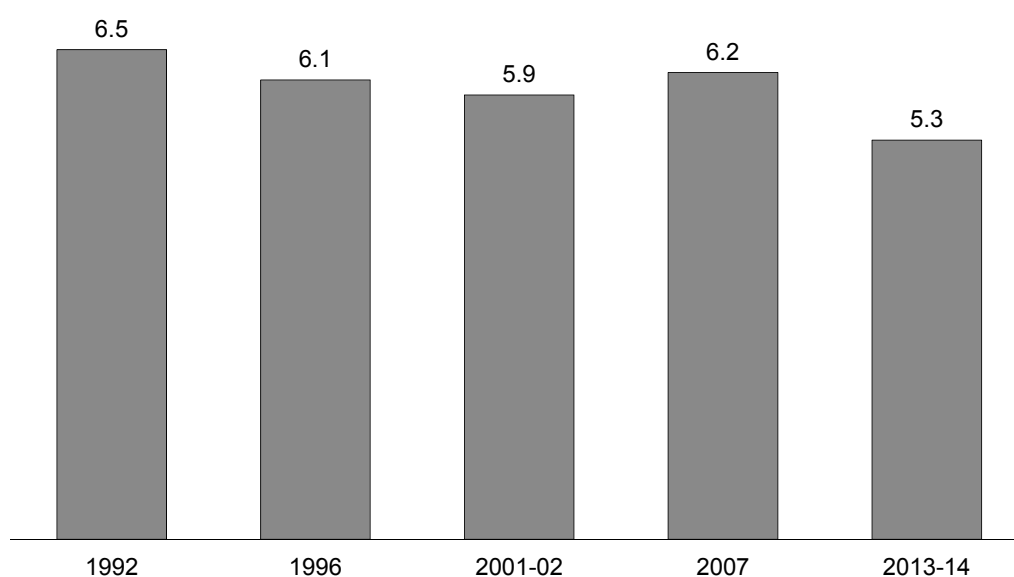
Age-specific and total fertility rates (TFRs) for three years preceding the 1992, 1996, 2001-2002, 2007, and 2013-2014 ZDHS surveys

Mother's age at birth	ZDHS 1992	ZDHS 1996	ZDHS 2001-02	ZDHS 2007	ZDHS 2013-14
15-19	156	158	160	146	141
20-24	294	280	266	274	239
25-29	271	274	249	263	232
30-34	242	229	218	240	203
35-39	194	175	172	191	152
40-44	105	77	79	90	71
45-49	31	24	30	29	14
TFR 15-49	6.5	6.1	5.9	6.2	5.3

Note: Age-specific fertility rates are per 1,000 women.

**Figure 5.1 Trends in total fertility rate, ZDHS 1992-2014**

TFR for women 15-49



## 5.4 CHILDREN EVER BORN AND LIVING

Data on the number of children ever born reflect the accumulation of births over the past 30 years and therefore have limited relevance to current fertility levels, particularly when the country has experienced a decline in fertility. Moreover, the data are subject to recall error, which is typically greater for older women than younger women. Nevertheless, information on children ever born (or parity) is useful in looking at a number of issues. Parity data show how average family size varies across age groups. The percentage of currently married women in their 40s who have never had children also provides an indicator of the level of primary infertility or the inability to bear children. Comparisons of differences in the mean number of children ever born and surviving reflect the cumulative effects of mortality levels during the period in which women have been bearing children.

Table 5.4 shows the percent distribution of all women and currently married women by number of children ever born, mean number of children ever born, and mean number of children living. Seventy-seven percent of women age 15-19 have never given birth. This proportion declines to 7 percent among women age 25-29 and to 3 percent or less among women age 30 and above. On average, Zambian women nearing the end of their reproductive years have attained a parity of 6.7 children. This is one and a half children more than the total fertility rate of 5.3 children. The same pattern is replicated for currently married women, except that the mean number of children ever born to women age 45-49 is higher among currently married women (7.3 children) than among all women (6.7 children). The difference between all women and currently married women in mean number of children ever born is due to the substantial proportion of young, unmarried women in the former category who exhibit lower fertility.

**Table 5.4 Children ever born and living**

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born and mean number of living children, according to age group, Zambia 2013-14

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	76.7	20.5	2.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3,625	0.26	0.25
20-24	25.9	30.3	29.2	11.9	2.2	0.4	0.1	0.0	0.0	0.0	0.0	100.0	3,006	1.36	1.26
25-29	7.3	12.4	22.4	25.3	19.9	9.4	2.4	0.7	0.2	0.0	0.0	100.0	2,813	2.81	2.59
30-34	3.4	5.8	10.5	19.6	19.5	18.5	12.9	7.0	2.1	0.7	0.1	100.0	2,475	4.06	3.67
35-39	2.4	4.5	7.5	8.8	14.6	15.7	16.3	14.0	8.9	4.7	2.6	100.0	2,009	5.19	4.57
40-44	2.0	3.6	6.2	7.5	9.1	11.2	12.9	15.2	12.0	10.7	9.6	100.0	1,464	6.09	5.27
45-49	2.0	3.5	4.7	7.0	6.4	9.2	11.0	11.7	14.8	11.5	18.2	100.0	1,018	6.70	5.58
Total	24.1	14.2	13.1	11.7	9.7	8.0	6.2	5.0	3.4	2.3	2.3	100.0	16,411	3.00	2.66
CURRENTLY MARRIED WOMEN															
15-19	23.8	63.3	11.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	613	0.91	0.84
20-24	6.4	28.8	42.0	18.4	3.6	0.6	0.1	0.1	0.0	0.0	0.0	100.0	1,684	1.87	1.73
25-29	2.7	9.0	22.2	27.9	23.4	10.9	2.9	0.8	0.2	0.0	0.0	100.0	2,181	3.10	2.87
30-34	1.4	4.3	8.5	18.7	20.3	20.7	14.7	8.0	2.4	0.9	0.2	100.0	1,976	4.35	3.93
35-39	1.6	2.9	5.8	7.7	13.5	16.0	17.5	15.7	10.4	5.7	3.2	100.0	1,572	5.54	4.89
40-44	1.4	2.2	3.7	5.9	8.0	10.4	12.8	17.0	13.8	13.0	11.8	100.0	1,102	6.62	5.76
45-49	1.3	1.8	4.4	5.3	4.7	7.3	10.5	12.2	16.1	14.3	22.0	100.0	730	7.25	6.06
Total	4.0	12.5	16.2	15.4	13.2	10.9	8.6	7.1	4.9	3.6	3.5	100.0	9,859	4.09	3.64

As expected, the mean number of children ever born and the mean number of children surviving rise with increasing age of the women. A comparison of the mean number of children ever born with the mean number of living children reveals the experience of child loss among Zambian women. By the end of their reproductive years, women in Zambia have given birth to an average of 3.0 children, with 2.7 surviving.

Currently married women with no children are likely to be those who are sterile or unable to bear children. The level of childlessness among married women at the end of their reproductive period can be

used as an indicator of the level of primary sterility. The level of primary sterility among older, currently married women is about 1 percent.

## 5.5 BIRTH INTERVALS

Birth interval is the length of time between two successive live births. Information on birth intervals provides insight into birth spacing patterns, which affect fertility as well as maternal, infant, and childhood mortality. Studies have shown that short birth intervals are associated with increased risk of death for mother and baby, particularly when the birth interval is less than 24 months.

Table 5.5 shows the percent distribution of non-first births in the five years preceding the survey by number of months since the preceding birth, according to background characteristics. The median birth interval in Zambia is 35 months, a small increase from 34 months in 2007. The median number of months since a preceding birth increases significantly with age, from 25 months among mothers age 15-19 to 40 months among mothers age 40-49. There is no marked difference in the length of the median birth interval by birth order or sex of the preceding birth.

Table 5.5 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Zambia 2013-14

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
<b>Age</b>									
15-19	15.4	29.4	42.9	12.1	0.2	0.0	100.0	109	25.3
20-29	5.0	13.6	42.4	22.8	8.9	7.4	100.0	4,748	32.3
30-39	4.1	9.0	33.4	23.5	13.6	16.4	100.0	4,532	37.1
40-49	2.3	7.6	32.3	22.3	14.3	21.2	100.0	1,129	39.9
<b>Sex of preceding birth</b>									
Male	4.4	10.8	37.4	23.4	11.4	12.6	100.0	5,409	35.0
Female	4.5	11.4	37.5	22.4	11.4	12.7	100.0	5,110	34.7
<b>Survival of preceding birth</b>									
Living	3.1	10.5	38.2	23.7	11.8	12.7	100.0	9,632	35.4
Dead	18.5	18.0	29.7	14.4	7.0	12.5	100.0	887	28.1
<b>Birth order</b>									
2-3	4.6	11.8	37.0	22.7	10.3	13.5	100.0	4,475	34.5
4-6	4.3	10.0	36.6	23.6	12.6	13.0	100.0	4,126	35.7
7+	4.2	12.0	40.3	22.0	11.3	10.1	100.0	1,917	33.6
<b>Residence</b>									
Urban	4.3	8.4	28.8	22.9	14.4	21.1	100.0	3,298	40.1
Rural	4.5	12.3	41.4	22.9	10.0	8.8	100.0	7,220	33.2
<b>Province</b>									
Central	4.2	15.0	39.4	22.4	10.0	9.0	100.0	1,038	33.0
Copperbelt	6.0	9.0	27.2	24.1	13.2	20.3	100.0	1,286	39.5
Eastern	5.2	9.8	38.6	24.0	11.6	10.9	100.0	1,391	34.8
Luapula	5.1	12.8	42.0	20.5	9.9	9.7	100.0	1,002	32.4
Lusaka	3.6	8.2	31.3	21.9	14.9	20.1	100.0	1,391	38.8
Muchinga	4.8	11.9	39.0	26.5	10.4	7.4	100.0	658	34.0
Northern	4.8	12.7	45.3	21.6	8.9	6.7	100.0	1,063	32.1
North Western	4.3	13.3	43.2	21.7	9.6	7.9	100.0	528	32.4
Southern	3.5	12.2	38.4	21.2	11.3	13.4	100.0	1,480	34.5
Western	1.9	8.1	37.1	27.9	11.5	13.5	100.0	682	36.5
<b>Education</b>									
No education	5.4	11.4	39.6	21.5	12.0	9.9	100.0	1,355	33.5
Primary	4.4	11.1	40.1	23.2	10.6	10.6	100.0	6,364	34.0
Secondary	4.2	11.5	30.9	23.1	12.4	17.9	100.0	2,477	37.4
More than secondary	2.4	8.1	25.9	21.6	16.2	25.8	100.0	322	42.3
<b>Wealth quintile</b>									
Lowest	4.8	12.7	42.7	23.5	8.6	7.6	100.0	2,627	32.8
Second	4.7	12.4	43.6	21.8	9.7	7.8	100.0	2,554	32.5
Middle	4.3	11.2	37.7	24.1	11.4	11.4	100.0	2,234	35.0
Fourth	4.0	9.0	29.8	22.9	15.6	18.8	100.0	1,749	39.4
Highest	3.7	8.2	25.2	22.0	14.7	26.2	100.0	1,354	43.7
<b>Total</b>	4.4	11.1	37.5	22.9	11.4	12.7	100.0	10,518	34.9

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.



Studies have shown that the death of a preceding child leads to a shorter birth interval than when the preceding child is living. The median birth interval is 7 months shorter among births in which the previous sibling is dead than among births in which the previous sibling is alive (28 months and 35 months, respectively). This difference in birth intervals may be due to the desire of parents to replace a dead child as well as the loss of the fertility-delaying effects of breastfeeding.

According to the 2013-14 ZDHS data, birth intervals are longer in urban (40 months) than in rural (33 months) areas. The median birth interval is longest in Copperbelt (40 months) and shortest in Luapula, Northern and North Western (32 months). Birth interval increases with education from 34 months among women with no education to 42 months among women with more than secondary education. Similarly, birth interval increases with wealth. The birth interval ranges from a low of 33 months in the first and second wealth quintiles to 44 months in the highest wealth quintile.

## 5.6 POSTPARTUM AMENORRHOEA, ABSTINENCE, AND INSUSCEPTIBILITY

Postpartum amenorrhoea is the interval between the birth of a child and the resumption of menstruation, a period during which the risk of pregnancy is reduced. Postpartum protection from conception depends upon the intensity and duration of breastfeeding. Postpartum abstinence refers to the period of voluntary sexual inactivity after childbirth. A woman is considered insusceptible if she is not exposed to the risk of pregnancy, either because she is amenorrhoeic or because she is abstaining from sexual intercourse following a birth. In the 2013-14 ZDHS, information was obtained about the duration of amenorrhoea and the duration of sexual abstinence following childbirth for births in the three years preceding the survey.

**Table 5.6 Postpartum amenorrhoea, abstinence and insusceptibility**

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Zambia 2013-14

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrhoeic	Abstaining	Insusceptible <sup>1</sup>	
< 2	96.6	96.4	99.4	316
2-3	81.9	51.0	87.8	456
4-5	72.9	30.4	78.2	449
6-7	63.8	24.3	70.2	434
8-9	53.9	22.1	61.8	412
10-11	45.5	17.9	53.8	447
12-13	38.9	18.4	48.0	458
14-15	31.3	11.1	36.5	475
16-17	21.7	12.1	29.0	451
18-19	18.0	9.3	25.2	437
20-21	10.4	9.4	19.1	422
22-23	7.6	6.3	12.1	412
24-25	4.1	6.0	9.6	448
26-27	2.3	5.1	7.1	467
28-29	1.8	6.2	7.9	452
30-31	1.0	3.8	4.8	398
32-33	1.0	4.8	5.4	429
34-35	1.5	5.0	6.3	417
Total	30.1	17.8	36.1	7,781
Median	9.5	3.0	11.5	na
Mean	11.4	7.1	13.5	na

Note: Estimates are based on status at the time of the survey.

na = Not applicable

<sup>1</sup> Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.6 shows that Zambian women are amenorrhoeic for a median of 10 months, abstain for a median of 3 months, and are insusceptible to pregnancy for a median of 12 months. In general, the proportion of women who are amenorrhoeic or abstaining decreases with increasing months after delivery. The proportion of women who are amenorrhoeic drops from 97 percent in the first two months after birth to 39 percent at 12-13 months and less than 8 percent at 22 months or later. The majority of Zambian women (96 percent) are still abstaining in the first two months following birth. A comparison of data from

earlier surveys indicates that the median duration of postpartum amenorrhoea, a proximate determinant of fertility, declined from 11 months in 2007 to 10 months in 2013-14.

Table 5.7 shows the median duration of postpartum amenorrhoea, abstinence, and insusceptibility by background characteristics. The duration of postpartum insusceptibility is longer among rural than urban women (13 months and 9 months, respectively). Women in Western have the longest median postpartum insusceptibility (18 months). Women with primary or no education have longer duration of postpartum insusceptibility than women with secondary education (13 months compared with 10 months). Women in the lowest wealth quintile are insusceptible for a period more than two times longer than women in the highest wealth quintile (15 months compared with 6 months).

**Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility**

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Zambia 2013-14

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insusceptibility <sup>1</sup>
<b>Mother's age</b>			
15-29	8.8	3.4	11.1
30-49	10.8	2.4	12.4
<b>Residence</b>			
Urban	6.2	2.6	8.9
Rural	11.2	3.2	12.7
<b>Province</b>			
Central	7.1	2.7	9.9
Copperbelt	5.2	(2.5)	7.2
Eastern	10.2	3.0	11.2
Luapula	12.7	3.3	13.5
Lusaka	6.8	*	10.0
Muchinga	10.3	*	11.6
Northern	12.1	3.1	12.9
North Western	12.3	3.6	15.3
Southern	9.4	(2.5)	11.0
Western	13.6	11.2	18.2
<b>Education</b>			
No education	12.5	2.6	12.9
Primary	11.1	2.9	12.8
Secondary	7.1	3.6	9.8
More than secondary	(5.0)	*	(6.2)
<b>Wealth quintile</b>			
Lowest	12.9	3.1	14.7
Second	11.8	3.3	13.0
Middle	9.5	2.9	10.8
Fourth	7.1	3.1	8.4
Highest	4.7	(2.5)	6.0
Total	9.5	3.0	11.5

Note: Medians are based on the status at the time of the survey (current status). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

<sup>1</sup> Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

## 5.7 MENOPAUSE

The risk of becoming pregnant declines with age. Table 5.8 presents data on menopause, an indicator of decreasing exposure to the risk of pregnancy (infecundity) for women age 30 or above.

In the 2013-14 ZDHS, women were considered menopausal if they were neither pregnant nor postpartum amenorrhoeic and had not had a menstrual period for at least six months preceding the survey. The proportion of women who were menopausal increased with age, from 2 percent among women age 30-34 to 50 percent among women age 48-49. Overall, 8 percent of women age 30-49 were menopausal. The proportion of currently married women age 48-49 who were menopausal increased from 47 percent in 2007 to 50 percent in 2013-14.

**Table 5.8 Menopause**

Percentage of women age 30-49 who are menopausal, by age, Zambia 2013-14

Age	Percentage menopausal <sup>1</sup>	Number of women
30-34	2.1	2,475
35-39	2.7	2,009
40-41	6.2	680
42-43	7.1	517
44-45	14.8	500
46-47	25.2	351
48-49	50.1	435
Total	8.1	6,966

<sup>1</sup> Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey

## 5.8 AGE AT FIRST BIRTH

The onset of childbearing at an early age has a major effect on the health of both mother and child. It also lengthens the reproductive period, thereby increasing the level of fertility. Table 5.9 shows the median age at first birth and the percentage of women who gave birth by exact ages, according to current age. The median age at first birth is 19.3 years for the youngest cohort of women (age 20-24) for whom a median age can be computed. Sixty-one percent of women age 20-49 gave birth at exact age 20. The median age at first birth has increased gradually from 18.7 years among women age 45-49 to 19.3 years among women age 20-24.

**Table 5.9 Age at first birth**

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Zambia 2013-14

Current age	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	1.1	na	na	na	na	76.7	3,625	a
20-24	2.8	30.7	58.9	na	na	25.9	3,006	19.3
25-29	3.6	32.4	60.8	78.0	88.9	7.3	2,813	19.2
30-34	3.5	34.3	61.6	78.0	88.7	3.4	2,475	19.0
35-39	3.7	34.9	63.4	80.3	89.7	2.4	2,009	19.0
40-44	4.0	34.6	62.4	79.1	89.2	2.0	1,464	19.0
45-49	5.7	39.7	63.8	81.0	90.5	2.0	1,018	18.7
20-49	3.6	33.6	61.3	na	na	9.1	12,786	19.1
25-49	3.9	34.5	62.1	78.9	89.2	4.0	9,780	19.1

na = Not applicable due to censoring

a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

Table 5.10 shows that the median age at first birth by background characteristics. The median age at first birth is one year higher in urban areas than in rural areas. Median age at first birth among women age 20-49 is highest in Lusaka (20.0 years) and lowest in Central and Eastern (18.6 years) provinces. The median age at first birth increases with education, with the impact of education more pronounced among women with secondary education. Women with no education give birth to their first child about two years earlier than women with secondary education.

## 5.9 TEENAGE PREGNANCY AND MOTHERHOOD

Teenage pregnancy and motherhood is a major social and health issue in Zambia. Early pregnancy can cause severe health problems for both the mother and child. Moreover, an early start to childbearing greatly reduces women's educational and employment opportunities and is associated with higher levels of fertility.

Table 5.11 shows that 29 percent of women age 15-19 have already had a birth or are pregnant with their first child. The percentage of women who have begun childbearing increases rapidly with age, from 5 percent among women age 15 to 59 percent among women age 19 years. Teenage pregnancy is much higher in rural areas (36 percent) than urban areas (20 percent). Teenage childbearing is lowest in Copperbelt (16 percent) and highest in North Western (41 percent). Early childbearing is inversely related to educational level. Twice as many teenagers with no education have begun childbearing than those with secondary education (53 percent and 23 percent, respectively). The percentage of teenagers who have begun childbearing is highest (45 percent) in the lowest wealth quintile and lowest in the highest wealth quintile (10 percent). At the national level, the proportion of teenage pregnancies has hardly changed in the last six years.

Table 5.10 Median age at first birth

Median age at first birth among women age 20-49 (25-49) years, according to background characteristics, Zambia 2013-14

Background characteristic	Women age	Women age
	20-49	25-49
<b>Residence</b>		
Urban	19.8	19.7
Rural	18.7	18.7
<b>Province</b>		
Central	18.6	18.5
Copperbelt	19.5	19.3
Eastern	18.6	18.6
Luapula	19.1	19.0
Lusaka	20.0	19.8
Muchinga	19.2	19.2
Northern	18.9	18.9
North Western	18.7	18.6
Southern	18.8	18.8
Western	19.1	19.3
<b>Education</b>		
No education	18.4	18.5
Primary	18.5	18.5
Secondary	20.0	19.9
More than secondary	a	24.7
<b>Wealth quintile</b>		
Lowest	18.8	18.9
Second	18.5	18.5
Middle	18.6	18.6
Fourth	19.1	19.0
Highest	a	20.9
Total	19.1	19.1

a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of women age 15-19 who:		Percentage who have begun childbearing	Number of women
	Have had a live birth	Are pregnant with first child		
<b>Age</b>				
15	2.5	2.4	4.9	740
16	7.2	4.7	11.9	766
17	17.3	8.3	25.7	642
18	37.0	4.7	41.7	745
19	52.4	6.5	58.9	732
<b>Residence</b>				
Urban	16.4	3.6	20.0	1,740
Rural	29.6	6.8	36.4	1,886
<b>Province</b>				
Central	24.8	5.1	29.9	341
Copperbelt	12.3	4.1	16.3	677
Eastern	28.5	6.8	35.4	432
Luapula	22.3	5.6	27.9	189
Lusaka	21.0	2.8	23.8	725
Muchinga	24.0	5.6	29.6	194
Northern	25.5	4.5	30.0	258
North Western	34.1	7.0	41.0	166
Southern	27.1	9.0	36.0	434
Western	34.8	5.6	40.4	208
<b>Education</b>				
No education	43.4	9.8	53.2	68
Primary	30.1	5.8	35.9	1,398
Secondary	18.3	4.8	23.1	2,145
More than secondary	*	*	*	13
<b>Wealth quintile</b>				
Lowest	37.7	6.8	44.5	546
Second	29.9	8.6	38.6	591
Middle	28.7	5.8	34.5	677
Fourth	22.7	5.5	28.2	802
Highest	8.5	1.9	10.3	1,010
Total	23.3	5.2	28.5	3,625

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed



## FERTILITY PREFERENCES

### Key Findings

- Thirty-seven percent of currently married women and 29 percent of currently married men age 15-49 want no more children or have been sterilised.
- The proportion of women who want to limit childbearing has increased slightly since the 2007 ZDHS (from 36 percent to 37 percent).
- Women reported an ideal family size of 4.7 children compared with 5.0 children among men. Mean ideal number of children increases with increasing number of living children.
- Overall, Zambian women have 0.8 children more than their ideal number. The total wanted fertility rate is 4.5 children per woman, while the actual fertility rate is 5.3 children per woman.

Information on fertility preferences is used to assess future fertility patterns and potential demand for contraception. Such data are also useful in constructing measures of unwanted or mistimed births.

### 6.1 DESIRE FOR MORE CHILDREN

Information about the desire for more children is important for understanding future reproductive behaviour. The provision of adequate and accessible family planning services is dependent on the availability of such information. In the 2013-14 ZDHS, currently married women (whether pregnant or not) and men were asked about their intentions to have another child and, if they had such intentions, how soon they wanted the child. The question was phrased differently for pregnant women and for men whose wife or wives (or girlfriends) were pregnant at the time of the interview to ensure that it reflected desire for subsequent children after completion of the current pregnancy. Sterilised women and men were considered not to want any more children, and therefore they were not asked questions about their desire for more children.

Table 6.1 shows the percent distribution of currently married women and men age 15-49 by desire for children, according to number of living children. The data show that 14 percent of women and 19 percent of men want to have another child soon (within two years), while 41 percent of women and 46 percent of men want to wait two or more years before having another child. Thirty-five percent of women and 28 percent of men do not want any more children, and 2 percent of women and 1 percent of men are sterilised. The proportions of currently married women and men age 15-49 who want no more children or have been sterilised (37 percent and 29 percent, respectively) have increased slightly from the figures reported in the 2007 ZDHS survey (36 percent and 26 percent, respectively).

As expected, women's desire to limit childbearing (including through sterilisation) increases with number of living children, from 3 percent among those with no children to 77 percent among those with six or more children. Similarly, men's desire to limit childbearing increases from 2 percent among those with no children to 53 percent among those with six or more children. Women's desire to have another child soon decreases with number of living children, from 82 percent among those with no children to 3 percent among those with six or more children. Men's, desire to have another child soon decreases from 77 percent among those with no children to 11 percent among those with six or more children.

**Table 6.1 Fertility preferences by number of living children**

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Zambia 2013-14

	Number of living children							Total		Total
Desire for children	0	1	2	3	4	5	6+	15-49	50-59	15-59
WOMEN <sup>1</sup>										
Have another soon <sup>2</sup>	82.3	25.2	17.9	12.4	9.0	6.4	2.6	13.8	na	na
Have another later <sup>3</sup>	2.2	63.2	60.9	53.4	40.6	32.3	12.7	41.0	na	na
Have another, undecided when	2.2	3.1	1.2	3.0	2.0	1.0	0.6	1.7	na	na
Undecided	1.5	2.0	3.3	5.1	6.5	6.8	5.4	4.7	na	na
Want no more	2.5	4.4	14.3	23.2	39.6	49.3	72.7	35.0	na	na
Sterilised <sup>4</sup>	0.0	0.2	0.9	1.6	2.0	2.7	3.8	1.9	na	na
Declared infecund	8.3	1.6	1.3	1.2	0.3	0.8	2.1	1.5	na	na
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na	na
Number	290	1,345	1,734	1,654	1,453	1,184	2,198	9,859	na	na
MEN <sup>5</sup>										
Have another soon <sup>2</sup>	76.8	28.4	21.5	19.0	14.7	13.2	10.5	18.7	7.1	17.2
Have another later <sup>3</sup>	14.5	65.7	58.9	53.9	44.8	39.3	30.7	46.1	6.1	40.7
Have another, undecided when	3.4	1.0	1.6	1.8	2.4	1.5	1.1	1.6	1.1	1.5
Undecided	0.4	1.1	3.7	4.8	5.5	7.5	4.0	4.2	1.9	3.9
Want no more	1.9	2.9	12.4	19.3	31.1	36.7	52.3	27.9	74.0	34.1
Sterilised <sup>4</sup>	0.3	0.6	0.5	0.7	1.1	0.9	0.8	0.7	2.0	0.9
Declared infecund	1.8	0.0	1.3	0.3	0.2	0.6	0.6	0.6	6.9	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	198	915	1,194	1,035	1,008	870	1,814	7,035	1,103	8,137

Note: Totals may not sum up to 100 percent because respondents with missing information have been deleted.

na = Not applicable

<sup>1</sup> The number of living children includes the current pregnancy.

<sup>2</sup> Wants next birth within 2 years

<sup>3</sup> Wants to delay next birth for 2 or more years

<sup>4</sup> Includes both female and male sterilisation

<sup>5</sup> The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

## 6.2 DESIRE TO LIMIT CHILDBEARING BY BACKGROUND CHARACTERISTICS

Tables 6.2.1 and 6.2.2 present the percentages of currently married women and men age 15-49, respectively, who want no more children, by number of living children and selected background characteristics.

Table 6.2.1 shows that 37 percent of currently married women age 15-49 want no more children or are sterilised. Overall, there is no substantial difference in the desire to limit childbearing between women in urban and rural areas (38 percent and 36 percent, respectively). However, among women with two or more children, those in urban areas are more likely to want to limit childbearing than those in rural areas. The percentage of women with no children or just one child who want to limit childbearing is slightly higher in rural than in urban areas. At the provincial level, Copperbelt and Northern have the highest proportions of women who want to limit childbearing (41 percent and 42 percent, respectively), while North Western and Western have the lowest proportion of women who want to limit childbearing (31 percent and 32 percent, respectively).

There is no clear relationship between education or wealth and desire to limit childbearing. Forty-two percent of women with no education want to limit childbearing, as compared with 31 percent of those with secondary education. By wealth, women in the lowest quintile are least likely to want to limit childbearing (32 percent).



Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Zambia 2013-14

Background characteristic	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Residence</b>								
Urban	2.1	4.2	19.5	33.2	57.9	66.8	87.9	38.0
Rural	2.8	4.9	10.9	16.8	30.4	44.2	73.4	36.3
<b>Province</b>								
Central	*	6.9	17.0	20.5	39.3	47.3	75.3	38.9
Copperbelt	(6.7)	9.2	21.0	26.6	61.6	65.3	83.8	41.2
Eastern	2.8	3.5	11.5	18.4	29.9	55.3	78.1	34.4
Luapula	(4.2)	4.4	9.1	17.9	27.4	47.4	75.1	37.1
Lusaka	(0.0)	1.8	20.7	38.2	56.6	59.3	85.8	36.4
Muchinga	(6.8)	4.4	12.5	17.5	33.0	42.4	77.4	37.8
Northern	(4.5)	1.3	8.9	20.9	32.3	47.1	80.0	41.6
North Western	*	9.1	5.8	12.4	30.1	36.4	64.7	31.3
Southern	(0.0)	4.0	11.5	23.4	37.3	46.8	68.2	34.7
Western	(1.7)	1.8	8.8	12.9	33.1	48.1	75.6	32.0
<b>Education</b>								
No education	(3.0)	5.9	13.3	24.3	27.9	41.1	73.1	42.1
Primary	2.5	4.8	11.1	19.9	37.1	48.3	76.0	39.3
Secondary	2.0	4.6	17.0	27.3	54.3	66.1	84.7	30.7
More than secondary	(3.8)	1.9	28.4	52.6	77.7	*	*	37.0
<b>Wealth quintile</b>								
Lowest	1.3	2.1	8.7	12.6	25.0	41.6	74.7	31.6
Second	(2.2)	6.4	9.5	14.9	27.6	44.4	69.4	34.5
Middle	1.9	5.9	11.5	22.5	38.1	57.0	75.9	41.7
Fourth	4.3	3.7	16.0	26.9	53.8	50.6	84.5	37.6
Highest	2.5	5.1	24.1	39.2	62.6	74.8	91.2	39.2
Total	2.5	4.6	15.1	24.8	41.6	52.0	76.5	37.0

Note: Women who have been sterilised are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> The number of living children includes the current pregnancy.

Table 6.2.2 shows that 29 percent of currently married men age 15-49 want no more children or are sterilised (32 percent in urban areas and 26 percent in rural areas). At every parity level, men in urban areas are more likely to want to limit childbearing than those in rural areas. Similar to women, Copperbelt has the highest proportion of men who want to limit childbearing (34 percent), while North Western and Western have the lowest proportions (23 percent each). Desire to limit childbearing is lowest among men with no education (25 percent) and highest among those with more than secondary education (35 percent). Men in the lowest wealth quintile are least likely to want to limit childbearing (21 percent), while those in the highest quintile are most likely to want to limit childbearing (35 percent).

Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Zambia 2013-14

Background characteristic	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Residence</b>								
Urban	3.0	5.9	19.1	29.2	46.9	51.9	66.6	32.3
Rural	1.4	1.1	6.0	11.3	21.1	29.3	49.8	26.2
<b>Province</b>								
Central	*	0.0	6.9	15.2	16.8	37.0	49.3	25.4
Copperbelt	*	7.8	14.1	36.8	43.8	50.7	63.7	33.9
Eastern	(0.0)	1.0	12.1	10.2	30.8	38.5	56.0	27.9
Luapula	*	0.7	5.7	13.6	20.9	32.5	51.0	28.4
Lusaka	(4.6)	5.2	23.2	25.8	49.1	55.0	68.0	31.4
Muchinga	*	2.0	9.6	13.1	27.5	27.7	51.5	28.0
Northern	*	0.7	6.6	14.4	23.6	30.0	56.1	29.7
North Western	*	1.3	5.3	10.6	13.4	25.5	45.4	22.6
Southern	*	4.4	6.2	19.0	23.7	25.8	47.6	25.6
Western	*	(0.9)	3.2	10.7	25.3	28.4	42.3	23.3
<b>Education</b>								
No education	*	(4.6)	(4.1)	(17.1)	19.3	24.5	51.7	25.4
Primary	4.5	1.5	8.8	15.1	26.7	34.0	48.4	29.0
Secondary	0.5	3.5	11.3	20.0	35.4	43.5	60.9	27.1
More than secondary	(2.5)	8.0	27.4	40.1	57.9	(51.2)	75.4	34.6
<b>Wealth quintile</b>								
Lowest	(0.0)	1.5	3.9	9.0	19.0	27.0	43.4	21.0
Second	(1.6)	1.5	5.3	8.0	24.6	26.8	43.6	23.3
Middle	(0.0)	0.8	12.2	19.2	25.6	38.3	56.4	32.4
Fourth	(8.3)	4.1	10.3	20.4	37.1	46.0	67.1	31.2
Highest	0.7	8.2	24.4	36.6	51.9	57.3	72.1	35.2
Total 15-49	2.1	3.5	12.8	20.0	32.2	37.6	53.1	28.6
50-59	*	*	(80.0)	62.0	68.0	83.7	78.1	76.1
Total 15-59	2.6	4.3	14.7	22.3	34.6	43.0	60.7	35.0

Note: Men who have been sterilised or who state in response to the question about desire for children that their wife has been sterilised are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

## 6.3 IDEAL FAMILY SIZE

The discussion earlier in this chapter focused on respondents' current childbearing preferences. These preferences are influenced by the number of children a respondent already has. The 2013-14 ZDHS also collected information from women and men age 15-49 about the total number of children they would like to have in their lifetime if they could choose the exact number to have at the time they had no children. Even though this question is based on a hypothetical situation, it provides two measures. Firstly, for women and men who have not yet started a family, the data provides an idea of future fertility. Secondly, for older and high-parity women, the excess of past fertility over ideal family size provides a measure of unwanted fertility.

Table 6.3 shows the percent distribution of women and men age 15-49 by their ideal number of children, according to number of living children. The mean ideal number of children is 4.7 for all women and 5.0 for all men. The number is higher among currently married women and men (5.1 children and 5.7 children, respectively). Thirty percent of women and 28 percent of men prefer to have four children and 28 percent of women and 30 percent of men want to have six or more children.

The ideal number of children among currently married women is similar to the figure reported in the 2007 ZDHS.

When interpreting the findings in Table 6.3, it is important to remember that the actual and stated ideal number of children tend to be related. There are several reasons for this. Firstly, to the extent that women are able to fulfil their fertility desires, those who want large families will achieve large families.

Secondly, because women with large families are, on average, older women, they may prefer a greater number of children because of the attitudes toward childbearing to which they were exposed during the early stages of their reproductive lives. Finally, some women may have difficulty admitting that they would prefer fewer children than they currently have if they could begin childbearing again. Such women are likely to report their actual number as their preferred number. Indeed, women who have fewer children do report a smaller ideal number of children than women with more children. The mean ideal number of children among women with no children is 3.7, as compared with 6.5 among those with six or more children. Similarly, the ideal number of children among men with no children is 4.2, compared with 7.6 among men with six or more children.

**Table 6.3 Ideal number of children by number of living children**

Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to the number of living children, Zambia 2013-14

Ideal number of children	Number of living children							Total
	0	1	2	3	4	5	6+	
WOMEN <sup>1</sup>								
0	1.2	0.4	0.5	0.7	0.7	0.9	1.3	0.8
1	1.3	1.6	0.7	0.4	0.3	0.6	0.7	0.9
2	16.5	13.2	9.9	4.5	3.0	3.0	1.6	8.7
3	22.0	24.4	13.3	9.5	4.1	4.3	2.7	13.2
4	35.0	35.1	43.3	34.1	25.6	12.7	10.9	29.5
5	12.7	13.7	16.5	23.5	20.1	21.8	10.4	16.0
6+	8.3	10.0	14.4	25.0	43.2	51.3	64.4	27.5
Non-numeric responses	3.0	1.6	1.3	2.2	3.1	5.5	8.0	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	3,783	2,584	2,341	2,039	1,775	1,399	2,490	16,411
Mean ideal number of children for: <sup>2</sup>								
All women	3.7	3.9	4.2	4.7	5.2	5.7	6.5	4.7
Number of women	3,669	2,542	2,311	1,993	1,720	1,322	2,291	15,849
Currently married women	4.1	4.0	4.2	4.7	5.2	5.7	6.6	5.1
Number of currently married women	272	1,320	1,709	1,625	1,406	1,125	2,019	9,477
MEN <sup>3</sup>								
0	0.8	0.0	0.0	0.0	0.3	0.0	0.3	0.4
1	0.8	1.2	0.3	0.7	0.3	0.2	0.2	0.6
2	11.8	8.8	7.1	3.5	2.5	3.4	1.4	7.6
3	18.2	21.9	13.1	8.2	3.6	2.9	2.4	12.9
4	31.5	34.6	37.5	34.8	22.7	11.7	12.2	28.0
5	19.7	17.4	21.9	24.8	25.3	19.6	10.2	19.3
6+	16.6	15.8	19.6	27.5	44.5	60.9	71.6	30.4
Non-numeric responses	0.6	0.3	0.6	0.6	0.9	1.2	1.9	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	5,931	1,332	1,356	1,129	1,056	899	1,857	13,561
Mean ideal number of children for: <sup>2</sup>								
All men	4.2	4.2	4.6	4.9	5.5	6.2	7.6	5.0
Number of men	5,897	1,329	1,349	1,122	1,047	888	1,823	13,454
Currently married men	4.2	4.3	4.6	4.9	5.5	6.2	7.6	5.7
Number of currently married men	197	913	1,187	1,028	1,003	859	1,781	6,968
Mean ideal number of children for men age 15-59: <sup>2</sup>								
All men	4.2	4.2	4.5	5.0	5.6	6.1	7.6	5.2
Number of men	5,916	1,361	1,396	1,201	1,131	1,012	2,608	14,625
Currently married men	4.2	4.3	4.6	4.9	5.6	6.1	7.7	5.9
Number of currently married men	206	932	1,220	1,089	1,073	971	2,545	8,035

<sup>1</sup> The number of living children includes the current pregnancy.

<sup>2</sup> Means are calculated excluding respondents who gave non-numeric responses.

<sup>3</sup> The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.4 shows the mean ideal number of children among all women age 15-49 by background characteristics. Mean ideal number of children increases steadily with age, from 3.8 among women age 15-19 to 6.3 among those age 45-49. The ideal number of children is lower in urban than in rural areas (4.2 and 5.1, respectively). At provincial level, women in Lusaka have the lowest desired family size (4.1 children) and women in Northern have the highest (5.4 children).

Mean ideal number of children is inversely associated with education and wealth. Ideal number of children ranges from a low of 3.5 among women with more than a secondary education to a high of 5.6 among those with no education. Similarly, ideal number of children is lowest among women in the highest wealth quintile (3.9 children) and highest among those in the lowest quintile (5.3 children).

## 6.4 FERTILITY PLANNING

Information collected in the 2013-14 ZDHS can also be used to estimate levels of unwanted fertility. This information provides insight into the degree to which couples are able to control fertility. Women age 15-49 were asked a series of questions about each child born to them in the preceding five years, as well as any current pregnancy, to determine whether the birth or pregnancy was wanted then (planned), wanted later (mistimed), or not wanted at all (unplanned) at the time of conception. In assessing these results, it is important to recognise that women may declare a previously unwanted birth or current pregnancy as wanted, and this rationalisation would result in an underestimate of the true extent of unwanted births.

Table 6.5 shows the distribution of births in the five years before the survey by the planning status of the birth. More than three in five births (63 percent) in the five years preceding the survey were planned, 31 percent were mistimed, and 6 percent were unwanted. The percentage of births that are planned has increased from the figure reported in the 2007 ZDHS (58 percent).

The table shows that the percentage of mistimed births generally decreases with increasing birth order; 41 percent of first-order births are mistimed, as compared with 28 percent of births of order three or higher. The proportion of unwanted births increases with birth order, from 1 percent among first- and second-order births to 11 percent among births of order four or higher.

By age, the proportion of wanted births is highest among mothers in the 25-29 age group (69 percent) and lowest among those in the 45-49 age group (39 percent). Mistimed births decrease steadily with age, from 45 percent among women who gave birth before age 20 to 8 percent among the oldest mothers (age 45-49). A much larger proportion of births among older women than younger women are unwanted, with 1-2 percent of births among mothers younger than age 30 being unwanted, as compared with 54 percent among mothers age 45-49.

Table 6.4 Mean ideal number of children

Mean ideal number of children for all women age 15-49 by background characteristics, Zambia 2013-14

Background characteristic	Mean	Number of women <sup>1</sup>
<b>Age</b>		
15-19	3.8	3,533
20-24	4.1	2,951
25-29	4.6	2,755
30-34	5.0	2,375
35-39	5.3	1,927
40-44	5.7	1,373
45-49	6.3	936
<b>Residence</b>		
Urban	4.2	7,461
Rural	5.1	8,388
<b>Province</b>		
Central	4.8	1,369
Copperbelt	4.4	2,747
Eastern	4.6	1,848
Luapula	5.2	1,005
Lusaka	4.1	3,250
Muchinga	4.9	834
Northern	5.4	1,191
North Western	5.1	696
Southern	4.9	1,990
Western	4.9	921
<b>Education</b>		
No education	5.6	1,260
Primary	5.2	7,341
Secondary	4.1	6,426
More than secondary	3.5	823
<b>Wealth quintile</b>		
Lowest	5.3	2,658
Second	5.2	2,742
Middle	4.9	2,967
Fourth	4.4	3,446
Highest	3.9	4,036
Total	4.7	15,849

<sup>1</sup> Number of women who gave a numeric response

**Table 6.5 Fertility planning status**

Percent distribution of births to women age 15-49 in the five years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Zambia 2013-14

Birth order and mother's age at birth	Planning status of birth			Total	Number of births
	Wanted then	Wanted later	Wanted no more		
<b>Birth order</b>					
1	58.3	40.5	0.8	100.0	3,171
2	66.9	32.1	0.8	100.0	2,635
3	69.6	27.6	2.7	100.0	2,297
4+	60.2	28.2	11.3	100.0	6,707
<b>Mother's age at birth</b>					
<20	53.9	44.7	1.0	100.0	2,695
20-24	64.9	34.1	0.9	100.0	3,820
25-29	68.8	28.6	2.3	100.0	3,562
30-34	66.3	25.8	7.5	100.0	2,596
35-39	54.4	23.8	21.7	100.0	1,545
40-44	53.2	16.5	30.1	100.0	541
45-49	38.5	7.8	53.7	100.0	51
Total	62.5	31.4	5.8	100.0	14,810

Note: Totals may not sum up to 100 percent because women with missing information have been deleted.

## 6.5 WANTED FERTILITY RATES

The wanted fertility rate measures the potential demographic impact of avoiding unwanted births. It is calculated in the same manner as the total fertility rate but excludes unwanted births from the numerator. A birth is considered wanted if the number of living children at the time of conception is less than the ideal number of children reported by the respondent. The gap between wanted and actual fertility shows how successful women are in achieving their reproductive intentions. This measure may be an underestimate to the extent that women may not report an ideal family size lower than their actual family size.

The total wanted fertility rates in Table 6.6 represent the levels of fertility that would have prevailed in the three years preceding the survey if all unwanted births had been avoided. The data show that the wanted fertility rate is 4.5 children, as compared with the actual fertility rate of 5.3 children. In other words, Zambian women are currently having an average of 0.8 children more than they actually want. The table also shows that regardless of place of residence, level of education, and wealth quintile, the wanted fertility rate is lower than the actual total fertility rate.

**Table 6.6 Wanted fertility rates**

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Zambia 2013-14

Background characteristic	Total wanted fertility rate	Total fertility rate
<b>Residence</b>		
Urban	3.3	3.7
Rural	5.6	6.6
<b>Province</b>		
Central	5.0	5.9
Copperbelt	3.4	4.0
Eastern	5.0	5.8
Luapula	5.8	6.4
Lusaka	3.2	3.7
Muchinga	5.2	6.3
Northern	5.7	6.6
North Western	5.4	6.2
Southern	4.9	6.2
Western	5.1	5.6
<b>Education</b>		
No education	6.2	7.2
Primary	5.4	6.3
Secondary	3.4	3.8
More than secondary	2.7	3.0
<b>Wealth quintile</b>		
Lowest	6.2	7.1
Second	6.0	7.0
Middle	5.0	6.0
Fourth	3.6	4.2
Highest	2.7	3.0
Total	4.5	5.3

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

The gap between the actual and wanted fertility rates is higher among women who live in rural areas (1.0 child) than among women who live in urban areas (0.4 children). By province, the difference between actual and wanted fertility varies from 0.5 children in Lusaka and Western to 1.3 children in Southern. The gap between actual and wanted fertility decreases with increasing education and, in general, increasing wealth. Women with no education have 1.0 child more than they want, as compared with 0.3 children among women with more than a secondary education. By wealth, the difference between actual and wanted fertility ranges from 0.3 children among women in the highest wealth quintile to 1.0 child among those in the second and middle quintiles.

There has been a steady decline over the past six years in the desired number of children among Zambian women, from 5.2 children in 2007 to 4.5 children in 2013-14.

**Key Findings**

- Knowledge of contraception is nearly universal in Zambia.
- One in two currently married women uses a method of contraception, with most women using a modern method (45 percent).
- The three most popular modern methods used by married women are injectables (19 percent), pill (12 percent), and implants (6 percent).
- Use of modern methods has increased three-fold over nearly two decades, from 15 percent in 1992 to 49 percent in 2013-14.
- The government sector remains the major provider of contraceptive methods, serving more than four in five users (82 percent).
- Seven percent of contraceptive users discontinued using a method within 12 months of starting its use because of side effects, health concerns, or both.
- Twenty-one percent of currently married women have an unmet need for family planning services, with 14 percent having an unmet need for spacing births and 7 percent having an unmet need for limiting them.

Family planning continues to be a priority for the Government of the Republic of Zambia and is highlighted in the current Revised Sixth National Development Plan, 2013-2016 (MoFNP, 2014). It is also considered an essential component of the country's National Health Strategic Plan 2011-2015 (MoH, 2011). The objectives of the National Family Planning Guidelines and Protocols include initiating and sustaining measures to slow the nation's high population growth, enhance people's health and welfare, and prevent premature death and illness, especially among the high risk groups of mothers and children. The plan also supports measures to ensure that all couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education, and means to do so (MoH, 2006).

The importance placed on family planning in national policies, strategies, and plans in recent years has increased access to family planning services. The National Family Planning Programme has continued to expand and sustain quality family planning services throughout the health service delivery system, including first and second level hospitals, health centres, health posts, and mobile health services. Family planning services can be accessed in all health facilities at the district level. Community Based Distributors (CBDs) play an important role in providing information and distributing condoms and supplies of pills. In addition, the private sector and non-governmental organisations (NGOs) have been encouraged to play a more effective role in the National Family Planning Programme (MoH, 2006).

This chapter presents information on knowledge of various contraceptive methods and discusses past and current prevalence. For users of the periodic abstinence (rhythm) method, knowledge of the ovulatory cycle is examined; for those relying on pills, injectables, and condoms, social marketing brands are captured. Also discussed are the sources of modern contraceptive methods; informed choice; discontinuation rates and reasons for discontinuation; unmet need for family planning; non-use of contraception; and intent to use contraceptive methods in the future. In addition, information is provided on exposure to family planning messages through the media and contact with family planning providers. These topics are of practical use to policymakers in formulating efficient and effective family planning strategies and policies. Although the main focus of this chapter is on women, results from the male respondents are also presented because men help play an important role in the realisation of reproductive goals. Wherever

possible, comparisons are made with findings from previous surveys in order to evaluate trends in family planning in Zambia over time.

## 7.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Knowledge of contraceptive methods is an important precursor to their use. The ability to recognise a family planning method when it is described is a simple test of a respondent's knowledge but does not necessarily indicate the extent of this knowledge. The 2013-14 ZDHS collected information on knowledge of contraceptive methods by asking respondents whether or not they have heard about any modern methods (female and male sterilisation, the pill, intrauterine devices (IUDs), injectables, implants, male and female condoms, Standard Days Method (SDM), Lactational Amenorrhoea Method (LAM), emergency contraception) and traditional methods (rhythm method, and withdrawal). Respondents were also asked whether they knew about other methods in addition to those listed.

Table 7.1 shows that knowledge of at least one contraceptive method is nearly universal among both women and men in Zambia. The high level of knowledge can be attributed to the successful dissemination of family planning messages through the mass media.

**Table 7.1 Knowledge of contraceptive methods**

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who have heard of any contraceptive method, by specific method, Zambia 2013-14

Method	Women			Men		
	All women	Currently married women	Sexually active unmarried women <sup>1</sup>	All men	Currently married men	Sexually active unmarried men <sup>1</sup>
<b>Any method</b>	98.8	99.8	99.5	99.5	99.9	99.8
<b>Any modern method</b>	98.8	99.7	99.5	99.4	99.9	99.8
Female sterilisation	70.7	77.3	66.5	61.0	72.9	52.5
Male sterilisation	23.4	25.6	23.2	29.5	33.8	24.5
Pill	95.6	98.7	96.3	91.5	98.1	90.7
IUD	60.2	68.5	58.1	32.7	43.2	24.7
Injectables	94.9	98.5	96.1	87.2	96.8	85.0
Implants	87.2	93.9	88.0	60.3	75.2	49.8
Male condom	96.9	98.3	98.2	99.2	99.8	99.4
Female condom	89.6	92.1	92.7	85.9	90.1	87.1
Lactational Amenorrhoea Method (LAM)	19.2	23.4	16.3	5.8	8.4	3.7
Emergency contraception	21.4	22.5	27.2	20.0	24.4	15.0
Standard Days Method (SDM)	26.8	31.7	25.2	26.1	35.2	20.1
<b>Any traditional method</b>	75.4	86.4	72.9	76.1	91.8	71.7
Rhythm	44.3	50.3	45.1	45.3	57.8	39.6
Withdrawal	69.8	82.5	65.3	72.5	88.6	67.2
Other	21.4	22.5	27.2	3.3	4.7	2.5
Mean number of methods known by respondents 15-49	8.2	8.9	8.3	7.2	8.3	6.6
Number of respondents	16,411	9,859	858	13,561	7,035	1,319
Mean number of methods known by respondents 15-59	na	na	na	7.3	8.3	6.6
Number of respondents	na	na	na	14,773	8,137	1,337

na = Not applicable

<sup>1</sup> Had last sexual intercourse within 30 days preceding the survey

Modern methods are more widely known than traditional methods; almost all women know of a modern method, while 75 percent know of a traditional method. Male condoms (97 percent), pill (96 percent), and injectables (95 percent) are the most commonly known modern methods among women, with a slightly smaller percentage mentioning female condoms (90 percent) and implants (87 percent). Among all men the most common methods of contraception known are the male condom (99 percent), pill (92 percent), injectables (87 percent), and female condoms (86). Knowledge of the IUD, Standard Days Method, female and male sterilisation, Lactational Amenorrhoea Method (LAM), and emergency contraception are known by smaller percentages of women and men.



The extent of and patterns in knowledge of a modern method of family planning among currently married and sexually active unmarried women are similar except that the latter group of women are slightly more knowledgeable than currently married women about emergency contraception.

With respect to traditional methods, withdrawal and the rhythm method are known by 70 and 44 percent of all women, respectively, while comparable percentages for all men are 73 percent and 45 percent, respectively. Overall, women know eight contraceptive methods on average, while men know seven methods.

## **7.2 CURRENT USE OF CONTRACEPTION**

This section presents information on the prevalence of current contraceptive use among women age 15-49 at the time of the survey. Level of current use is the most widely employed and valuable measure of the success of family planning programmes. The Contraceptive Prevalence Rate (CPR) is usually defined as the percentage of currently married women using a method of contraception.

Table 7.2 shows the percent distribution by age of all women, currently married women, and sexually active unmarried women who are currently using specific family planning methods. Forty-nine percent of currently married women are using a method of family planning; 45 percent a modern method and 4 percent a traditional method. Use of any method is higher among women who are currently married (49 percent) than among sexually active unmarried women (39 percent). A similar pattern is seen in use of modern methods for currently married women (45 percent) and sexually active women (38 percent).

Injectables are the most widely used modern method (19 percent) among currently married women, followed by the pill (12 percent), implants (6 percent), and the male condom (4 percent). Modern contraceptive use varies by age. Use of any modern method is lower among the youngest (36 percent) and oldest (28 percent) cohorts of women compared with those age 20-44. Use of any modern method is highest among those age 25-34 (49 percent).

Table 7.2. Current use of contraception by age

Percent distribution of all women, currently married women, and sexually active unmarried women age 15-49 by contraceptive method currently used, according to age, Zambia 2013-14

Age	Modern method						Traditional method						Total	Number of women					
	Any modern method	Female sterilisation	Pill	IUD	Injectables	Implants	Male condom	Female condom	LAM	Standard Days Method	Other	Any traditional method			Rhythm	Withdrawal	Other	Not currently using	
ALL WOMEN																			
15-19	10.6	10.2	0.0	1.7	0.0	5.1	1.0	1.9	0.0	0.4	0.0	0.0	0.3	0.0	0.3	0.0	89.4	100.0	3,625
20-24	34.6	33.0	0.0	6.5	0.3	18.0	4.0	3.3	0.1	0.6	0.0	0.1	1.6	0.1	1.3	0.1	65.4	100.0	3,006
25-29	47.0	43.8	0.2	10.7	1.2	21.2	5.4	4.0	0.0	1.0	0.1	0.1	3.1	0.4	2.7	0.1	53.0	100.0	2,813
30-34	48.0	44.5	0.8	13.2	1.4	17.9	5.9	4.3	0.0	0.5	0.0	0.3	3.5	0.4	2.8	0.4	52.0	100.0	2,475
35-39	46.0	42.1	2.2	11.1	1.7	14.6	6.4	5.4	0.1	0.4	0.1	0.0	3.9	0.7	2.7	0.5	54.0	100.0	2,009
40-44	44.2	38.2	5.8	9.7	1.6	11.2	5.0	4.0	0.1	0.3	0.6	0.0	6.0	1.3	3.8	0.9	55.8	100.0	1,464
45-49	26.0	22.1	6.2	5.8	0.9	3.9	2.4	2.7	0.0	0.1	0.0	0.2	3.9	0.7	1.8	1.4	74.0	100.0	1,018
Total	35.1	32.5	1.3	8.0	0.9	13.8	4.2	3.5	0.1	0.5	0.1	0.1	2.7	0.4	2.0	0.3	64.9	100.0	16,411
CURRENTLY MARRIED WOMEN																			
15-19	37.5	35.8	0.0	6.4	0.0	20.9	2.6	4.4	0.3	1.2	0.0	0.0	1.7	0.0	1.7	0.0	62.5	100.0	613
20-24	46.8	44.1	0.0	9.4	0.2	25.3	5.3	2.9	0.0	1.0	0.0	0.0	2.7	0.2	2.2	0.2	53.2	100.0	1,684
25-29	52.5	48.6	0.2	12.5	1.0	24.1	5.7	3.6	0.0	1.2	0.1	0.1	4.0	0.5	3.4	0.1	47.5	100.0	2,181
30-34	52.5	48.7	0.9	15.1	1.7	19.8	6.0	4.1	0.0	0.6	0.0	0.3	3.8	0.5	3.1	0.2	47.5	100.0	1,976
35-39	52.0	47.1	2.5	13.1	2.0	16.4	7.0	5.4	0.2	0.5	0.0	0.0	4.9	0.9	3.5	0.5	48.0	100.0	1,572
40-44	52.0	44.2	6.2	11.5	1.5	13.2	5.7	4.8	0.2	0.4	0.7	0.0	7.8	1.8	5.0	1.1	48.0	100.0	1,102
45-49	32.9	27.5	7.3	7.9	1.3	4.3	3.2	3.1	0.1	0.1	0.0	0.2	5.3	1.0	2.5	1.9	67.1	100.0	730
Total	49.0	44.8	1.9	11.8	1.2	19.3	5.5	4.0	0.1	0.8	0.1	0.1	4.3	0.7	3.2	0.4	51.0	100.0	9,859
SEXUALLY ACTIVE UNMARRIED WOMEN <sup>1</sup>																			
15-19	18.6	17.9	0.0	3.1	0.0	5.3	0.8	8.7	0.0	0.0	0.0	0.0	0.6	0.1	0.5	0.0	81.4	100.0	296
20-24	48.0	47.0	0.0	11.8	0.0	19.8	4.1	9.7	0.9	0.0	0.0	0.6	1.0	0.0	1.0	0.0	52.0	100.0	198
25-29	51.0	50.0	0.0	9.0	0.9	18.3	5.2	15.0	0.0	0.0	0.0	1.5	1.0	0.0	0.0	1.0	49.0	100.0	128
30-34	56.1	50.3	0.0	16.0	1.2	17.6	5.4	9.9	0.0	0.0	0.2	0.0	5.8	0.0	1.7	4.1	43.9	100.0	95
35-39	59.1	59.1	0.0	10.4	0.0	20.1	4.3	21.9	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	40.9	100.0	77
40-44	(39.5)	(39.2)	(5.2)	(17.9)	(0.0)	(9.7)	(0.0)	(6.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.4)	(0.0)	(0.0)	(0.4)	(60.5)	100.0	44
45-49	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	20	
Total	39.0	37.7	0.3	8.8	0.3	13.7	3.0	10.9	0.2	0.0	0.2	0.4	1.3	0.0	0.6	0.7	61.0	100.0	858

Note: If more than one method is used, only the most effective method is considered in this tabulation. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

LAM = Lactational Amenorrhoea Method

<sup>1</sup> Women who have had sexual intercourse within 30 days preceding the survey

### 7.3 CURRENT USE OF CONTRACEPTION BY BACKGROUND CHARACTERISTICS

Analyzing current use of contraception by background characteristics is important because it helps identify subgroups of the population to target for family planning services. Table 7.3.1 presents the percent distribution of currently married women by their use of family planning methods, according to background characteristics. This table allows a comparison of levels of current contraceptive use across major population groups and an examination of differences in use in the various subgroups.

There is a direct association between use of family planning methods and the number of children women have, except in the case of women with five or more children. Only 4 percent of women with no living children use a method of contraception; the percentage increases to 48 percent among women with one or two children and 54 percent among women with three or four children before declining to 52 percent among women with five or more children. Use of injectables rises from less than 1 percent of women with no children to 23 percent of women with one or two children and then declines to 21 percent and 18 percent among women with three or four children and five children or more, respectively. Pill use is highest (15 percent) among women with three or four children. Use of female sterilisation is highest among women with five or more living children (4 percent). The use of implants increases with parity.

Urban women are more likely to use a family planning method than rural women, reflecting wider availability and easier access to methods in urban than in rural areas. The CPR for any method is 57 percent in urban areas, compared with 44 percent in rural areas. While the use of the pill, implant, and male condom is nearly two times higher in urban areas than in rural areas, there is little difference in injectable use between urban and rural areas.

By province, use of a method is highest in Lusaka (58 percent) and lowest in Western (33 percent). Use of injectables ranges from a low of 13 percent in Northern to a high of 26 percent in Eastern. Pill use is highest in Lusaka (17 percent) and lowest in North Western and Luapula (5 percent). Female sterilisation is especially popular in North Western (4 percent), while use of implants is highest in Lusaka (8 percent).

Contraceptive use increases with education from 37 percent among women with no education to 63 percent among women with more than secondary education. Use of a modern method is also highest among women with more than secondary education and decreases with decreasing education.

Wealth has a positive association with women's contraceptive use. Contraceptive use increases as household wealth increases, from 39 percent among women in the lowest wealth quintile to 62 percent among those in the highest wealth quintile.

Table 7.3.1. Current use of contraception by background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Zambia 2013-14

Background characteristic	Modern method						Traditional method						Total	Number of women					
	Any method	Any modern method	Female sterilisation	Pill	IUD	Injectables	Implants	Male condom	Female condom	LAM	Standard days	Other			Any traditional method	Rhythm	Withdrawal	Other	Not currently using
<b>Number of living children</b>																			
0	3.8	3.8	0.0	0.4	0.0	0.8	0.2	2.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.2	100.0	487
1-2	48.3	45.3	0.5	11.3	0.5	22.7	4.3	4.9	0.0	0.9	0.2	0.0	3.0	0.6	2.2	0.2	51.7	100.0	3,090
3-4	54.0	49.9	1.7	14.5	1.5	20.8	5.6	4.5	0.0	0.9	0.1	0.3	4.1	0.6	3.3	0.2	46.0	100.0	3,051
5+	51.8	45.5	3.6	11.3	1.7	17.6	7.4	3.1	0.2	0.6	0.1	0.0	6.3	0.9	4.4	1.0	48.2	100.0	3,231
<b>Residence</b>																			
Urban	56.6	53.4	2.2	15.9	2.0	19.0	7.6	5.3	0.1	0.8	0.1	0.3	3.2	0.8	2.2	0.2	43.4	100.0	3,953
Rural	43.9	39.0	1.6	9.0	0.6	19.6	4.1	3.1	0.1	0.8	0.1	0.0	5.0	0.5	3.8	0.6	56.1	100.0	5,905
<b>Province</b>																			
Central	42.8	41.3	0.6	11.0	0.2	23.5	4.4	1.5	0.0	0.1	0.0	0.0	1.5	0.3	0.8	0.5	57.2	100.0	895
Copperbelt	53.5	50.8	2.8	14.6	1.6	18.3	6.9	5.0	0.0	1.0	0.0	0.6	2.7	0.8	1.9	0.0	46.5	100.0	1,477
Eastern	53.5	49.8	3.3	9.8	0.8	25.8	3.6	5.3	0.1	1.1	0.1	0.0	3.7	0.1	3.4	0.2	46.5	100.0	1,304
Luapula	34.5	33.1	1.5	4.9	0.3	19.4	5.1	1.0	0.2	0.4	0.3	0.0	1.4	0.2	0.0	1.2	65.5	100.0	740
Lusaka	57.8	54.7	2.0	17.1	2.9	17.6	8.3	5.3	0.1	1.0	0.3	0.1	3.1	0.8	1.9	0.3	42.2	100.0	1,780
Muchinga	45.0	34.3	1.2	7.5	0.5	14.5	6.3	3.9	0.0	0.1	0.2	0.0	10.8	0.9	9.7	0.2	55.0	100.0	575
Northern	48.2	32.5	1.3	7.1	0.8	13.4	6.9	3.1	0.0	0.0	0.0	0.0	15.7	0.3	13.9	1.5	51.8	100.0	820
North Western	40.1	36.7	4.1	4.7	0.1	20.9	3.7	2.3	0.0	0.8	0.2	0.0	3.4	0.9	2.0	0.6	59.9	100.0	407
Southern	51.2	48.2	0.7	15.4	1.2	20.3	3.9	4.7	0.2	1.7	0.0	0.0	3.0	1.6	1.1	0.3	48.8	100.0	1,351
Western	33.1	31.7	0.9	9.3	0.2	16.0	2.1	3.1	0.0	0.0	0.0	0.1	1.4	0.1	1.0	0.4	66.9	100.0	511
<b>Education</b>																			
No education	37.4	32.6	2.3	9.4	0.1	14.1	3.1	2.5	0.1	0.9	0.1	0.0	4.9	0.3	3.7	0.9	62.6	100.0	1,081
Primary	46.6	41.8	1.8	10.1	1.2	19.2	5.2	3.6	0.1	0.6	0.1	0.0	4.8	0.7	3.6	0.5	53.4	100.0	5,422
Secondary	55.6	52.8	1.5	14.8	1.5	22.2	7.1	3.9	0.1	1.2	0.2	0.3	2.8	0.5	2.1	0.2	44.4	100.0	2,905
More than secondary	63.4	58.1	4.6	17.9	2.2	14.4	5.0	12.6	0.0	0.4	0.6	0.4	5.3	2.4	2.9	0.0	36.6	100.0	451
<b>Wealth quintile</b>																			
Lowest	38.6	31.3	1.1	7.1	0.4	15.7	3.3	3.1	0.0	0.6	0.1	0.0	7.3	0.2	6.4	0.7	61.4	100.0	1,888
Second	43.4	39.3	1.3	7.8	0.6	21.7	3.8	3.1	0.1	1.0	0.0	0.0	4.0	0.6	2.7	0.7	56.6	100.0	2,003
Middle	48.5	44.8	1.7	10.9	0.5	21.8	5.8	3.1	0.1	0.8	0.1	0.0	3.7	0.4	2.9	0.4	51.5	100.0	1,953
Fourth	52.5	49.5	1.5	13.0	2.6	20.5	7.6	3.7	0.1	0.5	0.0	0.0	3.0	0.7	1.9	0.3	47.5	100.0	2,063
Highest	61.7	58.3	3.8	20.0	1.8	16.7	7.0	7.0	0.1	1.0	0.3	0.5	3.5	1.3	2.1	0.1	38.3	100.0	1,952
Total	49.0	44.8	1.9	11.8	1.2	19.3	5.5	4.0	0.1	0.8	0.1	0.1	4.3	0.7	3.2	0.4	51.0	100.0	9,859

Note: If more than one method is used, only the most effective method is considered in this tabulation.

LAM = Lactational Amenorrhoea Method.

## 7.4 TRENDS IN CURRENT USE OF FAMILY PLANNING

Trends in current use of family planning can be used to monitor and evaluate the success of family planning programmes over time. Table 7.3.2 and Figure 7.1 show trends in contraceptive use among currently married women from 1992 to 2013-14. Data from the five DHS surveys conducted in Zambia over the past nearly two decades show an impressive three-fold increase in the use of contraceptive methods from 15 percent in 1992 to 49 percent in 2013-14. The increase in the use of modern contraceptives is due mainly to increased use of injectables. There has been a decline in the use of male condoms in the past six years. Use of traditional methods has also decreased between 1996 and 2013-2014.

**Table 7.3.2 Trends in the current use of family planning**

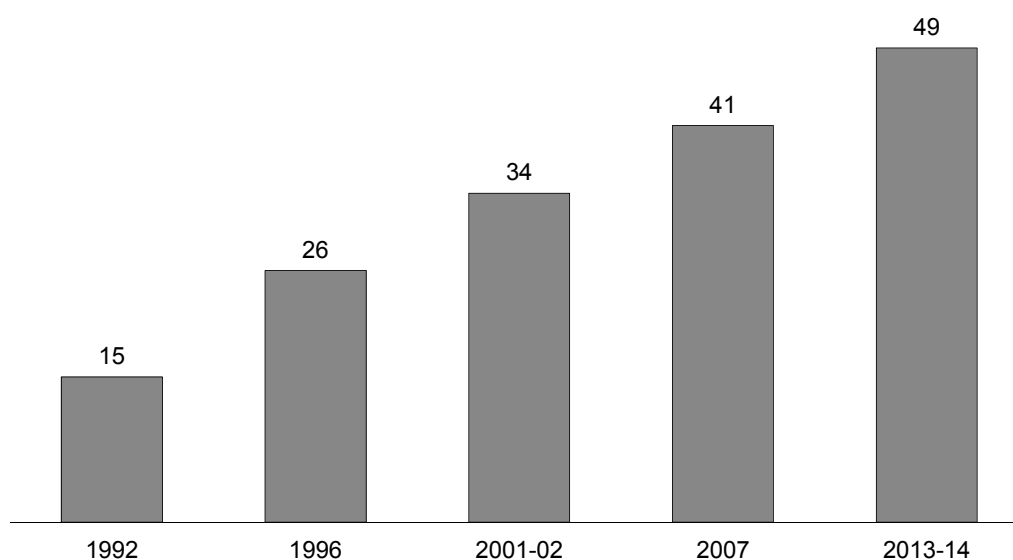
Percentage of currently married women age 15-49 who are currently using specific family planning methods, Zambia 1992, 1996, 2001-2002, 2007, and 2013-14

Method	ZDHS 1992	ZDHS 1996	ZDHS 2001-2002	ZDHS 2007	ZDHS 2013-14
<b>Any method</b>	15.2	25.9	34.2	40.8	49.0
<b>Any modern method</b>	8.9	14.4	22.6	32.7	44.8
Pill	4.3	7.2	11.9	11.0	11.8
IUD	0.5	0.4	0.1	0.1	1.2
Injectables	0.1	1.0	4.5	8.5	19.3
Implants	na	Na	0.3	0.4	5.5
Male condom	1.8	3.5	3.8	4.7	4.0
Female condom	na	Na	0.0	0.1	0.1
Female sterilisation	2.1	2.0	2.0	1.9	1.9
Lactational Amenorrhoea (LAM)	na	Na	2.7	6.2	0.8
<b>Any traditional method</b>	6.3	11.5	8.9	8.1	4.3
Rhythm/periodic abstinence	0.9	1.9	1.1	1.2	0.7
Withdrawal	3.0	4.5	5.1	5.6	3.2
Other	2.2	5.2	2.7	1.3	0.4
Number of women	4,457	4,902	4,694	4,402	9,859

na = Not applicable

**Figure 7.1 Trends in the contraceptive prevalence rate, ZDHS 1992-2014**

Percentage of currently married women age 15-49



## 7.5 SOURCE OF CONTRACEPTION

Table 7.4 documents the main sources of contraception for users of different modern methods. Such information on where women obtain their contraceptive method is important for programme managers and implementers in designing family planning policies and programmes. All current users of modern contraceptive methods were asked the most recent source of their methods. The public sector remains the

major source of contraceptive methods in Zambia, providing methods to 82 percent of current users. The share of the public sector as a source of modern methods has increased from 68 percent in 2007.

Within the public sector, 69 percent of users obtain their method from government health centres/posts and 9 percent from hospitals, while mobile clinics, family planning clinics, and community-based agents contribute to the remaining 3 percent. Nine percent of modern contraceptive users obtain their methods from the private medical sector, primarily from pharmacies (4 percent) and private hospitals or clinics (3 percent). It is worth noting that the percentage of users obtaining their methods from the private sector has decreased from 17 percent to 9 percent in the past six years.

Female sterilisations are performed mostly in government and private hospitals (63 and 20 percent, respectively), in mission hospitals or clinics (8 percent), and in government health centres or posts (4 percent, respectively). More than half of pill users obtain their supply from a government health centre or post (51 percent). Pill users who obtain their supply from a private medical source primarily go to pharmacies (13 percent). Nine in 10 women who use injectables obtain them from the public sector, primarily health centres or posts (86 percent). Male condoms are obtained primarily from the public sector (62 percent) and mostly from a government health centre or post (50 percent). Shops are also an important source of male condoms (25 percent). Although these findings point to the continued reliance on government facilities as a major source of contraceptives, the role of the private sector and other sources cannot be ignored.

**Table 7.4 Source of modern contraception methods**

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Zambia 2013-14

Source	Female sterilisation	Pill	IUD	Injectables	Implants	Male condom	Total
<b>Public sector</b>	68.3	60.6	90.2	95.0	96.7	62.3	81.6
Government hospital	63.3	4.9	8.5	5.8	11.6	8.1	9.1
Government health centre/ post	3.6	51.4	79.9	86.4	82.3	50.2	69.3
Mobile hospital, clinic	1.0	1.1	1.5	1.6	2.2	0.8	1.4
Family planning clinic	0.0	1.3	0.3	0.7	0.4	0.8	0.8
Community based agent, fieldworker	0.0	1.8	0.0	0.5	0.1	1.8	0.9
Other public sector	0.4	0.1	0.0	0.1	0.0	0.6	0.1
<b>Private medical sector</b>	31.2	16.6	9.6	4.7	3.1	9.5	9.3
Private hospital, clinic	19.8	2.6	5.9	2.0	1.1	0.5	2.8
Mission hospital, clinic	7.8	0.7	2.8	2.4	1.3	1.0	1.9
Pharmacy	0.0	12.7	0.0	0.1	0.0	7.1	4.0
Private doctor	0.0	0.0	0.9	0.1	0.3	0.0	0.1
Community based agent, fieldworker	0.0	0.5	0.0	0.0	0.0	0.6	0.2
Mobile hospital, clinic	3.6	0.0	0.0	0.1	0.4	0.0	0.2
Other private sector	0.0	0.1	0.0	0.0	0.0	0.2	0.0
<b>Other source</b>	0.0	22.7	0.0	0.2	0.0	26.5	8.8
Shop	0.0	22.4	0.0	0.0	0.0	25.1	8.5
Church	0.0	0.0	0.0	0.1	0.0	0.1	0.1
Friends, relatives	0.0	0.3	0.0	0.1	0.0	1.3	0.2
Other	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Don't know	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Missing	0.1	0.1	0.2	0.1	0.2	1.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	99.9	100.0
Number of women	217	1,309	145	2,263	682	581	5,212

Note: Total includes five users of male sterilisation and nine users of female condom but excludes users of Standard Days Method Or Lactational Amenorrhoea Method (LAM).

## 7.6 BRANDS OF PILLS, INJECTABLES, AND CONDOMS USED

Women who were currently using oral contraceptives, injectables, and condoms were asked for the brand name of the method they last used. Information on women's use of social marketing brand contraceptives is useful for monitoring the success of social marketing programmes.

Table 7.5.1 shows the distribution of women using pills and injectables by social marketing brand used, according to background characteristics. Among pill users, the brands most commonly used are Safe Plan (46 percent), Oralcon F (28 percent) and Microgynon (20 percent). Among women using injectables, 93 percent use Depo Provera and 5 percent use Noristerat.

Table 7.5.1 Use of social marketing brand pills and injectables

Percentage of pill and injectable users age 15-49 using a specific social marketing brand, by background characteristics, Zambia 2013-14

Background characteristic	Brand of pills					Number of women using the pill	Name/type of injectable				Total	Number of women using injectables		
	Safe plan	Microgynon	Microlut	Oralcon F	Other		DK/missing	Total	Norigynon <sup>1</sup>	Noristerat <sup>1</sup>			Depo Provera <sup>2</sup>	Other
<b>Age</b>														
15-19	35.8	9.4	8.1	46.1	0.0	0.7	100.0	1.4	3.6	94.4	0.0	0.7	100.0	186
20-24	46.5	17.2	4.8	28.1	0.5	2.9	100.0	1.1	3.6	94.0	0.2	1.1	100.0	540
25-29	44.0	17.0	3.3	34.0	1.1	1.6	100.0	0.5	5.8	93.3	0.0	0.4	100.0	597
30-34	47.6	21.3	1.8	25.9	0.6	2.7	100.0	0.8	7.3	90.0	0.0	1.9	100.0	443
35-39	51.7	20.3	1.5	24.4	0.5	1.7	100.0	0.0	4.8	93.6	0.6	1.0	100.0	294
40-44	34.6	30.2	6.8	22.5	0.5	5.4	100.0	0.0	5.0	94.0	0.2	0.8	100.0	163
45-49	50.8	16.4	6.1	19.5	3.5	3.8	100.0	(0.0)	(5.2)	(94.8)	(0.0)	(0.0)	(100.0)	40
<b>Residence</b>														
Urban	50.1	21.5	2.8	22.9	0.9	1.8	100.0	1.2	6.7	91.6	0.1	0.5	100.0	904
Rural	39.8	17.5	4.6	34.1	0.6	3.5	100.0	0.3	4.2	94.0	0.2	1.3	100.0	1,359
<b>Province</b>														
Central	48.3	17.4	2.1	27.9	0.0	4.3	100.0	0.0	4.1	91.8	0.0	4.1	100.0	249
Copperbelt	45.1	20.7	2.9	27.4	1.4	2.5	100.0	0.9	7.8	90.5	0.0	0.8	100.0	313
Eastern	44.0	12.0	3.0	31.8	1.5	7.7	100.0	0.0	1.7	96.7	0.3	1.3	100.0	381
Luapula	50.7	25.1	4.3	10.8	0.0	9.2	100.0	0.5	3.0	96.0	0.2	0.3	100.0	168
Lusaka	52.9	22.9	2.4	20.3	0.6	1.0	100.0	2.4	8.3	88.8	0.0	0.5	100.0	364
Muchinga	35.6	19.1	4.0	36.9	1.5	3.0	100.0	0.8	6.2	91.1	1.9	0.0	100.0	89
Northern	44.9	25.5	5.0	23.2	0.5	1.0	100.0	0.0	4.0	95.8	0.0	0.3	100.0	117
North Western	52.5	15.1	6.5	25.9	0.0	0.0	100.0	0.4	7.2	92.4	0.0	0.0	100.0	117
Southern	33.1	17.7	6.9	41.2	0.3	0.8	100.0	0.0	2.5	97.0	0.0	0.4	100.0	319
Western	50.9	18.4	1.7	26.4	0.9	1.6	100.0	1.3	10.1	88.6	0.0	0.0	100.0	147
<b>Education</b>														
No education	43.4	17.2	3.5	31.3	0.8	3.8	100.0	0.6	6.6	87.5	1.0	4.3	100.0	170
Primary	41.6	22.6	4.0	27.4	0.4	4.1	100.0	0.6	5.1	93.6	0.0	0.6	100.0	1,184
Secondary	49.8	16.9	2.5	29.2	0.8	0.8	100.0	0.8	4.4	93.7	0.1	0.9	100.0	830
More than secondary	49.3	19.5	6.9	20.1	2.8	1.4	100.0	0.0	12.0	88.0	0.0	0.0	100.0	78
<b>Wealth quintile</b>														
Lowest	30.7	20.1	6.8	35.2	1.6	5.6	100.0	0.6	5.4	93.7	0.0	0.4	100.0	374
Second	40.1	19.0	5.9	31.6	0.0	3.5	100.0	0.3	4.7	92.7	0.5	1.7	100.0	495
Middle	43.4	15.7	2.6	34.4	0.2	3.7	100.0	0.5	2.9	95.6	0.1	0.9	100.0	540
Fourth	55.7	15.4	1.3	25.5	0.1	2.1	100.0	1.1	6.5	91.4	1.1	1.0	100.0	467
Highest	46.3	25.4	3.9	21.9	1.6	0.9	100.0	0.9	7.3	91.2	0.0	0.7	100.0	387
Total	45.5	19.7	3.6	27.9	0.7	2.6	100.0	0.7	5.2	93.0	0.1	1.0	100.0	2,263

Note: Figure in parentheses are based on 25-49 unweighted cases

<sup>1</sup> Two-month injectables<sup>2</sup> Three-month injectables

Women who said that they were currently using condoms (male or female) as a form of contraception were asked which brand of condoms they used. Table 7.5.2 shows the percent distribution for women condom users age 15-49 by social marketing brand of condoms used, according to background characteristics. The most common brand of condom used is the Maximum Classic male condom (48 percent). Twenty-three percent of women use the unbranded public sector male condom.

**Table 7.5.2 Use of social marketing brand condoms: Women**

Percentage of women age 15-49 using specific social marketing brand of condoms by background characteristics, Zambia 2013-14

Background characteristic	Brand of condoms									Total	Number of women using condoms
	Maximum classic	Maximum scented	Rough rider	Durex	Care female condom	Public sector un-branded	Other	Don't know	Missing		
<b>Age</b>											
15-19	44.4	6.2	0.0	2.0	0.0	29.6	0.0	17.8	0.0	100.0	68
20-24	28.4	8.1	10.1	8.0	0.0	18.9	1.2	18.5	6.7	100.0	100
25-29	52.9	7.5	4.9	0.7	0.0	20.9	2.1	6.5	4.5	100.0	112
30-34	48.3	10.3	2.0	4.1	0.0	22.6	1.0	8.4	3.3	100.0	107
35-39	62.4	3.1	1.3	0.0	0.0	25.3	1.1	3.1	3.7	100.0	109
40-44	46.4	3.9	0.0	5.7	2.4	22.4	2.3	16.8	0.0	100.0	59
45-49	(57.2)	(8.8)	(0.0)	(1.8)	(0.0)	(16.8)	(0.0)	(12.2)	(3.2)	(100.0)	27
<b>Residence</b>											
Urban	55.6	7.2	4.6	1.5	0.4	17.6	1.8	7.7	3.6	100.0	343
Rural	37.5	6.4	1.4	5.6	0.0	30.0	0.4	15.4	3.2	100.0	237
<b>Province</b>											
Central	*	*	*	*	*	*	*	*	*	*	21
Copperbelt	52.6	5.0	6.4	1.9	0.0	24.3	4.6	5.3	0.0	100.0	108
Eastern	51.3	10.8	3.0	5.0	0.0	18.6	0.0	11.3	0.0	100.0	91
Luapula	*	*	*	*	*	*	*	*	*	*	10
Lusaka	63.5	6.3	4.8	0.0	0.0	12.5	0.0	5.9	7.0	100.0	155
Muchinga	(18.9)	(4.6)	(0.8)	(3.1)	(0.0)	(53.5)	(0.0)	(19.1)	(0.0)	(100.0)	25
Northern	(33.3)	(2.9)	(0.0)	(0.0)	(0.0)	(49.2)	(0.0)	(14.5)	(0.0)	(100.0)	31
North Western	(31.2)	(21.4)	(0.0)	(30.4)	(0.0)	(6.3)	(0.0)	(10.7)	(0.0)	(100.0)	13
Southern	41.6	4.0	1.5	6.5	1.4	22.2	1.1	15.8	5.9	100.0	98
Western	(38.6)	(8.7)	(0.0)	(0.0)	(0.0)	(20.1)	(1.7)	(26.5)	(4.4)	(100.0)	28
<b>Education</b>											
No education	(51.7)	(7.2)	(0.0)	(0.0)	(0.0)	(30.5)	(0.0)	(10.6)	(0.0)	(100.0)	27
Primary	44.5	5.2	1.1	4.1	0.6	28.7	0.3	12.2	3.2	100.0	240
Secondary	49.1	5.9	3.3	3.1	0.0	20.0	1.6	12.3	4.8	100.0	223
More than secondary	54.6	13.4	9.9	1.8	0.0	11.1	3.2	4.0	1.9	100.0	91
<b>Wealth quintile</b>											
Lowest	37.5	2.5	2.8	3.3	0.0	40.1	0.0	9.0	4.7	100.0	70
Second	40.2	6.5	0.0	7.4	0.0	26.3	0.0	16.7	3.0	100.0	78
Middle	39.1	7.4	0.2	4.6	1.6	20.1	0.0	25.3	1.8	100.0	89
Fourth	55.3	4.0	0.7	3.2	0.0	24.0	2.3	3.8	6.6	100.0	132
Highest	54.0	9.9	7.5	1.0	0.0	15.9	1.9	7.8	1.9	100.0	212
<b>Total</b>	48.2	6.8	3.3	3.2	0.2	22.7	1.2	10.9	3.5	100.0	581

Note: Figure in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Men who reported that they had had sex within the 12 months preceding the survey and used a condom the last time they had sex were asked which brand of condoms they used. Table 7.5.3 shows the percent distribution of these men by social marketing brand used, according to background characteristics. As reported for women, the majority of men use Maximum Classic (48 percent), while three in ten (30 percent) use the unbranded public sector male condom.



Table 7.5.3 Use of social marketing brand condoms: Men

Percentage of men age 15-49 using specific social marketing brand of condoms by background characteristics, Zambia 2013-14

Background characteristic	Brand of condoms								Total	Number of men who had sex in the past year and used a condom during last sex
	Maximum classic	Maximum scented	Rough rider	Durex	Public sector unbranded	Other	Don't know	Missing		
<b>Age</b>										
15-19	45.1	9.1	2.3	1.2	31.2	2.8	5.8	2.5	100.0	445
20-24	50.9	7.5	4.3	1.6	28.5	2.3	3.2	1.8	100.0	672
25-29	49.9	7.5	2.7	1.3	28.4	3.0	4.5	2.6	100.0	513
30-34	47.4	11.4	4.3	1.8	23.8	1.9	5.1	4.4	100.0	397
35-39	48.6	10.6	3.7	1.5	30.5	0.5	3.5	1.0	100.0	281
40-44	45.2	9.5	2.8	0.2	36.7	1.1	2.7	1.7	100.0	195
45-49	46.5	4.5	0.7	4.3	39.4	0.7	1.3	2.5	100.0	149
<b>Residence</b>										
Urban	58.7	10.0	4.7	2.0	17.1	2.3	2.9	2.3	100.0	1,342
Rural	37.7	7.3	1.9	1.0	42.5	1.8	5.2	2.5	100.0	1,310
<b>Province</b>										
Central	42.1	2.8	4.2	1.7	36.5	2.1	8.1	2.5	100.0	219
Copperbelt	53.1	14.4	2.7	1.5	20.8	0.3	4.4	2.9	100.0	462
Eastern	30.4	12.5	2.1	0.0	43.4	3.2	4.4	4.0	100.0	370
Luapula	61.4	10.7	0.6	1.7	13.4	0.0	7.4	4.8	100.0	101
Lusaka	67.0	8.0	6.4	2.2	9.8	3.3	3.2	0.3	100.0	594
Muchinga	40.7	7.1	1.9	0.9	38.2	5.2	5.0	1.0	100.0	97
Northern	44.4	3.0	0.7	0.3	41.3	3.1	2.4	4.7	100.0	123
North Western	63.1	2.4	0.2	1.0	24.0	0.2	1.6	7.4	100.0	105
Southern	40.1	9.6	4.3	1.9	37.9	2.0	2.1	2.2	100.0	372
Western	29.7	1.8	0.4	2.7	59.7	0.8	4.6	0.3	100.0	209
<b>Education</b>										
No education	30.0	2.1	0.0	0.5	57.6	0.0	5.3	4.5	100.0	74
Primary	41.9	6.2	2.4	0.6	39.9	1.7	5.3	2.1	100.0	877
Secondary	53.7	9.8	2.6	1.8	24.2	2.3	2.9	2.7	100.0	1,413
More than secondary	46.4	12.1	10.5	2.9	18.2	2.9	5.7	1.1	100.0	288
<b>Wealth quintile</b>										
Lowest	29.2	10.2	0.2	0.7	49.0	3.0	5.4	2.3	100.0	341
Second	39.7	5.1	2.9	1.2	41.8	2.2	4.9	2.3	100.0	431
Middle	46.3	5.8	2.8	0.8	36.1	0.6	4.8	2.8	100.0	480
Fourth	56.4	8.0	3.5	1.3	22.7	1.7	3.7	2.7	100.0	634
Highest	56.3	12.3	5.0	2.7	16.1	2.8	2.8	1.9	100.0	767
Total 15-49	48.3	8.7	3.3	1.5	29.7	2.1	4.1	2.4	100.0	2,652
50-59	38.5	9.5	3.6	3.3	37.5	2.0	3.5	2.0	100.0	111
Total 15-59	47.9	8.7	3.3	1.6	30.0	2.0	4.0	2.4	100.0	2,763

## 7.7 INFORMED CHOICE

Informed choice is an important tool for assessing, monitoring, and evaluating the quality of family planning services. Current users of modern methods of contraception were asked whether they were informed about side effects or problems they might have with a method, what to do if they experienced side effects, and what other methods they could use. This information assists users in coping with side effects and decreases unnecessary discontinuations. Moreover, such data serve as a measure of the quality of family planning service provision. Table 7.6 presents results by method type and source.

Table 7.6 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the five years preceding the survey, the percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods they could use, by method and initial source, Zambia 2013-14

Method/source	Among women who started last episode of modern contraceptive method within five years preceding the survey:			Number of women
	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	
<b>Method</b>				
Female sterilisation	72.2	66.5	60.0	83
Pill	68.2	67.5	74.6	1,193
IUD	85.5	85.1	97.3	130
Injectables	80.8	79.1	84.9	2,198
Implants	91.9	89.1	89.7	663
<b>Initial source of method<sup>1</sup></b>				
Public sector	83.4	81.4	86.8	3,709
Private sector	61.7	62.2	65.8	320
Other source	33.8	36.3	43.3	209
<b>Total</b>	<b>79.0</b>	<b>77.4</b>	<b>82.7</b>	<b>4,266</b>

Note: Table includes users of only the methods listed individually. Total includes 22 women with information missing on initial source of method, four women using a method from an unspecified source, and one woman using a method from an unknown source.

<sup>1</sup> Source at start of current episode of use

Seventy-nine percent of modern contraceptive users were informed by a health or family planning worker about potential side effects of the method they use; 77 percent were informed about what to do if they experienced side effects, and 83 percent were informed of other available methods of contraception.

Users were slightly less likely to receive information about side effects or problems from a private medical facility (62 percent) than from a public health facility (83 percent). The same was true about information on what to do if side effects were experienced; 62 percent of users of a modern contraceptive method were given the information in a private medical facility, as compared with 81 percent in a public health facility. In addition, 66 percent of users were informed of other methods that could be used by the private sector while the public sector informed 87 percent of users.

## 7.8 CONTRACEPTIVE DISCONTINUATION RATES

Couples can realise their reproductive goals only when they consistently and correctly use contraceptive methods. A prominent concern for family planning programmes is the rate at which contraceptive users discontinue using their methods. In the “Calendar” section of the Woman’s Questionnaire, all segments of contraceptive use from 3-59 months prior to the survey are recorded. The month of interview and the two months prior to the survey are ignored in order to avoid the bias that may be introduced by unrecognised pregnancies. One-year contraceptive discontinuation rates based on the calendar data are presented in Table 7.7.

Overall, 29 percent of the episodes of contraceptive use were discontinued within 12 months of starting its use for any reason. Seven percent of episodes of discontinuation occurred because the women experienced side effects or had health concerns, 5 percent because the woman wanted to become pregnant, and 4 percent because they wanted a more effective method. Discontinuation rates vary by method and are highest for pill users (33 percent). Seven percent of women switched to another method. Women who used male condom or withdrawal were most likely to switch to another method (13 percent and 12 percent, respectively).

**Table 7.7 Twelve-month contraceptive discontinuation rates**

Among women age 15-49 who started an episode of contraceptive use within the five years preceding the survey, the percentage of episodes discontinued within 12 months, by reason for discontinuation and specific method, country, 2011

Method	Reason for discontinuation								Switched to another method <sup>5</sup>	Number of episodes of use <sup>6</sup>
	Method failure	Desire to become pregnant	Other fertility related reasons <sup>2</sup>	Side effects/health concerns	Wanted more effective method	Other method related reasons <sup>3</sup>	Other reasons	Any reason <sup>4</sup>		
Pill	3.9	7.5	1.2	10.2	2.8	2.6	4.3	32.6	7.3	2,865
IUD	(3.4)	(0.0)	(0.0)	(6.5)	(1.2)	(0.0)	(0.7)	(11.8)	(4.8)	175
Injectables	1.8	5.9	1.4	10.9	0.8	2.0	4.0	26.7	4.1	3,666
Implants	0.1	0.4	0.0	3.3	0.0	0.0	0.5	4.2	1.0	760
Male condom	1.4	4.8	2.6	0.2	8.8	1.6	10.4	29.8	12.6	896
Withdrawal	7.8	5.6	0.7	0.0	9.2	0.6	5.8	29.8	12.1	797
All methods <sup>1</sup>	3.1	5.4	1.2	7.3	3.7	1.8	6.1	28.6	7.3	9,910

Note: Figures are based on life table calculations using information on episodes of use that began 3-62 months preceding the survey. Figures in parentheses are based on 125-249 exposed women.

<sup>1</sup> Includes female sterilisation, male sterilisation, female condom, LAM, rhythm method, and Standard Days Methods

<sup>2</sup> Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation

<sup>3</sup> Includes lack of access/too far, costs too much, and inconvenient to use

<sup>4</sup> Reasons for discontinuation are mutually exclusive and add to the total given in this column.

<sup>5</sup> The episodes of use included in this column are a subset of the discontinued episodes included in the discontinuation rate. A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within two months of discontinuation.

<sup>6</sup> Number of episodes of use includes both episodes of use that were discontinued during the period of observation and episodes of use that were not discontinued during the period of observation.

## 7.9 REASONS FOR DISCONTINUATION OF CONTRACEPTIVE USE

Another perspective on discontinuation of modern contraceptive use is provided in Table 7.8, which shows the percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by reasons for discontinuation, according to method. The most common reason for discontinuing a method is wanting to become pregnant (33 percent), followed by side effects or health concerns (22 percent), became pregnant while using (12 percent), and wanting a more effective method (9 percent). It is worth noting that the reason most often cited for discontinuing use of the pill (37 percent), injectables (37 percent), implants (27 percent), male condom (26 percent) and withdrawal (31 percent) was wanting to become pregnant. Side effects and health concerns were the main reasons cited for discontinuing use of implants (62 percent).

**Table 7.8 Reasons for discontinuation**

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason stated for discontinuation, according to specific method, Zambia 2013-14

Reason	Pill	IUD	Injection	Implants	Male condom	Withdrawal	Other <sup>1</sup>	All methods
Became pregnant while using	13.1	(12.8)	6.2	2.8	9.7	29.0	17.5	12.1
Wanted to become pregnant	37.0	(13.9)	36.8	26.7	26.2	30.8	12.1	32.9
Husband disapproved	2.9	(0.0)	3.2	0.6	8.0	4.6	0.9	3.3
Wanted a more effective method	4.9	(4.3)	3.0	1.2	22.9	21.7	25.7	9.0
Side effects/health concerns	22.4	(61.2)	31.6	62.0	2.2	0.0	1.3	21.6
Lack of access/too far	3.3	(0.0)	4.5	0.2	2.4	0.0	0.1	2.9
Cost too much	0.2	(0.0)	0.2	0.0	0.3	0.0	0.0	0.1
Inconvenient to use	3.0	(0.0)	0.8	0.0	2.9	1.6	1.4	1.9
Up to God/fatalistic	0.1	(0.0)	0.1	0.0	0.0	0.0	0.6	0.1
Difficult to get pregnant/ menopausal	0.2	(0.0)	0.2	0.2	0.0	0.3	0.0	0.2
Infrequent sex/husband away	2.5	(1.7)	3.0	0.8	6.2	0.6	0.7	2.6
Marital dissolution/separation	1.1	(0.0)	1.5	0.9	0.2	0.9	0.6	1.1
Other	2.2	(1.7)	2.2	1.8	1.5	0.7	0.0	1.8
Don't know	0.1	(0.0)	0.1	0.0	0.3	0.0	0.8	0.2
Missing	7.0	(4.4)	6.5	2.9	17.2	9.7	38.1	10.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	2,463	58	2,245	229	562	659	546	6,763

Note: Figures in parentheses are based on 25-49 women.

<sup>1</sup> Includes female sterilisation, male sterilisation, female condom, LAM, rhythm method, and Standard Days Method

## 7.10 KNOWLEDGE OF FERTILE PERIOD

An elementary knowledge of reproductive physiology provides a useful background for the successful practice of the rhythm method. Fifty percent of married women have heard of the rhythm method, but less than 1 percent are currently using the method as shown in Tables 7.1 and 7.2. Table 7.9 shows women's knowledge about the time during the menstrual cycle when a woman is most likely to get pregnant.

Overall, only 22 percent of all women correctly reported the most fertile time as being halfway between two

menstrual periods. Among users of the rhythm method, 31 percent were able to correctly identify a woman's monthly cycle; 38 percent incorrectly reported that a woman's most fertile period is directly after menstruation has ended. Results on knowledge of the fertile period among Zambian women show that 14 percent of all women did not know about the fertile period. These results indicate a continued need for education about women's physiology of reproduction and effective use of contraceptive methods.

Table 7.9 Knowledge of fertile period

Percent distribution of women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Zambia 2013-14

Perceived fertile period	Users of rhythm method	Nonusers of rhythm method	All women
Just before her menstrual period begins	25.2	21.0	21.0
During her menstrual period	2.0	2.2	2.2
Right after her menstrual period has ended	38.1	34.3	34.3
Halfway between two menstrual periods	30.7	21.9	22.0
Other	0.0	0.1	0.1
No specific time	0.0	6.1	6.0
Don't know	4.1	14.3	14.3
Total	100.0	100.0	100.0
Number of women	66	16,345	16,411

Note: Totals may not sum up to 100 percent because women with missing information have been deleted

## 7.11 NEED AND DEMAND FOR FAMILY PLANNING SERVICES

Data in this section provide information on the extent of need and potential demand for family planning services in Zambia. Currently married fecund women who want to postpone their next birth for two or more years or who want to stop childbearing altogether but are not using a contraceptive method are considered to have an unmet need for family planning. Pregnant women are considered to have an unmet need for spacing or limiting if their pregnancy was mistimed or unwanted. Similarly, amenorrhoeic women who are not using family planning and whose last birth was mistimed are considered to have an unmet need for spacing, and those whose last child was unwanted have an unmet need for limiting. Women who are currently using a family planning method are said to have a met need for family planning. Total demand for family planning services comprises those who fall in the met need and unmet need categories.

Table 7.10 shows need and demand for family planning among currently married women by background characteristics. Twenty-one percent of currently married women have an unmet need for family planning, with 14 percent having an unmet need for spacing and 7 percent having an unmet need for limiting. If all currently married women who say they want to space or limit their children were to use a family planning method, the contraceptive prevalence rate would increase to 70 percent. Currently, only 49 percent of the family planning needs of married women are being met.

Unmet need for family planning is highest among women age 15-19 (25 percent). Unmet need is higher in rural (24 percent) than in urban areas (17 percent). By province, unmet need is highest in Luapula (29 percent) and lowest in Lusaka (16 percent). Unmet need is highest among women with no education (24 percent) and lowest among women with more than secondary education (10 percent). Unmet need is highest among those in the second wealth quintile (26 percent) and lowest in the highest wealth quintile (13 percent).

Table 7.10 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Zambia 2013-14

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning <sup>1</sup>			Percentage of demand satisfied <sup>2</sup>	Percentage of demand satisfied by modern methods <sup>3</sup>	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
<b>Age</b>												
15-19	24.3	0.8	25.1	35.8	1.7	37.5	60.1	2.5	62.6	59.9	57.2	613
20-24	20.8	1.2	22.0	43.2	3.6	46.8	64.0	4.8	68.8	68.0	64.1	1,684
25-29	16.7	2.2	18.9	43.0	9.6	52.5	59.7	11.8	71.5	73.5	67.9	2,181
30-34	15.4	5.4	20.8	32.6	19.9	52.5	48.0	25.3	73.3	71.6	66.4	1,976
35-39	9.3	13.9	23.2	17.1	34.9	52.0	26.5	48.7	75.2	69.2	62.7	1,572
40-44	4.8	18.2	23.0	7.1	45.0	52.0	11.9	63.1	75.0	69.3	58.9	1,102
45-49	0.9	15.2	16.2	1.8	31.0	32.9	2.8	46.3	49.0	67.0	56.2	730
<b>Residence</b>												
Urban	10.5	6.1	16.7	33.4	23.2	56.6	43.9	29.4	73.3	77.2	72.8	3,953
Rural	16.2	7.9	24.1	26.6	17.4	43.9	42.8	25.3	68.1	64.5	57.3	5,905
<b>Province</b>												
Central	15.2	10.5	25.7	26.7	16.1	42.8	42.0	26.5	68.5	62.5	60.3	895
Copperbelt	11.5	8.6	20.1	30.9	22.6	53.5	42.4	31.2	73.6	72.7	69.0	1,477
Eastern	12.9	4.1	17.0	32.2	21.3	53.5	45.1	25.4	70.5	75.9	70.7	1,304
Luapula	20.3	8.2	28.5	18.4	16.1	34.5	38.6	24.3	62.9	54.8	52.5	740
Lusaka	10.9	5.2	16.1	34.6	23.2	57.8	45.5	28.4	73.9	78.2	74.0	1,780
Muchinga	14.3	9.3	23.7	28.2	16.8	45.0	42.6	26.1	68.7	65.6	49.9	575
Northern	16.5	7.8	24.3	26.1	22.1	48.2	42.6	29.9	72.5	66.5	44.8	820
North Western	17.0	6.1	23.1	26.1	14.0	40.1	43.1	20.1	63.2	63.4	58.0	407
Southern	13.9	7.3	21.2	32.2	19.0	51.2	46.1	26.3	72.4	70.7	66.6	1,351
Western	15.9	8.4	24.2	20.7	12.5	33.1	36.5	20.8	57.4	57.7	55.3	511
<b>Education</b>												
No education	14.8	9.1	23.9	19.6	17.9	37.4	34.4	27.0	61.4	61.0	53.1	1,081
Primary	14.9	8.2	23.1	26.7	19.9	46.6	41.6	28.1	69.7	66.9	60.0	5,422
Secondary	13.1	5.1	18.2	36.6	19.0	55.6	49.7	24.1	73.8	75.3	71.5	2,905
More than secondary	6.3	3.8	10.1	36.8	26.6	63.4	43.0	30.4	73.4	86.3	79.1	451
<b>Wealth quintile</b>												
Lowest	18.0	7.2	25.2	25.2	13.4	38.6	43.2	20.6	63.8	60.5	49.1	1,888
Second	17.8	7.8	25.7	27.9	15.5	43.4	45.7	23.3	69.0	62.8	57.0	2,003
Middle	14.7	8.6	23.3	26.9	21.6	48.5	41.6	30.2	71.8	67.5	62.4	1,953
Fourth	12.2	6.9	19.1	30.1	22.5	52.5	42.3	29.3	71.6	73.3	69.2	2,063
Highest	7.1	5.5	12.6	36.3	25.4	61.7	43.4	30.9	74.3	83.1	78.4	1,952
<b>Total</b>	<b>13.9</b>	<b>7.2</b>	<b>21.1</b>	<b>29.3</b>	<b>19.7</b>	<b>49.0</b>	<b>43.2</b>	<b>26.9</b>	<b>70.2</b>	<b>69.9</b>	<b>63.8</b>	<b>9,859</b>

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012.

<sup>1</sup> Total demand is the sum of unmet need and met need.

<sup>2</sup> Percentage of demand satisfied is met need divided by total demand.

<sup>3</sup> Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, Lactational Amenorrhoea Method (LAM), and Standard Days Method.

The total demand for family planning is highest among women age 35-44 (75 percent) and lowest among those age 45-49 (49 percent). There are small variations in demand for family planning by urban-rural residence. Western had the lowest demand for family planning (57 percent). Demand for family planning is lowest among women with no education (61 percent) and highest among women with secondary education (74 percent). Similarly, the demand for family planning was highest among currently married women (74 percent) in the highest wealth quintile and lowest among those in the lowest wealth quintile (64 percent).

The percentage of women whose demand for modern methods is satisfied is highest among women age 25-29 (68 percent); urban women (73 percent); those in Lusaka (74 percent); women with more than secondary education (79 percent) and those in the highest wealth quintile (78 percent).

## 7.12 FUTURE USE OF CONTRACEPTION

An important indicator of the changing demand for family planning is the extent to which nonusers plan to use contraceptive methods in the future. In the 2013-14 ZDHS, women age 15-49 who were not using any contraceptive method at the time of the survey were asked about their intention to use family planning in the future. Table 7.11 shows that among currently married women not using contraception, 67 percent intend to use a family planning method in the future, 5 percent are unsure of their intentions, and 27 percent have no intention of using any method in the future.

Table 7.11 Future use of contraception						
Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Zambia 2013-14						
Intention to use in the future	Number of living children <sup>1</sup>					Total
	0	1	2	3	4+	
Intends to use	53.1	71.4	71.8	70.9	65.1	67.4
Unsure	10.0	7.2	4.7	4.1	4.1	5.0
Does not intend to use	36.3	21.2	23.0	23.9	29.5	26.7
Missing	0.6	0.2	0.5	1.0	1.2	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	271	742	846	753	2,414	5,026

<sup>1</sup> Includes current pregnancy

The proportion of women intending to use family planning rises from 53 percent among women with no children, peaks at 72 percent among nonusers with two children, declines to 71 percent among those with three children, and further declines to 65 percent among those who have four or more children.

## 7.13 REASONS FOR NOT INTENDING TO USE CONTRACEPTION IN THE FUTURE

Table 7.12 shows the main reasons why currently married women who are not using a contraceptive method do not intend to use one in the future. The results show that 47 percent of women do not intend to use a method in the future for fertility-related reasons. Of these women, 18 percent are subfecund or infecund, 14 percent are menopausal or have had a hysterectomy, and 10 percent want more children. Of the 39 percent of women who do not intend to use a method for method-related reasons, 18 percent fear side effects and 14 percent have health concerns. Eight percent are not willing to use a method because of the respondent's or other people's opposition to the use of contraception.

Table 7.12 Reason for not intending to use contraception in the future

Percent distribution of currently married women age 15-49 who are not using contraception and who do not intend to use in the future by main reason for not intending to use, Zambia 2013-14

Reason	Percentage of currently married women age 15-49 who are not using a method of contraception
<b>Fertility-related reasons</b>	47.3
Infrequent sex	4.8
Menopausal, hysterectomy	14.4
Subfecund, infecund	17.8
Wants more children	10.3
<b>Opposition to use</b>	7.6
Respondent opposed	2.3
Husband opposed	(3.4)
Others opposed	0.2
Religious prohibition	1.7
<b>Lack of knowledge</b>	1.3
Knows no method	0.8
Knows no source	0.5
<b>Method-related reasons</b>	38.6
Health concerns	13.6
Fears side effects	18.2
Lack of access	0.6
Inconvenient to use	1.3
Interfere with body's normal process	4.9
Other	3.3
Don't know	1.8
Total	100.0
Number of women	1,343

Note: Totals may not sum up to 100 percent because women with missing information have been deleted. Figures in parentheses are based on 25-49 women.

## 7.14 PREFERRED METHOD FOR FUTURE USE

Demand for specific methods can be assessed by asking nonusers which method they intend to use in the future. Table 7.13 presents information on method preferences of married women who are not currently using contraception but who say they intend to use in the future.

Currently married women most commonly prefer to use injectables in the future (47 percent), followed by the pill (22 percent), and implants (12 percent).

The order of preferred methods for future use among currently married women has changed over the nearly two decades between the first ZDHS conducted in 1992 and the current ZDHS 2013-14 (Figure 7.2). The most preferred method in 1992 was the pill, but its importance as a future method has declined remarkably from 59 percent in 1992 to 22 percent in the most recent survey. Conversely, the importance of injectables has risen from 5 percent to 47 percent over the same period. A similar trend is seen in the use of implants as a future method, with its status as a preferred method increasing from less than 1 percent in 1996 to 12 percent in 2013-14.

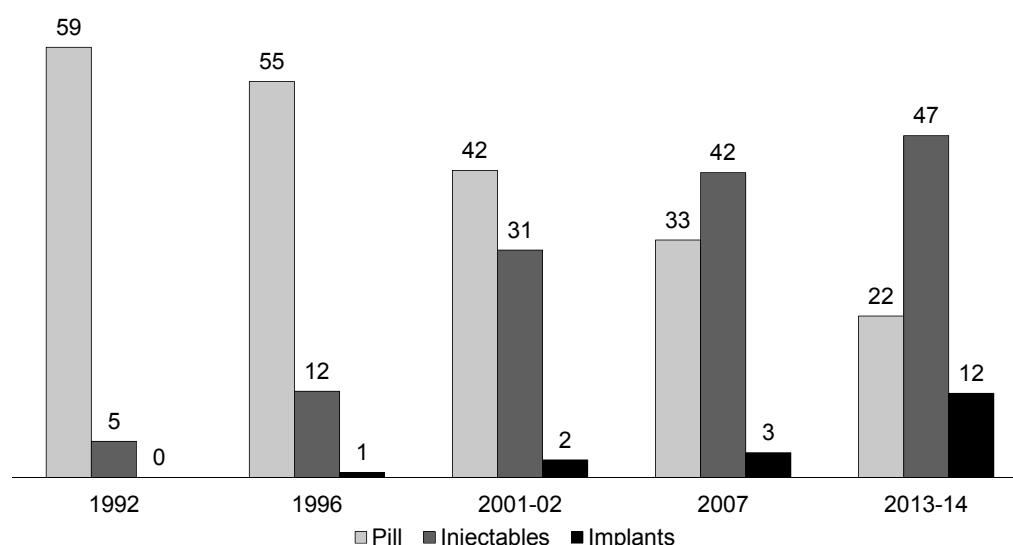
**Table 7.13 Preferred method of contraception for future use**

Percent distribution of currently married women age 15-49 who are not using a contraceptive method but who intend to use in the future, by preferred method, Zambia 2013-14

Method	Percentage of currently married women age 15-49 who are not using a contraceptive method
Female sterilisation	5.7
Male sterilisation	0.0
Pill	22.3
IUD	2.2
Injectables	47.2
Implants	11.6
Male condom	3.0
Female condom	0.2
Lactational Amenorrhoea Method	0.1
Standard Days Method	0.1
Rhythm	0.1
Withdrawal	0.9
Other	0.9
Unsure	5.6
Total	100.0
Number of women	3,387

**Figure 7.2 Trends in the preferred method for future use, ZDHS 1992-2014**

Percent of currently married women age 15-49



## 7.15 EXPOSURE TO FAMILY PLANNING MESSAGES

The media play an important role in communicating messages about family planning. Data on level of exposure to such media as radio, television, and printed materials are important for programme managers and planners to effectively target population subgroups for information, education, and communication campaigns. To assess the extent to which the media serve as a source of family planning messages, respondents were asked whether they had heard or seen a message about family planning on the radio or television, in a newspaper or magazine, or in other media sources. The results are shown in Table 7.14.

Table 7.14 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on radio, on television, or in a newspaper or magazine in the past few months, according to background characteristics, Zambia 2013-14

Background characteristic	Women					Men				
	Radio	Television	News- paper/ magazine	None of these three media sources	Number of women	Radio	Television	News- paper/ magazine	None of these three media sources	Number of men
<b>Age</b>										
15-19	22.4	16.8	8.6	70.8	3,625	22.4	16.1	9.5	68.2	3,337
20-24	31.1	23.1	10.7	62.3	3,006	36.0	25.7	18.5	54.7	2,335
25-29	33.9	22.3	9.9	60.2	2,813	42.5	26.2	18.7	48.2	1,944
30-34	34.8	22.8	9.1	60.2	2,475	45.4	28.7	21.7	45.5	1,927
35-39	32.1	22.1	9.3	62.3	2,009	50.3	28.5	21.5	42.8	1,664
40-44	34.2	21.0	9.2	61.1	1,464	48.1	26.4	18.9	44.8	1,384
45-49	34.2	18.8	7.8	62.1	1,018	50.7	27.4	21.8	43.6	970
<b>Residence</b>										
Urban	37.6	37.9	15.8	51.6	7,585	42.8	41.7	26.4	42.5	6,326
Rural	25.0	6.4	3.8	73.5	8,826	35.6	9.2	9.6	61.3	7,235
<b>Province</b>										
Central	33.3	15.7	9.7	61.8	1,467	30.5	14.1	12.2	62.8	1,153
Copperbelt	33.8	35.0	14.7	55.0	2,836	49.4	45.4	30.4	35.7	2,395
Eastern	36.8	11.2	7.0	61.8	1,930	41.2	11.7	12.3	54.9	1,710
Luapula	22.7	7.9	4.3	75.6	1,143	37.2	11.2	8.4	59.0	855
Lusaka	36.4	41.2	16.5	52.8	3,266	34.7	38.7	21.6	50.8	2,844
Muchinga	19.6	7.6	4.8	78.0	868	43.2	13.8	12.0	53.4	680
Northern	27.4	7.8	3.3	71.2	1,200	27.8	8.5	5.3	70.0	929
North Western	30.4	12.2	5.4	66.9	713	43.6	13.7	9.8	51.0	557
Southern	24.6	11.1	4.4	70.7	2,007	41.0	20.1	19.5	52.7	1,771
Western	24.3	9.2	4.8	73.8	980	32.9	8.0	9.8	63.5	668
<b>Education</b>										
No education	19.7	5.0	0.9	79.3	1,375	26.9	2.5	0.8	72.0	500
Primary	24.4	10.7	2.7	72.7	7,685	32.2	9.8	5.5	64.4	5,365
Secondary	37.6	31.3	14.7	53.6	6,521	42.0	31.1	22.6	46.6	6,638
More than secondary	55.3	60.7	42.6	27.8	830	59.9	66.3	53.1	20.2	1,058
<b>Wealth quintile</b>										
Lowest	13.6	1.2	0.9	86.1	2,859	25.9	2.9	4.6	72.1	2,038
Second	24.9	2.8	2.2	74.4	2,861	35.8	4.7	6.8	62.5	2,448
Middle	30.6	7.1	4.1	67.7	3,077	40.8	11.2	10.9	56.5	2,547
Fourth	33.8	27.8	10.5	57.8	3,510	41.8	31.5	20.9	48.4	3,124
Highest	44.4	51.9	23.2	41.4	4,103	45.1	54.7	34.3	34.4	3,405
Total 15-49	30.8	20.9	9.3	63.4	16,411	39.0	24.4	17.4	52.5	13,561
50-59	na	na	na	Na	na	52.6	27.7	23.3	40.6	1,212
Total 15-59	na	na	na	Na	na	40.1	24.6	17.9	51.5	14,773

na = Not applicable

In Zambia, the most common media sources are the radio and television. Thirty-one percent of women and 39 percent of men age 15-49 heard a family planning message on the radio; and 21 percent of women and 24 percent of men saw a message on television. Nine percent of women and 17 percent of men read about family planning in a newspaper or magazine. Overall, 63 percent of women and 53 percent of men were not exposed to family planning messages in any of the specified media sources.

Not surprisingly, women and men residing in urban areas are much more likely to have been exposed to family planning messages on any media than their rural counterparts. This is especially true for messages on television and in the print media. By province, women in Eastern (37 percent) are most likely to be exposed to family planning messages on the radio, whereas women in Lusaka (41 percent) are most exposed to family planning messages through the television. The print media is also the most important source for women in Lusaka (17 percent). Exposure to all three media sources on family planning is highest in Copperbelt where one in two men are exposed to family planning messages on the radio or television (49 and 45 percent, respectively), and one in three men (30 percent) read about it on the newspaper or magazine. Women in Muchinga (78 percent) and men in Northern (70 percent) are least likely to be exposed to family planning messages from any media source. Exposure to family planning messages either through radio, television, newspaper, or magazine increases with the level of education and wealth among both men and women.



In the 2013-14 ZDHS, women were asked if they had listened to specific radio programmes or watched specific programmes on television within the past six months. Table 7.15 shows the percentage of women age 15-49 who heard or saw specific radio or television programmes, by background characteristics. “Your Health Matters” a radio and television programme is the most popular. Overall, 26 percent of women had listened to or watched “Your Health Matters” on the radio or TV.

**Table 7.15 Exposure to specific radio and television programmes**

Percentage of women age 15-49 who heard or saw specific radio or television programmes in the past six months according to background characteristics, Zambia 2013-14

Background characteristic	Radio		TV		Number of women
	Your Health Matters	Other programmes	Your Health Matters	Other programmes	
<b>Age</b>					
15-19	21.3	4.2	25.1	3.5	3,625
20-24	27.4	6.0	28.2	4.9	3,006
25-29	27.3	5.6	27.5	4.3	2,813
30-34	28.5	6.5	27.3	4.2	2,475
35-39	25.5	5.9	25.9	4.3	2,009
40-44	25.8	6.7	22.2	4.2	1,464
45-49	27.0	6.4	22.7	4.2	1,018
<b>Residence</b>					
Urban	38.7	6.6	48.8	7.5	7,585
Rural	14.7	4.9	6.6	1.3	8,826
<b>Province</b>					
Central	29.3	14.1	18.9	6.1	1,467
Copperbelt	36.2	5.9	49.6	7.4	2,836
Eastern	19.9	11.8	10.2	3.3	1,930
Luapula	16.1	3.3	8.2	0.9	1,143
Lusaka	38.9	6.0	49.7	7.7	3,266
Muchinga	11.6	3.6	7.5	1.3	868
Northern	12.1	1.0	9.3	1.0	1,200
North Western	19.8	2.2	15.9	1.9	713
Southern	20.6	0.9	14.9	1.0	2,007
Western	14.5	2.3	10.0	1.0	980
<b>Education</b>					
No education	9.0	3.5	4.5	0.5	1,375
Primary	15.8	3.8	11.5	1.6	7,685
Secondary	36.8	7.1	41.1	6.7	6,521
More than secondary	60.1	15.8	79.3	14.9	830
<b>Wealth quintile</b>					
Lowest	4.9	2.3	1.2	0.2	2,859
Second	11.8	4.5	2.4	0.3	2,861
Middle	20.4	5.9	7.3	1.6	3,077
Fourth	31.8	5.8	32.9	4.3	3,510
Highest	49.1	8.6	68.3	11.6	4,103
<b>Total</b>	<b>25.8</b>	<b>5.7</b>	<b>26.1</b>	<b>4.2</b>	<b>16,411</b>

## 7.16 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

When family planning providers visit women in the field or when women visit health facilities, family planning field workers and health providers are expected to discuss reproductive needs and contraceptive options available, and to counsel them to adopt a method of family planning. To gain insight into the level of contact between nonusers and health workers, women who were not using contraception were asked whether a fieldworker had visited them during the 12 months preceding the survey and discussed family planning. In addition, women were asked whether they had visited a health facility in the 12 months preceding the survey for any reason and whether anyone at the facility had discussed family planning with them during the visit.

Table 7.16 shows that fieldworkers discussed family planning with only 8 percent of nonusers during the 12 months preceding the survey. At the same time, only 19 percent of nonusers visited a health facility and discussed family planning at the facility; 31 percent who visited a facility did not discuss family planning. This low level of contact of nonusers with family planning providers varies little by background characteristics. Overall, 76 percent of women who could have been exposed to family planning information

did not discuss family planning during a field visit or at a health facility, indicating numerous missed opportunities to inform and educate women about family planning.

**Table 7.16 Contact of nonusers with family planning providers**

Among women age 15-49 who are not using contraception, the percentage who during the past 12 months were visited by a fieldworker who discussed family planning, the percentage who visited a health facility and discussed family planning, the percentage who visited a health facility but did not discuss family planning, and the percentage who did not discuss family planning either with a fieldworker or at a health facility, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
<b>Age</b>					
15-19	5.5	7.5	25.9	88.3	3,242
20-24	9.0	22.3	32.3	73.0	1,967
25-29	10.3	29.2	33.2	66.3	1,492
30-34	9.6	28.4	34.4	66.8	1,287
35-39	10.1	24.5	34.1	69.7	1,085
40-44	9.4	17.9	35.1	76.4	818
45-49	7.9	13.7	36.8	80.8	753
<b>Residence</b>					
Urban	6.7	13.9	30.7	81.2	4,813
Rural	9.5	22.7	32.0	72.5	5,830
<b>Province</b>					
Central	6.6	18.0	22.2	78.4	1,011
Copperbelt	6.0	12.6	38.7	83.0	1,871
Eastern	14.0	25.6	32.9	67.6	1,139
Luapula	7.4	26.8	34.2	69.9	840
Lusaka	6.9	13.6	21.9	81.2	2,022
Muchinga	11.2	19.5	31.7	74.0	590
Northern	8.2	21.9	35.8	74.5	774
North Western	7.8	17.1	37.4	79.3	500
Southern	8.7	21.0	36.9	74.2	1,195
Western	9.3	23.9	28.7	70.7	702
<b>Education</b>					
No education	8.0	23.8	29.3	71.6	936
Primary	9.4	21.9	31.6	73.0	4,833
Secondary	7.1	14.9	30.8	80.7	4,405
More than secondary	7.8	12.5	40.4	81.7	469
<b>Wealth quintile</b>					
Lowest	9.2	21.9	32.2	73.0	2,006
Second	10.5	27.5	31.8	68.1	1,875
Middle	9.3	20.7	33.7	74.1	1,900
Fourth	7.8	16.2	28.0	78.5	2,213
Highest	5.5	11.0	31.7	84.9	2,649
<b>Total</b>	<b>8.2</b>	<b>18.8</b>	<b>31.4</b>	<b>76.4</b>	<b>10,643</b>

## 7.17 HUSBAND/PARTNER'S KNOWLEDGE OF WOMEN'S CONTRACEPTIVE USE

The 2013-14 ZDHS asked currently married women whether their husband or partner knew that they were using a method of family planning. The question was not asked of women who were using male sterilisation, the male condom, or withdrawal because these are male methods, and it is obvious that husbands would be aware of their use. Table 7.17 shows that almost all currently married women age 15-49 who were using a method other than the three aforementioned male methods reported that their husband or partner knows about their contraceptive use (93 percent). Five percent reported that their husband or partner did not know. Using a method without the husband's/partner's knowledge was highest among women age 35-39 (8 percent), women living in Western (10 percent), and women in the lowest wealth quintile (7 percent).

**Table 7.17 Husband/partner's knowledge of women's use of contraception**

Percent distribution of currently married women age 15-49 who are using a method of contraception by whether they report that their husbands/partners know about their use, according to background characteristics, Zambia 2013-14

Background characteristic	Husband/partner's knowledge of wife's use of contraception				Total	Number of women <sup>1</sup>
	Knows	Does not know	Don't know	Missing		
<b>Age</b>						
15-19	94.1	2.2	0.0	3.7	100.0	192
20-24	95.4	3.8	0.0	0.9	100.0	702
25-29	94.2	3.9	0.1	1.7	100.0	994
30-34	93.2	5.9	0.0	0.9	100.0	892
35-39	90.7	8.0	0.0	1.4	100.0	679
40-44	88.5	7.8	0.5	3.1	100.0	465
45-49	92.9	5.5	0.0	1.6	100.0	197
<b>Residence</b>						
Urban	92.7	5.4	0.2	1.8	100.0	1,938
Rural	93.1	5.5	0.0	1.4	100.0	2,183
<b>Province</b>						
Central	95.2	3.1	0.2	1.5	100.0	362
Copperbelt	90.2	7.4	0.3	2.0	100.0	683
Eastern	95.1	3.5	0.0	1.4	100.0	585
Luapula	88.7	8.7	0.2	2.3	100.0	247
Lusaka	93.7	4.4	0.0	1.9	100.0	901
Muchinga	92.2	6.6	0.0	1.2	100.0	181
Northern	91.2	8.3	0.0	0.5	100.0	256
North Western	96.2	2.8	0.0	1.0	100.0	146
Southern	93.9	4.6	0.0	1.5	100.0	613
Western	88.7	10.4	0.0	0.9	100.0	148
<b>Education</b>						
No education	91.0	5.5	0.0	3.5	100.0	338
Primary	93.2	5.4	0.0	1.3	100.0	2,133
Secondary	92.2	6.1	0.2	1.6	100.0	1,436
More than secondary	97.4	1.4	0.0	1.3	100.0	214
<b>Wealth quintile</b>						
Lowest	91.7	6.5	0.1	1.7	100.0	549
Second	92.6	5.8	0.0	1.5	100.0	752
Middle	93.7	5.0	0.0	1.3	100.0	830
Fourth	91.9	5.9	0.3	1.9	100.0	967
Highest	94.1	4.4	0.0	1.5	100.0	1,023
<b>Total</b>	<b>92.9</b>	<b>5.4</b>	<b>0.1</b>	<b>1.6</b>	<b>100.0</b>	<b>4,121</b>

<sup>1</sup> Includes women who report use of male sterilisation, male condoms, or withdrawal



## INFANT AND CHILD MORTALITY

### Key Findings

- Infant and under-5 mortality rates in the past five years are 45 and 75 deaths per 1,000 live births, respectively. At these mortality levels, 1 in every 22 Zambian children dies before reaching age 1, and one in every 13 does not survive to his or her fifth birthday.
- Infant mortality and under-5 mortality have declined by 58 percent and 61 percent, respectively, over nearly two decades.
- Childhood mortality is relatively high in Eastern and Luapula
- The neonatal mortality rate for the past five years is 24 deaths per 1,000 live births, which is slightly higher than the postneonatal rate of 20 deaths per 1,000 live births.
- The perinatal mortality rate is 31 per 1,000 pregnancies.

This chapter describes levels, trends, and differentials in early childhood mortality and high-risk fertility behaviour of women in Zambia. Infant and child mortality rates are important indicators of a country's socioeconomic development and quality of life, as well as its health status. Measures of childhood mortality also contribute to a better understanding of the progress of population and health programmes and policies. Analyses of mortality measures are useful in identifying promising directions for health and nutrition programmes and improving child survival efforts in Zambia. Disaggregation of mortality measures by socioeconomic and demographic characteristics helps to identify differentials in population subgroups and target high-risk groups for effective programmes. Measures of childhood mortality are also useful for population projections.

Childhood mortality rates are now being used for monitoring a country's progress toward Millennium Development Goal 4, which aims for a two-thirds reduction in child mortality by the year 2015 (United Nations, 2000). Results from the 2013-14 ZDHS can be used to monitor the impact of major national neonatal and child health interventions, strategies, and policies.

Neonatal, postneonatal, infant, child, and under-5 year mortality rates are calculated from birth and death data derived from vital registration or from household surveys. The reliability of mortality estimates depends on the accuracy and completeness of reporting and recording of births and deaths. Underreporting and misclassification are, however, common amongst deaths occurring early in life.

The 2013-14 ZDHS provides various measures of childhood mortality. The mortality rates presented in this chapter are computed from information gathered in the birth history section of the Woman's Questionnaire. Women age 15-49 were asked whether they had ever given birth, and if they had, were asked to report the number of sons and daughters living with them, the number living elsewhere, and the number who had died. A detailed history of all births was gathered in chronological order starting with the first. For each birth, information was collected on the sex, whether a pregnancy was single or multiple, date of birth (month and year), survival status, age of the child on the date of interview if alive, and, if not alive, age at death of each child born alive. Because primary causes of childhood mortality change as children age—from biological factors to environmental factors—childhood mortality rates are expressed by age categories and are customarily defined as follows:

- **Neonatal mortality (NN):** the probability of dying within the first month of life
- **Postneonatal mortality (PNN):** the difference between infant and neonatal mortality
- **Infant mortality ( ${}_1q_0$ ):** the probability of dying between birth and the first birthday

- **Child mortality ( $4q_1$ ):** the probability of dying between exact ages 1 and 5
- **Under-5 mortality ( $5q_0$ ):** the probability of dying between birth and the fifth birthday

Childhood mortality rates are expressed as deaths per 1,000 live births, except for child mortality, which is expressed as deaths per 1,000 children surviving to age 1.

Information on stillbirths and deaths occurring within seven days of birth is used to estimate perinatal mortality, defined as the number of stillbirths and early neonatal deaths per 1,000 stillbirths and live births, respectively.

## 8.1 ASSESSMENT OF DATA QUALITY

The accuracy of mortality estimates depends on the sampling variability of the estimates and on nonsampling errors. Sampling variability and sampling errors are discussed in detail in Appendix B. Nonsampling errors depend on the extent to which the date of birth and age at death are accurately reported and recorded and the completeness with which child deaths are reported. Omission of births and deaths affects mortality estimates, and displacement of birth and death dates and misreporting of age at death may distort the age pattern of mortality. Typically, the most serious source of nonsampling errors in retrospective surveys is the underreporting of births and deaths of children who were dead at the time of the survey. In most cases, and in many traditions, mothers and relatives alike are reluctant to discuss the dead, let alone dead children. Underreporting of births and deaths is generally more severe the farther back in time an event has occurred. The possible occurrence of these data problems in the 2013-14 ZDHS are discussed with reference to the data quality tables in Appendix C.

An unusual pattern in the distribution of births by calendar years is an indication of omission of children or age displacement. In the 2013-14 ZDHS, the cutoff date for asking health questions was January 2008 or later. Table C.4 shows that the overall percentage of births for which a month and year of birth was reported is almost 100 percent for both children who have died and children who are alive.

Table C.4 shows some age displacement across this boundary for both living and dead children. The distribution of living children and the total number of children does not show a deficit in 2009 in relation to 2008 but does show an excess in 2007, as denoted by the calendar year ratios. The deficit in 2008 can be attributed to the transference of births by interviewers out of the period for which health data were collected. Transference is proportionately higher for dead children than living children, and this displacement may affect mortality rates. The transference of children, especially deceased children, out of the five-year period preceding the survey is likely to underestimate the true level of childhood mortality for that period.

Underreporting of deaths is usually assumed to be higher for deaths that occur very early in infancy. Omission of deaths or misclassification of deaths as stillbirths may also be more common among women who have had several children or in cases where a death took place in the distant past. To assess the impact of omission on measures of child mortality, two indicators are used: the percentage of deaths that occurred in fewer than seven days to the number that occurred in less than one month; and, the percentage of neonatal deaths to infant deaths. It is hypothesized that omission will be more prevalent among those who died immediately after birth than those who lived longer and that it will be more serious for events that took place in the distant past than for those that occurred in the more recent past. Table C.5 shows data on age at death for early infant deaths. Selective underreporting of early neonatal deaths would result in an abnormally low ratio of deaths within the first seven days of life to all neonatal deaths. Early infant deaths were not severely underreported in the 2013-14 ZDHS survey, as suggested by the high ratio of deaths in the first seven days of life to all neonatal deaths (77 percent in the five years preceding the survey).

Heaping of the age at death on certain digits is another problem that is inherent in most retrospective surveys. Misreporting of age at death biases age pattern estimates of mortality if the net result

is the transference of deaths between age segments for which the rates are calculated; for example, child mortality may be overestimated relative to infant mortality if children who died in the first year of life are reported as having died at age 1 or older. In an effort to minimise misreporting of age at death, interviewers were instructed to record deaths under 1 month in days and to record deaths under age 2 in months. In addition, they were trained to probe deaths reported at exactly 1 year or 12 months to ensure that they had actually occurred at 12 months. The distribution of deaths under age 2 during the 20 years prior to the survey by month of death shows that there is some heaping at age 12 months, with corresponding deficits in adjacent months (Table C.6). Heaping at age 12 months is obvious for all five-year time periods preceding the survey including the 0-4 years for which the most recent mortality rates are calculated. This indicates that there may be some underreporting of infant mortality and overreporting of child mortality as reported in the 2013-14 ZDHS.

## 8.2 LEVELS AND TRENDS IN INFANT AND CHILD MORTALITY

Table 8.1 presents neonatal, postnatal, infant, child, and under-5 mortality rates for the three five-year periods preceding the survey. Neonatal mortality in the most recent period (2009-2013) is 24 deaths per 1,000 live births. The infant mortality rate in the five years preceding the survey is 45 deaths per 1,000 live births; this means that 1 in every 22 Zambian children dies before reaching age 1. The under-5 mortality rate for the same period is 75 deaths per 1,000 live births, meaning 1 in every 13 Zambian children does not survive to their fifth birthday.

Mortality trends can be examined in two ways: by comparing mortality rates for three five-year periods preceding a single survey and by comparing mortality estimates obtained from various surveys. However, comparisons between surveys should be interpreted with caution because of variations in quality of data, time references, and sample coverage. In particular, sampling errors associated with mortality estimates are large and should be taken into account when examining trends between surveys.

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Zambia 2013-14

Years preceding the survey	Approximate time period of estimated rates	Neonatal mortality (NN)	Post-neonatal mortality (PNN) <sup>1</sup>	Infant mortality (IQ <sub>0</sub> )	Child mortality (4Q <sub>1</sub> )	Under-5 mortality (5Q <sub>0</sub> )
0-4	2009-2013	24	20	45	31	75
5-9	2004-2008	26	26	52	37	88
10-14	1999-2003	29	47	76	57	128

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

Data from the 2013-14 ZDHS show that neonatal mortality has declined by 17 percent over the 15-year period preceding the survey, from 29 to 24 deaths per 1,000 live births. The corresponding declines in postneonatal, infant, and under-5 mortality over the 15-year period are 57 percent, 41 percent, and 41 percent, respectively. Examination of neonatal, infant, and under-5 mortality rates in Zambia over the past 15 years reveals that neonatal mortality has decreased at a slower pace than infant and child mortality. Specifically, neonatal deaths have reduced only by five deaths per 1,000 live births compared with other childhood mortality indicators.

It should be noted that, in the past five years, there have been minimal changes in neonatal mortality. However, postneonatal, infant, and child mortality have shown substantial improvements. The Ministry of Health (MoH) and Ministry of Community Development, Mother and Child Health (MCDMCH) and other partners have developed and passed policies aimed at improving the general welfare and health of children including neonates. The main child health interventions being implemented in Zambia are the Expanded Programme on Immunisation (EPI) and the Integrated Management of Childhood Illnesses (IMCI) programme (MoH, 2011). The Prevention of Mother-to-Child Transmission (PMTCT) of HIV programme has also made progress by ensuring that women who are HIV positive have reduced risk of transmitting HIV to their babies. All infants born to HIV-positive mothers are put on

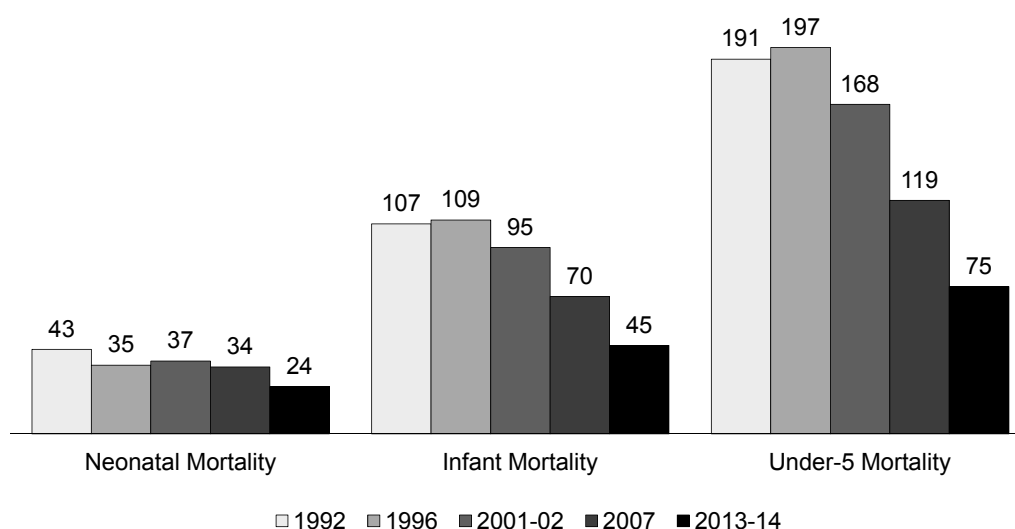
paediatric ART treatment. Other interventions include scaling up and sustaining high-impact nutrition interventions including vitamin A supplementation, iron-folate supplements, early initiation of breastfeeding, infant and child feeding, and management of malnutrition (MoH, 2011). These efforts have to a certain degree contributed greatly to marked improvements in child health and subsequently have contributed to reductions in deaths of children in Zambia.

The 2013-14 ZDHS also collected data on antenatal care, delivery care, and postnatal visits, which are discussed in greater detail in Chapter 9. Increased antenatal care and improved delivery care are likely to improve early neonatal survival, and newborn care. Improvements in these indicators impact neonatal health. Neonatal deaths are mainly due to birth asphyxia, neonatal sepsis, or infection, and these are affected by poor quality health care at birth and lack of access to skilled birth attendants at delivery. Universal access to skilled care at birth is therefore important and cost effective in reducing neonatal deaths (Darmstadt et al, 2008).

Mortality trends can also be observed by comparing data from the 2013-14 ZDHS with data from the 1992, 1996, 2001-02, and 2007 ZDHS surveys (Figure 8.1). Infant and under-5 mortality rates obtained for the five years preceding the five surveys confirm a downward trend. Infant mortality has declined by nearly 58 percent over the last two decades, from 107 deaths per 1,000 live births in 1992 to 45 deaths per 1,000 live births in 2013-2014. An equally impressive decline was observed in under-5 mortality, which decreased by 61 percent from 191 deaths per 1,000 live births to 75 deaths per 1,000 live births over the same period. An examination of neonatal, infant, and under-5 mortality rates in Zambia over the past two decades reveals that neonatal mortality has decreased at a slower pace than infant and child mortality. The data show a 44 percent decline in neonatal mortality over the same period.

**Figure 8.1 Trends in childhood mortality, ZDHS 1992-2014**

Deaths per 1,000 live births for the 5-year period before the survey



### 8.3 SOCIOECONOMIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 8.2 shows differentials in childhood mortality by socioeconomic variables. To minimise sampling errors associated with mortality estimates and to ensure a sufficient number of cases for statistical reliability, the mortality rates shown in the table are calculated for a 10-year period.

Table 8.2 shows that infant and child mortality for the 2013-14 ZDHS is higher in rural areas than in urban areas. Infant mortality in rural areas is 49 deaths per 1,000 live births, compared with 46 deaths per 1,000 live births in urban areas. Rural-urban differences are more notable in the case of child mortality and under-5 mortality rates. Similarly, there are differentials in infant and under-5 mortality by province,



with infant mortality ranging from 39 deaths per 1,000 live births in North Western to 68 deaths per 1,000 live births in Eastern. Under-5 mortality is highest in Eastern and lowest in Copperbelt (115 and 63 deaths per 1,000 live births respectively).

**Table 8.2 Early childhood mortality rates by socioeconomic characteristics**

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristics, Zambia 2013-14

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) <sup>1</sup>	Infant mortality (iQ <sub>0</sub> )	Child mortality (4q <sub>1</sub> )	Under-5 mortality (5Q <sub>0</sub> )
<b>Residence</b>					
Urban	22	25	46	27	72
Rural	27	22	49	38	85
<b>Region</b>					
Central	25	18	43	39	80
Copperbelt	20	22	42	22	63
Eastern	35	33	68	50	115
Luapula	23	32	55	45	98
Lusaka	23	20	42	27	68
Muchinga	28	23	50	40	88
Northern	25	24	49	39	86
North Western	20	20	39	28	66
Southern	23	22	44	25	68
Western	32	12	44	30	73
<b>Mother's education</b>					
No education	29	31	59	53	109
Primary	26	23	49	35	82
Secondary	23	20	43	25	67
More than secondary	17	15	32	11	43
<b>Wealth quintile</b>					
Lowest	31	24	55	47	100
Second	26	24	50	37	85
Middle	22	24	46	34	79
Fourth	23	25	48	26	73
Highest	22	17	39	20	58

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

Mother's education is inversely related to a child's risk of dying. Under-5 mortality among children born to mothers with no education is two and a half times (109 deaths per 1,000 live births) as high as mortality among children born to mothers with more than secondary education (43 deaths per 1,000 live births, respectively). Table 8.2 also shows that the risk of dying among children born to mothers from the highest wealth quintile is lower for almost all measures of childhood mortality compared with children born from the other wealth quintiles. Under-5 mortality for children from the lowest wealth quintile is almost twice as high as that for children in the highest wealth quintile (100 and 58 deaths per 1,000 live births, respectively).

## 8.4 DEMOGRAPHIC DIFFERENTIALS IN MORTALITY

Demographic characteristics of both the mother and child play an important role in the survival of children. Table 8.3 shows that, with the exception of postneonatal mortality, mortality is higher among male children than female children for all measures of mortality.

The relationship between maternal age at birth and childhood mortality is generally U-shaped; being relatively higher among children born to mothers under age 20 and over age 30 compared with children born to mothers in the 20-29 age group. In general, mortality rates are also higher among first births and births of order seven or above than among births of order two to six. Data for the 2013-14 ZDHS show that under-5 mortality is highest for births of order seven and higher (95 deaths per 1,000 live births) compared with births of order two to three (73 deaths per 1,000 live births) and births of order three to four (79 deaths per 1,000 live births). Child spacing is another factor influencing child survival. Generally, shorter birth intervals are associated with higher mortality, both during and after infancy.. The 2013-14 ZDHS data confirms this pattern. All childhood mortality rates show that births within a two-year

interval are more likely to result in deaths during childhood than births after a two-year interval. Using infant mortality as an example, children born fewer than two years after a preceding birth are more likely to die than children born after a two-year interval (75 deaths per 1,000 live births compared with 28 to 44 deaths per 1,000 live births).

**Table 8.3 Early childhood mortality rates by demographic characteristics**

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by demographic characteristics, Zambia 2013-14

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) <sup>1</sup>	Infant mortality ( <sub>1</sub> q <sub>0</sub> )	Child mortality ( <sub>4</sub> q <sub>1</sub> )	Under-5 mortality ( <sub>5</sub> q <sub>0</sub> )
<b>Child's sex</b>					
Male	30	23	53	36	87
Female	20	23	43	32	74
<b>Mother's age at birth</b>					
<20	34	26	60	32	90
20-29	21	23	43	33	75
30-39	26	21	46	38	82
40-49	47	32	78	(34)	(109)
<b>Birth order</b>					
1	34	26	60	28	86
2-3	20	21	41	34	73
4-6	23	22	45	36	79
7+	31	26	57	40	95
<b>Previous birth interval<sup>2</sup></b>					
<2 years	41	34	75	57	128
2 years	22	22	44	35	77
3 years	13	16	28	27	55
4+ years	20	19	40	28	67
<b>Birth size<sup>3</sup></b>					
Small/very small	65	26	90	*	*
Average or larger	18	19	37	na	na

Note: Figures in parentheses are based on 250-499 unweighted cases. An asterisk indicates that a figure is based on fewer than 250 unweighted cases and has been suppressed.

na = Not available

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

<sup>2</sup> Excludes first-order births

<sup>3</sup> Rates for the five-year period before the survey

Studies have shown that a child's birth weight is an important determinant of survival. Mothers were asked their infant's weight at birth. Women were also asked whether their child was very large, larger than average, average, smaller than average, or small at birth. These descriptions have been found to be good proxy measures for a child's weight. Data in Table 8.3 shows that the size of the baby at birth is associated with child mortality. For example, the neonatal mortality rate is higher among children described as "small/very small" by mothers compared with those described as being "average or larger" (65 and 18 deaths per 1,000 live births, respectively).

## 8.5 PERINATAL MORTALITY

The 2013-14 ZDHS was also designed to ask women to report any pregnancy loss that occurred in the five years preceding the survey. For each pregnancy that did not end in a live birth, the duration of pregnancy was recorded. In this report, perinatal deaths include pregnancy losses of at least seven months gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths). The perinatal mortality rate is the sum of stillbirths and early neonatal deaths divided by the sum of all stillbirths and live births. Information on stillbirths and infant deaths within the first week of life is highly susceptible to omission and misreporting. Nevertheless, retrospective surveys in several developing countries provide more representative and accurate perinatal death rates than do vital registration systems and hospital-based studies.

Table 8.4 shows that out of the 13,563 reported pregnancies of at least seven months' gestation in the five years preceding the survey, 180 were stillbirths and 247 were early neonatal deaths, yielding an overall perinatal mortality rate of 31 per 1,000 pregnancies. Because the perinatal mortality rate is subject

to a high degree of sampling variation, differences by background characteristics should be interpreted with caution.

**Table 8.4 Perinatal mortality**

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Zambia 2013-14

Background characteristic	Number of stillbirths <sup>1</sup>	Number of early neonatal deaths <sup>2</sup>	Perinatal mortality rate <sup>3</sup>	Number of pregnancies of 7+ months duration
<b>Mother's age at birth</b>				
<20	43	70	45	2,522
20-29	79	91	25	6,777
30-39	38	68	29	3,726
40-49	20	17	69	538
<b>Previous pregnancy interval in months<sup>4</sup></b>				
First pregnancy	51	78	46	2,815
<15	23	55	49	1,582
15-26	36	41	23	3,293
27-38	27	24	20	2,614
39+	43	48	28	3,257
<b>Residence</b>				
Urban	63	82	31	4,637
Rural	117	164	31	8,925
<b>Region</b>				
Central	12	24	27	1,320
Copperbelt	20	31	29	1,752
Eastern	21	42	36	1,758
Luapula	13	16	24	1,201
Lusaka	26	40	33	1,987
Muchinga	18	17	41	833
Northern	17	20	28	1,286
North Western	9	10	27	679
Southern	34	29	33	1,876
Western	11	18	34	870
<b>Mother's education</b>				
No education	17	28	30	1,500
Primary	93	133	30	7,611
Secondary	60	78	35	3,972
More than secondary	9	8	35	480
<b>Wealth quintile</b>				
Lowest	41	65	32	3,264
Second	39	56	30	3,118
Middle	37	35	26	2,786
Fourth	26	53	33	2,383
Highest	37	38	38	2,012
<b>Total</b>	<b>180</b>	<b>247</b>	<b>31</b>	<b>13,563</b>

<sup>1</sup> Stillbirths are fetal deaths in pregnancies lasting seven or more months.

<sup>2</sup> Early neonatal deaths are deaths at age 0-6 days among live-born children.

<sup>3</sup> The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1,000.

<sup>4</sup> Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months.

Table 8.4 also shows that the perinatal mortality rate is highest among the youngest (below age 20) and oldest (age 40-49) cohort of mothers (45 and 69 deaths per 1,000 pregnancies, respectively). A higher perinatal mortality rate is also observed among births that occur less than 15 months after a previous birth (49 deaths per 1,000 pregnancies) than among births that occur more than 15 months after a birth. Although several indicators seem to underperform when residence is put into perspective, the 2013-14 ZDHS shows that perinatal mortality was similar for both rural and urban areas (31 deaths per 1,000 pregnancies). Perinatal mortality is highest in Muchinga and lowest in Luapula (41 and 24 deaths per 1,000 pregnancies, respectively). There seems to be no difference in perinatal mortality between mothers with no education and those with primary education (30 deaths per 1,000 pregnancies). However, the perinatal mortality rate is higher among the more educated women (secondary and post-secondary) than among women with little or no education. Table 8.4 shows that perinatal mortality is highest in the highest wealth quintile compared with the other wealth quintiles. These findings are quite striking because results from similar studies seem to suggest otherwise; high education and high wealth quintiles are both associated with low perinatal mortality in these studies (Bhutta et al, 2005).

## 8.6 HIGH-RISK FERTILITY BEHAVIOUR

Survival of infants and children depends in part on demographic and biological characteristics of mothers. Typically, however, the probability of dying in infancy is also much greater among children born to mothers who are too young (under age 18) or too old (over age 34), children born after a short birth interval (less than 24 months after the preceding birth), and children born to mothers of high parity (more than three children). The risk is further elevated when a child is born to a mother who has a combination of these risk characteristics.

Table 8.5 shows the distribution of children born in the five years preceding the survey by risk category. First births, which make up 14 percent of births, are considered “unavoidable” and are in a separate risk category. The 2013-14 ZDHS shows that the majority of births in Zambia occur in an avoidable high-risk category (59 percent). Thirty-nine percent of births are in the single high-risk category and 19 percent are in the multiple high-risk category, while 27 percent are not in any high-risk category. The most common single high-risk category is births of order higher than three (26 percent), while the most common multiple high-risk category is births to mothers above age 34 and of birth order above three (12 percent).

**Table 8.5 High-risk fertility behaviour**

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Zambia 2013-14

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women <sup>1</sup>
	Percentage of births	Risk ratio	
<b>Not in any high risk category</b>	27.0	1.00	19.2 <sup>a</sup>
<b>Unavoidable risk category</b>			
First order births between ages 18 and 34 years	14.3	1.40	3.1
<b>Single high-risk category</b>			
Mother's age <18	7.5	1.98	0.4
Mother's age >34	0.6	1.95	3.2
Birth interval <24 months	5.1	1.77	8.1
Birth order >3	26.2	1.04	21.1
<b>Subtotal</b>	39.4	1.33	32.9
<b>Multiple high-risk category</b>			
Age <18 and birth interval <24 months <sup>2</sup>	0.4	2.95	0.3
Age >34 and birth interval <24 months	0.0	*	0.1
Age >34 and birth order >3	12.2	1.19	27.0
Age >34 and birth interval <24 months and birth order >3	1.4	2.11	5.1
Birth interval <24 months and birth order >3	5.3	1.67	12.3
<b>Subtotal</b>	19.3	1.42	44.8
<b>In any avoidable high-risk category</b>	58.7	1.36	77.7
Total	100.0	na	100.0
Number of births/women	13,383	na	9,859

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. An asterisk indicates that a ratio is based on fewer than 25 unweighted births and has been suppressed.

na = Not applicable

<sup>1</sup> Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.

<sup>2</sup> Includes the category age <18 and birth order >3

<sup>a</sup> Includes sterilised women

The risk ratios in the second column of Table 8.5 denote the relationship between risk factors and mortality. In general, risk ratios are higher for children in a multiple high-risk category than in a single high-risk category. The most vulnerable births are those to women younger than 18, with a birth interval less than 24 months. This group of children is nearly three times as likely to die as children not in any high-risk category. However, less than 1 percent of births fall in this category.

The last column of Table 8.5 shows by category the distribution of currently married women with the potential for having a high-risk birth. This column is purely hypothetical and does not take into consideration the protection provided by family planning, postpartum insusceptibility, and prolonged abstinence. However, it provides insight into the magnitude of high-risk births. Twenty-seven percent of women are or would be too old (over 34) and have or would have too many children (more than three) if they were to become pregnant. A slightly lower proportion of women (33 percent) would risk having a birth in a single high-risk category than in a multiple high-risk category (45 percent).



**Key Findings**

- More than 9 in 10 (96 percent) mothers received antenatal care from a skilled provider.
- The median duration of pregnancy at the first antenatal visit is 4.8 months.
- Eighty-two percent of mothers with a birth in the five years preceding the survey were protected against neonatal tetanus.
- Two in three (64 percent) births in the five years preceding the survey were assisted by a skilled provider.
- In the two years before the survey, 63 percent of women received postnatal care for their last birth in the first two days after delivery.
- Thirty-six percent of women have heard of problems associated with fistula.

This chapter presents findings from several areas of importance to maternal health, including information on antenatal, delivery, and postpartum care and problems in accessing health care. The health care that a mother receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and her child. The 2013-14 ZDHS obtained information on the extent to which women in Zambia receive care during pregnancy, during delivery, and in the period after the baby is born. These findings are important to policymakers and programme implementers in designing appropriate strategies and interventions to improve maternal and child health care services.

## 9.1 ANTENATAL CARE

Antenatal care (ANC) from a skilled provider is important to monitor the pregnancy and reduce the risk of morbidity and mortality for the mother and her baby during pregnancy and delivery. The quality of antenatal care can be monitored through the services received and the kind of information mothers are given during their visit. Information on ANC coverage was obtained from women who gave birth in the five years preceding the survey. Among women with two or more live births during the five-year period, data refer to the most recent birth only.

Table 9.1 shows the percent distribution of women in the five years preceding the survey by source of antenatal care received during pregnancy, according to selected characteristics. Women were asked to report on all persons they saw for antenatal care for their last birth. However, if a woman saw more than one provider, only the provider with the highest qualifications was considered in the tabulation of results.

Ninety-six percent of mothers received antenatal care from a skilled provider (a doctor, clinical officer, nurse, or midwife) for their most recent birth in the five years preceding the survey. Less than 1 percent of women received antenatal care from a community health worker. There were no major variations in ANC coverage by age or birth order.

Ninety-nine percent of urban mothers received antenatal care from a skilled provider at least one, as compared with 94 percent of rural mothers. The proportion of women who received antenatal care from a skilled provider was lowest in Western (90 percent) and highest in Lusaka (99 percent).

The use of antenatal care services from a skilled provider is strongly related to mother's level of education. Women with more than a secondary education are more likely to receive antenatal care from a skilled provider (99 percent) than women with no education (91 percent). Similarly, women in the highest wealth quintile (99 percent) are more likely than women in the lowest wealth quintile (92 percent) to receive care from a skilled provider.

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Zambia 2013-14

Background characteristic	Antenatal care provider							No ANC	Total	Percentage receiving antenatal care from a skilled provider <sup>1</sup>	Number of women
	Doctor	Clinical officer	Nurse/midwife	Traditional birth attendant	Community health worker	Other	Missing				
<b>Mother's age at birth</b>											
<20	2.8	3.6	88.7	2.3	0.4	0.7	0.2	1.2	100.0	95.1	1,600
20-34	3.3	2.2	90.7	1.1	0.7	0.7	0.1	1.1	100.0	96.3	6,186
35-49	3.9	2.3	88.2	1.9	0.6	0.5	0.5	2.2	100.0	94.3	1,538
<b>Birth order</b>											
1	4.3	3.0	89.6	1.4	0.4	0.6	0.2	0.6	100.0	96.9	1,884
2-3	3.2	2.3	90.6	1.4	0.7	0.7	0.1	0.9	100.0	96.2	3,113
4-5	3.9	2.0	90.1	1.0	0.4	0.7	0.4	1.6	100.0	96.0	2,138
6+	2.1	2.8	89.2	1.9	0.9	0.6	0.2	2.3	100.0	94.0	2,190
<b>Residence</b>											
Urban	6.0	1.6	91.0	0.3	0.0	0.1	0.1	0.9	100.0	98.6	3,528
Rural	1.7	3.0	89.3	2.1	1.0	1.0	0.2	1.6	100.0	94.0	5,796
<b>Province</b>											
Central	3.3	7.3	85.0	1.8	0.4	0.3	0.4	1.6	100.0	95.6	875
Copperbelt	5.6	1.6	90.0	0.8	0.1	0.0	0.4	1.5	100.0	97.1	1,305
Eastern	0.9	2.1	92.6	2.2	1.4	0.2	0.0	0.7	100.0	95.5	1,188
Luapula	0.3	0.5	93.7	2.7	0.8	0.0	0.2	1.8	100.0	94.6	765
Lusaka	8.0	1.6	89.8	0.1	0.0	0.0	0.0	0.5	100.0	99.4	1,522
Muchinga	1.3	3.9	89.1	2.8	0.0	1.0	0.1	1.7	100.0	94.4	544
Northern	2.0	2.0	88.7	1.5	1.8	1.3	0.0	2.8	100.0	92.7	803
North Western	1.6	1.0	93.2	0.6	1.7	0.0	0.4	1.4	100.0	95.9	443
Southern	1.5	3.0	91.8	2.2	0.5	0.0	0.4	0.6	100.0	96.3	1,263
Western	4.0	2.3	83.7	0.2	0.6	6.7	0.0	2.5	100.0	90.0	616
<b>Education</b>											
No education	2.1	2.9	85.9	1.8	1.1	1.1	0.5	4.6	100.0	90.9	961
Primary	2.2	2.6	90.6	1.8	0.7	0.7	0.2	1.3	100.0	95.4	4,996
Secondary	3.7	2.3	91.6	0.8	0.4	0.6	0.1	0.5	100.0	97.5	2,999
More than secondary	19.3	0.9	79.2	0.0	0.0	0.3	0.3	0.0	100.0	99.3	368
<b>Wealth quintile</b>											
Lowest	1.5	2.7	87.9	2.5	1.4	1.4	0.1	2.6	100.0	92.1	2,055
Second	1.4	3.2	89.9	2.0	0.7	1.1	0.4	1.4	100.0	94.5	1,963
Middle	1.8	2.7	91.3	1.9	0.8	0.5	0.1	0.9	100.0	95.8	1,920
Fourth	3.3	2.2	92.6	0.3	0.1	0.1	0.2	1.2	100.0	98.1	1,800
Highest	9.9	1.3	88.2	0.0	0.0	0.0	0.3	0.3	100.0	99.4	1,587
Total	3.3	2.5	90.0	1.4	0.6	0.7	0.2	1.3	100.0	95.7	9,324

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.

<sup>1</sup> Skilled provider includes doctor, clinical officer, and nurse/midwife



## Number and Timing of Antenatal Visits

Regular antenatal care is more helpful in identifying and preventing adverse pregnancy outcomes when it is sought early in the pregnancy and is continued through delivery. WHO recommends that a woman have at least four ANC visits. In the event of any complications, more frequent visits are advised, and admission to a health facility may be necessary. Zambia developed safe motherhood guidelines and has been implementing these guidelines since 2005. For normal pregnancies, ANC visits are recommended as follows: the first visit should occur by the end of 16 weeks of pregnancy, the second at 24 weeks, the third at 32 weeks, and the fourth at 36 weeks (MoH, 2011). However, women who experience discomfort, danger signs or have special needs or conditions beyond the scope of basic care may require additional visits.

Table 9.2 presents information on the number of antenatal visits and the timing of the first antenatal visit for the most recent birth in the five years preceding the survey. The findings show that 56 percent of pregnant women make four or more antenatal care visits during their pregnancy.

Table 9.2 further shows that 24 percent of women had their first antenatal visit in the first trimester of pregnancy (before the 4th month). The median duration of pregnancy at the first ANC visit was 4.8 months.

### 9.2 COMPONENTS OF ANTENATAL CARE

The content of antenatal care is an essential component of ANC service quality. Focused antenatal care hinges on the principle that every pregnancy is at risk of complications. Therefore, apart from receiving basic care, every pregnant woman should be monitored for complications. Ensuring that pregnant women receive information and undergo screening for complications should be a routine part of all antenatal care visits. To assess ANC services, mothers in the 2013-14 ZDHS were asked a number of questions about the care they received during the pregnancy for their most recent live birth in the five years preceding the survey.

Table 9.3 presents information on the percentage of women who took iron tablets and drugs for intestinal parasites during their most recent pregnancy. The table also shows the percentage of women who were informed about the signs of pregnancy complications and, among those receiving antenatal care, the percentage who received specific routine ANC services.

**Table 9.2 Number of antenatal care visits and timing of first visit**

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Zambia 2013-14

Number and timing of ANC visits	Residence		Total
	Urban	Rural	
<b>Number of ANC visits</b>			
None	0.9	1.7	1.4
1	1.6	2.0	1.8
2-3	40.7	40.2	40.4
4+	55.9	55.2	55.5
Don't know/missing	1.0	0.9	1.0
Total	100.0	100.0	100.0
<b>Number of months pregnant at time of first ANC visit</b>			
No antenatal care	0.9	1.7	1.4
<4	23.6	24.9	24.4
4-5	55.7	54.9	55.2
6-7	18.5	17.0	17.6
8+	0.8	1.1	1.0
Don't know/missing	0.6	0.4	0.4
Total	100.0	100.0	100.0
Number of women	3,528	5,796	9,324
Median months pregnant at first visit (for those with ANC)	4.9	4.7	4.8
Number of women with ANC	3,498	5,700	9,198

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Zambia 2013-14

Background characteristic	Among women with a live birth in the past five years, the percentage who during the pregnancy of their last birth:		Among women who received antenatal care for their most recent birth in the past five years, the percentage with selected services						Number of women with ANC for their most recent birth
	Took iron tablets or syrup	Took intestinal parasite drugs	Number of women with a live birth in the past five years	Informed of signs of pregnancy complications	Weighed	Blood pressure measured	Urine sample taken	Blood sample taken	
<b>Mother's age at birth</b>									
<20	96.0	60.4	1,600	86.0	94.3	86.4	40.5	93.6	1,581
20-34	95.9	66.6	6,186	88.4	95.9	89.7	42.6	94.6	6,114
35-49	92.8	59.3	1,538	88.2	96.4	88.3	37.7	91.3	1,502
<b>Birth order</b>									
1	96.5	62.8	1,884	87.7	95.4	89.6	47.7	95.1	1,873
2-3	96.3	68.7	3,113	89.0	96.1	90.3	45.5	95.5	3,086
4-5	95.5	64.1	2,138	88.5	96.1	88.5	39.1	93.8	2,102
6+	93.1	59.7	2,190	86.2	95.0	86.5	32.4	90.7	2,137
<b>Residence</b>									
Urban	97.2	69.9	3,528	94.7	98.3	97.7	57.7	98.1	3,498
Rural	94.3	61.0	5,796	83.9	94.1	83.5	31.5	91.3	5,700
<b>Province</b>									
Central	96.0	64.8	875	83.6	94.8	88.7	35.1	89.6	860
Copperbelt	96.1	66.1	1,305	95.3	98.1	97.4	58.3	97.4	1,285
Eastern	95.4	61.6	1,188	83.5	96.6	86.5	35.1	94.6	1,180
Luapula	92.6	63.8	765	94.4	95.9	78.9	17.2	92.0	750
Lusaka	97.4	72.0	1,522	96.1	98.9	99.0	60.7	98.4	1,514
Muchinga	93.8	55.4	544	84.4	91.1	81.3	24.4	88.9	535
Northern	91.7	54.7	803	79.3	90.1	73.7	19.1	81.3	780
North Western	96.0	73.8	443	93.2	97.8	92.2	34.3	92.9	437
Southern	96.9	66.7	1,263	80.6	94.4	90.0	58.0	98.2	1,256
Western	94.7	56.1	616	85.0	93.8	84.5	23.6	95.0	601
<b>Education</b>									
No education	90.4	55.5	961	83.0	93.0	81.2	28.9	87.8	917
Primary	94.9	62.7	4,996	86.5	95.1	87.0	35.7	92.8	4,930
Secondary	97.4	69.0	2,999	91.1	97.0	93.3	51.2	97.0	2,983
More than secondary	99.1	72.4	368	94.8	99.5	97.8	70.8	99.1	368
<b>Wealth quintile</b>									
Lowest	92.6	55.3	2,055	81.1	92.9	78.5	23.3	88.6	2,001
Second	94.6	63.1	1,963	85.5	94.0	84.8	30.2	91.9	1,934
Middle	95.8	66.3	1,920	86.9	95.7	88.6	39.8	94.3	1,903
Fourth	97.0	68.1	1,800	93.7	98.4	96.8	51.9	96.8	1,776
Highest	97.7	71.0	1,587	94.5	98.2	98.4	68.4	99.2	1,583
Total	95.4	64.4	9,324	88.0	95.7	88.9	41.4	93.9	9,198

Among women with a live birth in the past five years, 95 percent took iron tablets or syrup. Mothers age 34 and younger (96 percent) are somewhat more likely to take iron supplements than their older counterparts (93 percent). Similarly, women with fewer than six children (96 percent) are more likely than those with six or more children (93 percent) to take iron supplements.

There was little variation by urban-rural residence. In all provinces, more than nine in ten women took iron tablets or syrup. The percentage of women who took iron supplements increased with increasing education and wealth.

Administration of intestinal anti-parasitic drugs during antenatal care was less common than administration of iron supplements. Sixty-four percent of women took drugs to combat intestinal parasites during their last pregnancy. There were variations by mother's age, birth order, residence, province, education, and wealth quintile. Women in urban areas (70 percent) were more likely to have taken drugs to prevent intestinal parasites than women in rural areas (61 percent). Women from Northern and Muchinga (55 percent) were least likely to have taken drugs for intestinal parasites, while women in North Western

(74 percent) were most likely to have done so. Similar to intake of iron supplements, the percentage of women who took intestinal anti-parasitic drugs increased with increasing education and wealth.

Eighty-eight percent of mothers who received ANC reported that they were informed about pregnancy complications during an antenatal visit. In addition, 96 percent of women who sought antenatal care were weighed, 94 percent had a blood sample taken, 89 percent had their blood pressure measured, and 41 percent had a urine sample taken.

Quality of antenatal care was particularly related to birth order and to mother's education, wealth, and residence. For example, urban women (95 percent) were more likely than rural women (84 percent) to be provided information about pregnancy complications, and women in the lowest wealth quintile were least likely to have been informed about complications (81 percent).

### **9.3 BIRTH PREPAREDNESS**

In an effort to prevent unnecessary delays related to delivery care, the Ministry of Community Development, Mother and Child Health and the Ministry of Health have implemented a birth preparedness package that outlines steps mothers should take to prepare for their birth (MoH, 2011). Adherence to these guidelines reduces delays in accessing delivery services, which can save lives, especially among women living in rural locations.

Table 9.4 shows that nine in ten women (91 percent) discussed a birth preparedness plan with a health care provider. In these discussions, 99 percent of women talked about where they would deliver, 97 percent talked about what they would do in the event of a complication, and 96 percent talked about who would be there to help them. Eighty-two percent used the birth plan.

Birth preparedness was particularly related to birth order, residence, province, and mother's education and wealth. Women with births of order two or three, those in urban areas, those in Southern, those with more than a secondary education, and those in the fourth wealth quintile were more likely than their counterparts in the other categories to have discussed a birth preparedness plan with a health care provider.

Table 9.4 Birth preparedness plan

Among women age 15-49 with a live birth in the five years preceding the survey who received ANC for the most recent birth, the percentage who discussed a birth preparedness plan with a health provider during the pregnancy; and, among women discussing a birth preparedness plan, the percentage who discussed various components, and the percentage who used the plan, by background characteristics, Zambia 2013-14

Background characteristic	Percentage who discussed a birth preparedness plan	Number of women who received ANC for their last live birth in the five years preceding the survey	Among women who discussed birth preparedness for their most recent birth in the past five years, the percentage who:				Number of women who discussed a birth preparedness plan
			Discussed where they will deliver	Discussed what they will do if a complication arises	Discussed who will be there to help them	Used the birth preparedness plan	
Mother's age at birth							
<20	89.7	1,581	98.4	94.7	94.6	82.4	1,419
20-34	91.6	6,114	98.9	97.3	96.4	82.1	5,604
35-49	90.4	1,502	99.3	97.3	97.5	79.4	1,359
Birth order							
1	90.4	1,873	98.0	95.4	95.1	84.4	1,693
2-3	92.0	3,086	98.7	96.9	96.1	84.2	2,839
4-5	91.4	2,102	99.5	97.8	96.3	81.3	1,922
6+	90.2	2,137	99.3	97.2	97.4	76.2	1,928
Residence							
Urban	94.5	3,498	98.7	97.4	96.5	88.2	3,305
Rural	89.1	5,700	99.0	96.5	96.1	77.5	5,076
Province							
Central	88.8	860	99.9	96.4	97.2	52.9	763
Copperbelt	93.4	1,285	97.9	97.0	95.7	84.7	1,201
Eastern	81.8	1,180	99.3	97.3	98.2	85.1	966
Luapula	96.0	750	98.8	97.9	96.9	78.7	719
Lusaka	93.7	1,514	98.8	97.6	96.7	88.1	1,418
Muchinga	87.7	535	98.4	94.5	96.1	84.1	469
Northern	82.0	780	98.0	91.4	87.9	85.0	640
North Western	95.4	437	99.6	99.3	99.4	86.6	417
Southern	98.9	1,256	99.5	98.3	98.5	84.8	1,242
Western	90.8	601	98.7	96.6	93.2	80.5	546
Education							
No education	86.7	917	98.7	96.7	95.4	73.4	795
Primary	90.4	4,930	99.2	96.8	96.4	78.9	4,457
Secondary	93.4	2,983	98.6	96.8	96.3	87.7	2,785
More than secondary	93.7	368	98.1	98.6	96.4	90.3	345
Wealth quintile							
Lowest	85.7	2,001	99.1	95.7	95.6	75.2	1,715
Second	90.7	1,934	99.1	96.7	96.5	79.0	1,754
Middle	92.1	1,903	99.1	97.2	96.6	80.0	1,752
Fourth	95.0	1,776	99.2	97.9	96.3	84.7	1,688
Highest	93.1	1,583	97.8	96.7	96.4	91.2	1,473
Total	91.1	9,198	98.9	96.9	96.3	81.7	8,382

## 9.4 TETANUS TOXOID VACCINATION

Neonatal tetanus is a leading cause of death among infants in developing countries, where a considerable proportion of deliveries take place at home or at locations where hygienic conditions may be poor. Tetanus toxoid (TT) vaccine is given to women during pregnancy to prevent infant deaths caused by neonatal tetanus, which can occur when sterile procedures are not followed in cutting the umbilical cord after delivery. For full protection, women should receive at least two doses of TT vaccine during each pregnancy. However, if a woman has been vaccinated during a previous pregnancy or during maternal and neonatal tetanus vaccination campaigns, then, she may only require one dose for her current pregnancy. Five doses are considered to provide lifetime protection.

Table 9.5 presents the percentage of women age 15-49 with a live birth in the five years preceding the survey whose last birth was protected against neonatal tetanus. More than four in five mothers (82 percent) with a birth in the five years preceding the survey were protected against neonatal tetanus. About one in three (30 percent) pregnant women received two or more tetanus injections during their last pregnancy.

**Table 9.5 Tetanus toxoid injections**

Among mothers age 15-49 with a live birth in the five years preceding the survey, the number of tetanus toxoid injections (TTI) during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Zambia 2013-14

Background characteristic	Injections during most recent live birth					Percentage whose last birth was protected against neonatal tetanus <sup>1</sup>	Number of mothers
	None	One	Two or more	Don't know/missing	Total		
<b>Mother's age at birth</b>							
<20	15.0	47.9	36.3	0.8	100.0	70.8	1,600
20-34	15.7	53.6	29.9	0.7	100.0	84.2	6,186
35-49	37.1	38.8	23.3	0.8	100.0	84.2	1,538
<b>Birth order</b>							
1	12.3	48.7	38.4	0.6	100.0	73.5	1,884
2-3	12.6	53.5	33.0	0.9	100.0	82.7	3,113
4-5	17.6	56.3	25.6	0.4	100.0	86.4	2,138
6+	35.7	40.8	22.6	1.0	100.0	83.7	2,190
<b>Residence</b>							
Urban	12.5	55.1	31.6	0.8	100.0	86.1	3,528
Rural	23.1	47.3	29.0	0.7	100.0	79.3	5,796
<b>Province</b>							
Central	24.8	42.1	32.3	0.8	100.0	84.3	875
Copperbelt	16.9	47.9	34.2	0.9	100.0	89.2	1,305
Eastern	21.7	51.0	26.5	0.8	100.0	82.2	1,188
Luapula	16.5	48.8	33.9	0.8	100.0	66.5	765
Lusaka	9.9	57.8	31.3	0.9	100.0	83.2	1,522
Muchinga	20.0	44.6	35.1	0.2	100.0	84.4	544
Northern	19.5	35.8	44.5	0.2	100.0	81.5	803
North Western	24.6	54.2	20.9	0.3	100.0	85.8	443
Southern	23.7	56.4	19.2	0.7	100.0	76.9	1,263
Western	22.1	56.1	20.9	0.9	100.0	84.4	616
<b>Education</b>							
No education	26.5	46.4	26.9	0.2	100.0	77.0	961
Primary	21.1	48.7	29.3	0.9	100.0	80.2	4,996
Secondary	13.7	52.9	32.8	0.7	100.0	85.1	2,999
More than secondary	16.9	58.9	23.1	1.0	100.0	92.1	368
<b>Wealth quintile</b>							
Lowest	22.7	46.6	30.4	0.3	100.0	77.6	2,055
Second	23.0	47.1	29.2	0.7	100.0	78.7	1,963
Middle	20.7	50.2	28.4	0.7	100.0	81.7	1,920
Fourth	14.0	53.6	31.3	1.2	100.0	85.8	1,800
Highest	13.6	55.0	30.5	0.8	100.0	87.2	1,587
Total	19.1	50.2	29.9	0.7	100.0	81.9	9,324

<sup>1</sup> Includes mothers with two injections during the pregnancy of their last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth.

Younger mothers (less than age 20), mothers with first-order births, and rural mothers were less likely to have their last pregnancy protected against neonatal tetanus than their counterparts. There were differences in tetanus toxoid coverage by province. Sixty-seven percent of mothers in Luapula and 77 percent in Southern had their last birth protected against neonatal tetanus, while more than 80 percent of mothers in each of the other provinces had their last birth protected.

There have been no changes since the 2007 survey in the percentage of mothers who received at least two or more tetanus toxoid injections for their last birth and the percentage whose last birth was protected against neonatal tetanus.

## 9.5 PLACE OF DELIVERY

Increasing the percentage of births delivered in health facilities is an important factor in reducing deaths arising from complications of pregnancy. The expectation is that if complications arise during delivery in a health facility, a skilled attendant can manage them or refer the mother to the next level of care.

Table 9.6 presents the percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics. Sixty-seven percent of births take place in a health facility, while 31 percent take place at home. Delivery in a health facility is most common among births to mothers less than age 20 (74 percent) and first-order births (81 percent). Births in urban areas are more likely (89 percent) to be delivered at a health facility than births in rural areas (56 percent). The proportion of births delivered at a health facility is lowest in Central and Northern (48 percent each) and highest in Lusaka (90 percent). Delivery at a health facility is strongly associated with mother's education and wealth. For example, 97 percent of births among mothers with more than a secondary education take place at a health facility, as compared with 51 percent of births among mothers with no education. Similarly, births to women in the lowest wealth quintile (49 percent) are significantly less likely to take place at a health facility than births to women in the highest quintile (95 percent).

**Table 9.6 Place of delivery**

Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Zambia 2013-14

Background characteristic	Health facility		Home	Other	Missing	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector						
<b>Mother's age at birth</b>								
<20	69.4	4.1	25.6	0.6	0.3	100.0	73.5	2,480
20-34	62.8	4.9	31.1	0.9	0.4	100.0	67.7	8,997
35-49	53.4	5.1	39.4	2.1	0.0	100.0	58.5	1,906
<b>Birth order</b>								
1	75.8	5.3	18.1	0.5	0.3	100.0	81.1	2,865
2-3	65.8	4.6	28.4	0.7	0.3	100.0	70.5	4,475
4-5	59.4	4.9	34.5	0.8	0.4	100.0	64.3	3,065
6+	48.7	4.3	45.0	2.0	0.1	100.0	52.9	2,977
<b>Antenatal care visits<sup>1</sup></b>								
None	12.7	1.0	85.9	0.4	0.0	100.0	13.7	126
1-3	65.4	4.2	29.2	1.2	0.0	100.0	69.6	3,935
4+	69.2	5.7	24.1	1.0	0.0	100.0	74.9	5,173
Don't know/missing	72.0	5.6	20.3	2.1	0.0	100.0	77.6	90
<b>Residence</b>								
Urban	84.4	4.6	10.6	0.2	0.3	100.0	88.9	4,574
Rural	51.4	4.9	42.0	1.4	0.3	100.0	56.3	8,809
<b>Province</b>								
Central	46.3	1.7	49.8	1.9	0.4	100.0	47.9	1,308
Copperbelt	75.4	7.0	17.1	0.3	0.1	100.0	82.5	1,732
Eastern	64.0	6.7	27.2	2.0	0.1	100.0	70.7	1,737
Luapula	61.6	6.7	31.0	0.3	0.3	100.0	68.4	1,189
Lusaka	87.4	2.5	9.7	0.1	0.3	100.0	89.9	1,961
Muchinga	55.3	5.4	38.0	1.2	0.0	100.0	60.8	815
Northern	46.6	1.4	51.6	0.3	0.1	100.0	48.0	1,270
North Western	54.8	19.8	24.5	0.5	0.3	100.0	74.7	670
Southern	54.4	1.5	41.1	2.2	0.8	100.0	55.9	1,842
Western	59.1	2.7	37.2	0.6	0.5	100.0	61.7	859
<b>Mother's education</b>								
No education	46.1	4.6	48.1	1.2	0.1	100.0	50.7	1,482
Primary	56.4	3.9	38.2	1.2	0.4	100.0	60.2	7,518
Secondary	78.7	5.4	15.2	0.6	0.2	100.0	84.1	3,912
More than secondary	82.5	14.0	2.2	0.2	1.0	100.0	96.5	470
<b>Wealth quintile</b>								
Lowest	44.6	4.9	49.0	1.1	0.4	100.0	49.4	3,223
Second	53.2	4.5	40.4	1.6	0.3	100.0	57.7	3,079
Middle	60.4	4.9	33.2	1.3	0.2	100.0	65.3	2,749
Fourth	81.4	2.6	15.5	0.4	0.2	100.0	84.0	2,357
Highest	87.8	7.4	4.3	0.2	0.3	100.0	95.1	1,974
<b>Total</b>	<b>62.7</b>	<b>4.8</b>	<b>31.3</b>	<b>1.0</b>	<b>0.3</b>	<b>100.0</b>	<b>67.4</b>	<b>13,383</b>

<sup>1</sup> Includes only the most recent birth in the five years preceding the survey

## 9.6 ASSISTANCE DURING DELIVERY

Obstetric care from a health professional during delivery is recognised as a critical element in managing complications that may arise during childbirth and reducing maternal and neonatal mortality. Women who deliver at home are usually more likely to do so without assistance from a trained provider, whereas women who deliver at a health facility are more likely to be assisted by a trained health professional.

Table 9.7 shows delivery assistance by type of provider, according to background characteristics. Sixty-four percent of births are assisted by a skilled health worker (doctor, clinical officer, nurse, or midwife), with 5 percent assisted by a doctor, 1 percent by a clinical officer, and 59 percent by a nurse or midwife. The percentage of deliveries assisted by a skilled health worker has increased from the figure reported in the 2007 ZDHS (47 percent). Seventeen percent of births are assisted by traditional birth attendants and 15 percent by a relative or some other person.

Table 9.7 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage delivered by caesarean section, according to background characteristics, Zambia 2013-14

Background characteristic	Person providing assistance during delivery							Total	Percentage delivered by a skilled provider <sup>1</sup>	Percentage delivered by C-section	Number of births
	Doctor	Clinical officer	Nurse/midwife	Traditional birth attendant	Relative/other	No one	Don't know/missing				
<b>Mother's age at birth</b>											
<20	4.7	1.3	64.2	14.4	14.7	0.5	0.3	100.0	70.1	5.0	2,480
20-34	4.8	0.9	58.8	17.0	15.1	2.8	0.5	100.0	64.6	4.3	8,997
35-49	4.4	0.4	50.0	18.8	16.6	9.6	0.2	100.0	54.8	4.3	1,906
<b>Birth order</b>											
1	7.9	1.2	68.9	10.6	10.8	0.3	0.3	100.0	78.0	7.8	2,865
2-3	5.5	1.0	61.2	16.6	14.1	1.3	0.4	100.0	67.6	4.4	4,475
4-5	3.1	0.9	57.2	18.0	16.8	3.5	0.7	100.0	61.1	3.1	3,065
6+	2.3	0.5	46.1	21.7	19.7	9.3	0.4	100.0	49.0	2.5	2,977
<b>Antenatal care visits<sup>2</sup></b>											
None	2.0	0.0	11.8	19.5	57.6	9.2	0.0	100.0	13.7	1.6	126
1-3	4.4	0.9	61.2	14.1	15.8	3.6	0.1	100.0	66.4	4.2	3,935
4+	6.5	1.1	64.0	14.5	11.1	2.9	0.1	100.0	71.5	6.1	5,173
Don't know/missing	5.3	0.0	68.4	11.2	12.4	2.4	0.4	100.0	73.7	5.5	90
<b>Place of delivery</b>											
Health facility	7.0	1.3	86.5	4.0	0.9	0.1	0.1	100.0	94.8	6.5	9,024
Elsewhere	0.0	0.1	0.7	43.5	45.3	10.1	0.3	100.0	0.7	0.0	4,318
<b>Residence</b>											
Urban	8.9	0.6	78.9	3.6	6.1	1.4	0.4	100.0	88.5	7.2	4,574
Rural	2.6	1.0	48.0	23.5	20.0	4.3	0.5	100.0	51.6	3.0	8,809
<b>Province</b>											
Central	3.4	2.3	39.9	19.4	24.8	9.6	0.5	100.0	45.7	3.1	1,308
Copperbelt	9.7	0.8	70.5	11.1	6.2	1.5	0.2	100.0	81.0	6.9	1,732
Eastern	3.4	0.6	61.0	20.8	10.9	3.0	0.3	100.0	65.0	3.7	1,737
Luapula	2.4	0.3	56.7	28.6	8.8	2.6	0.5	100.0	59.4	3.0	1,189
Lusaka	8.6	0.5	79.9	3.6	5.7	1.4	0.4	100.0	88.9	7.4	1,961
Muchinga	2.0	1.8	52.9	17.3	20.0	5.8	0.2	100.0	56.7	3.8	815
Northern	2.1	1.1	42.1	32.0	20.2	2.1	0.4	100.0	45.3	2.7	1,270
North Western	3.1	0.2	66.9	17.2	9.7	1.7	1.1	100.0	70.3	5.8	670
Southern	3.8	1.0	50.2	17.7	22.3	4.3	0.6	100.0	55.0	2.9	1,842
Western	3.7	0.5	53.0	3.8	36.1	2.4	0.5	100.0	57.2	3.1	859
<b>Mother's education</b>											
No education	1.9	0.8	43.5	20.9	24.3	8.0	0.6	100.0	46.2	1.6	1,482
Primary	3.1	0.9	52.8	21.3	17.7	3.8	0.5	100.0	56.7	3.2	7,518
Secondary	6.9	1.1	73.6	8.3	8.9	1.0	0.2	100.0	81.6	6.5	3,912
More than secondary	22.8	0.4	72.5	1.2	1.6	0.4	1.1	100.0	95.6	15.0	470
<b>Wealth quintile</b>											
Lowest	2.3	0.7	42.2	26.2	23.3	4.7	0.6	100.0	45.2	2.8	3,223
Second	2.1	1.0	49.1	23.8	18.8	4.7	0.4	100.0	52.2	2.1	3,079
Middle	3.6	1.3	57.4	17.6	16.1	3.5	0.5	100.0	62.3	3.5	2,749
Fourth	5.4	0.6	76.9	6.3	8.8	1.7	0.3	100.0	83.0	5.1	2,357
Highest	13.8	0.7	79.8	1.5	3.2	0.7	0.3	100.0	94.3	10.9	1,974
<b>Total</b>	4.7	0.9	58.6	16.7	15.3	3.3	0.4	100.0	64.2	4.4	13,383

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. Total includes 40 births for whom information is missing on place of delivery.

<sup>1</sup> Skilled provider includes doctor, clinical officer, and nurse/midwife.

<sup>2</sup> Includes only the most recent birth in the five years preceding the survey

Births to mothers in the youngest age cohort (70 percent) and first-order births (78 percent) are more likely to receive assistance from a skilled provider than births to other women. Births to older women (age 35-49) are much more likely to be delivered without any assistance (10 percent) than births to women less than age 20 (1 percent).

Eighty-nine percent of births in urban areas are attended by a skilled provider, as compared with 52 percent in rural areas. Births in Luapula and Northern are more likely to be assisted by a traditional birth attendant (29 percent and 32 percent, respectively) than births in the other provinces.

Table 9.7 also shows that 4 percent of births are delivered via caesarean section. Caesarean deliveries are most common among first births (8 percent), births in urban areas (7 percent), and births to women with more than a secondary education (15 percent). The proportion of births delivered via C-section is higher in Copperbelt and Lusaka (7 percent each) than in the other provinces. Less than 4 percent of births to women in the lowest three wealth quintiles are delivered via C-section, as compared with 11 percent of births to women in the highest wealth quintile.

## **9.7 REASONS FOR NOT DELIVERING IN A HEALTH FACILITY**

Countries worldwide are striving to achieve Millennium Development Goal 4 (reducing neonatal deaths). High-income countries have made much progress in reducing neonatal mortality, while low-income countries lag behind. Skilled birth attendance at delivery, timely emergency obstetric care, and provision of immediate newborn care and postnatal care are essential in promoting neonatal health. Therefore, a shift in the place of delivery from home to a health facility is seen as an important strategy for improving neonatal outcomes.

In the 2013-14 ZDHS, mothers who did not deliver in a health facility were asked why they chose not to do so. Table 9.8 shows the percentage of most recent live births not delivered in a health facility by specific reasons cited for not delivering in such a facility, according to background characteristics. One in three (32 percent) births were not delivered in a health facility because the facility was too far away or mothers had no transportation. In addition, 27 percent of births were not delivered in a health facility because of a short labour interval.

The distance or lack of transportation was most often cited as a reason by mothers age 35-49 (41 percent) and mothers with births of order six or higher (36 percent). Women in rural areas were more likely to mention problems related to distance or lack of transportation (32 percent) than women in urban areas (27 percent). Women in Luapula were least likely to cite distance or lack of transportation as a problem (25 percent), and women in Western were most likely to do so (41 percent).

Thirty-eight percent of women in urban areas reported that they did not deliver in a health facility because of a short labour interval, as compared with 25 percent of women in rural areas. Lusaka had the highest proportion of women who cited this reason (37 percent), while Muchinga had the lowest (21 percent).



Table 9.8 Reasons for not delivering in a health facility

Among last live births not delivered in a health facility, percentage whose mothers cite specific reasons for not delivering in a facility, according to background characteristics, Zambia 2013-14

Background characteristic	Cost too much	Facility not open	Too far/ no transportation	Don't trust facility/poor quality service	No female provider at facility	Husband/ family did not allow	Short labour	Not necessary	Not customary	Other	Total number of births
<b>Mother's age at birth</b>											
<20	3.4	0.8	32.1	0.4	1.2	0.1	21.0	0.8	2.0	4.3	651
20-34	3.0	1.0	29.4	0.2	0.7	0.5	25.6	0.7	3.3	4.6	2,878
35-49	3.6	1.3	40.8	0.6	0.4	0.5	36.4	1.9	5.2	3.3	790
<b>Birth order</b>											
1	2.7	0.4	28.0	0.5	0.5	0.4	20.8	0.4	1.4	4.4	533
2-3	3.2	1.4	30.1	0.3	1.0	0.3	26.3	0.4	3.8	3.5	1,306
4-5	2.7	1.0	30.9	0.2	0.6	0.7	26.3	0.7	3.0	5.0	1,082
6+	3.7	0.9	35.7	0.3	0.5	0.5	30.2	1.8	4.4	4.5	1,398
<b>Residence</b>											
Urban	3.0	0.3	27.4	0.7	0.0	0.2	38.1	2.8	1.1	3.0	494
Rural	3.2	1.1	32.4	0.3	0.8	0.5	25.4	0.7	3.8	4.5	3,825
<b>Province</b>											
Central	6.0	0.8	34.9	0.2	0.4	0.0	22.5	3.0	3.2	3.7	676
Copperbelt	3.5	1.1	35.8	0.2	0.4	0.0	28.5	2.1	1.5	3.5	302
Eastern	0.2	1.3	26.6	0.2	0.1	0.8	25.4	0.5	1.7	7.1	507
Luapula	1.2	2.1	25.2	1.2	0.4	0.2	28.2	0.6	1.0	3.6	373
Lusaka	1.6	0.0	32.2	1.2	0.0	0.0	37.4	2.6	1.1	2.4	192
Muchinga	2.6	0.4	37.3	0.3	0.7	0.3	20.8	0.0	1.5	5.0	320
Northern	3.1	1.7	28.4	0.5	1.3	1.2	22.2	0.6	10.2	4.1	659
North Western	3.8	2.2	27.3	0.2	1.3	2.5	29.7	0.0	3.6	2.2	168
Southern	4.4	0.4	32.2	0.0	1.3	0.0	35.4	0.0	3.2	4.5	799
Western	2.4	0.3	40.7	0.2	0.3	0.6	21.8	0.0	1.7	4.4	325
<b>Mother's education</b>											
No education	4.4	1.5	33.9	0.2	0.0	0.6	21.8	2.1	3.9	5.6	730
Primary	3.0	1.0	31.2	0.3	0.8	0.4	26.6	0.8	3.6	4.0	2,962
Secondary	2.6	0.5	32.4	0.7	1.1	0.6	33.6	0.3	2.4	4.2	615
<b>Wealth quintile</b>											
Lowest	3.1	1.8	32.7	0.4	0.5	0.8	21.5	1.1	3.6	4.3	1,616
Second	3.5	0.5	30.0	0.3	0.8	0.3	27.0	0.6	3.0	4.4	1,292
Middle	3.4	0.8	33.9	0.3	1.0	0.3	30.0	0.2	4.3	4.9	947
Fourth	2.6	0.3	29.0	0.2	0.7	0.1	39.1	3.3	2.9	2.3	373
Highest	0.0	0.0	33.2	0.0	0.0	0.0	38.1	0.3	2.0	4.4	90
Total	3.2	1.0	31.9	0.3	0.7	0.5	26.9	0.9	3.5	4.3	4,318

Note: Total includes 12 women with more than a secondary education who are not shown separately.

## 9.8 POSTNATAL CARE

The postpartum period is particularly important for women, as during this period they may develop serious, life-threatening complications. There is evidence that a large proportion of maternal and neonatal deaths occur during the postpartum period, with postpartum haemorrhage being an important cause. A postnatal care visit is an ideal time to educate a new mother on how to care for herself and her newborn. Therefore, Zambia's safe motherhood guidelines recommend that women receive at least four postnatal checkups, the first within six hours of delivery, the second on the second day following delivery, the third on the sixth day following delivery, and the last within six weeks after delivery (MoH, 2011).

### 9.8.1 Timing of First Postnatal Checkup for the Mother

Table 9.9 shows that in the two years preceding the survey, 63 percent of women received postnatal care within the critical first two days following delivery. Forty-eight percent of women received postnatal care within four hours of delivery, 14 percent received care within 4-23 hours, and 2 percent were seen 1-2 days following delivery. Differences by mother's age, birth order, place of residence, wealth quintile, and education were pronounced and were similar to the differences discussed for delivery care. Twenty-eight percent of women did not receive a postnatal checkup within the recommended time.

Table 9.9 Timing of first postnatal checkup for the mother

Among women age 15-49 giving birth in the two years preceding the survey, the percent distribution of the mother's first postnatal checkup for the last live birth by time after delivery, and the percentage of women with a live birth in the two years preceding the survey who received a postnatal checkup in the first two days after giving birth, according to background characteristics, Zambia 2013-14

Background characteristic	Time after delivery of mother's first postnatal checkup						No postnatal checkup <sup>1</sup>	Total	Percentage of women with a postnatal checkup in the first two days after birth	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/missing				
<b>Mother's age at birth</b>										
<20	48.6	13.6	1.7	2.8	2.2	4.1	27.0	100.0	63.9	948
20-34	49.5	13.7	1.7	2.2	2.7	3.4	26.8	100.0	65.0	3,369
35-49	40.5	12.9	2.7	1.7	1.9	3.4	36.9	100.0	56.1	757
<b>Birth order</b>										
1	55.6	14.5	1.9	2.9	2.4	3.7	19.0	100.0	71.9	1,119
2-3	52.4	13.5	1.6	1.9	2.5	3.2	24.8	100.0	67.5	1,701
4-5	46.1	12.0	1.6	1.8	3.0	4.0	31.5	100.0	59.8	1,168
6+	35.3	14.4	2.6	2.4	2.1	3.3	39.9	100.0	52.2	1,086
<b>Place of delivery</b>										
Health facility	61.5	17.6	1.7	1.6	2.3	4.7	10.6	100.0	80.8	3,671
Elsewhere	12.7	3.0	2.4	3.7	3.1	0.6	74.6	100.0	18.0	1,401
<b>Residence</b>										
Urban	64.3	15.4	1.7	2.1	3.1	3.0	10.5	100.0	81.4	1,711
Rural	39.7	12.6	2.0	2.3	2.2	3.8	37.4	100.0	54.3	3,363
<b>Province</b>										
Central	33.8	8.1	2.5	6.1	7.2	2.8	39.5	100.0	44.4	512
Copperbelt	68.9	11.1	1.6	0.7	1.1	2.6	14.0	100.0	81.6	654
Eastern	50.6	18.9	1.8	3.8	1.9	5.3	17.8	100.0	71.2	641
Luapula	46.6	7.0	0.6	0.4	1.0	11.0	33.3	100.0	54.2	451
Lusaka	64.9	15.7	2.4	2.2	5.1	3.0	6.7	100.0	83.0	742
Muchinga	33.2	15.4	3.3	0.9	2.4	1.3	43.5	100.0	52.0	305
Northern	40.2	7.2	1.8	0.6	0.4	1.4	48.4	100.0	49.2	480
North Western	42.5	28.8	4.1	1.9	3.4	0.3	19.1	100.0	75.3	262
Southern	39.4	18.6	0.4	2.4	0.9	1.8	36.5	100.0	58.4	690
Western	34.8	6.0	2.3	2.3	1.1	5.4	48.2	100.0	43.1	338
<b>Education</b>										
No education	35.4	10.7	2.1	1.8	3.0	4.2	42.9	100.0	48.1	533
Primary	43.6	13.5	2.0	2.2	1.9	3.9	33.0	100.0	59.1	2,744
Secondary	57.1	14.4	1.5	2.5	3.3	2.9	18.3	100.0	73.0	1,606
More than secondary	69.7	16.0	2.9	1.5	2.6	2.4	4.9	100.0	88.6	191
<b>Wealth quintile</b>										
Lowest	33.0	12.0	2.4	1.7	1.6	4.4	44.9	100.0	47.4	1,247
Second	41.5	11.9	2.0	2.2	2.1	3.5	36.8	100.0	55.4	1,169
Middle	48.1	15.1	1.6	2.9	3.2	2.7	26.4	100.0	64.8	1,028
Fourth	62.2	14.7	1.2	2.4	3.5	3.5	12.6	100.0	78.1	899
Highest	66.3	15.3	2.0	2.0	2.6	3.2	8.6	100.0	83.6	730
<b>Total</b>	<b>48.0</b>	<b>13.6</b>	<b>1.9</b>	<b>2.2</b>	<b>2.5</b>	<b>3.5</b>	<b>28.3</b>	<b>100.0</b>	<b>63.4</b>	<b>5,074</b>

Note: Total includes 3 women for whom information is missing on place of delivery.

<sup>1</sup> Includes women who received a checkup after 41 days

## 9.8.2 Provider of First Postnatal Checkup for the Mother

The skill level of the provider who performs the first postnatal checkup also has important implications for maternal and neonatal health. Table 9.10 shows that 53 percent of women received postnatal care from a nurse or midwife, 5 percent from a doctor, and 1 percent from a clinical officer. Three percent of women received postnatal care from a traditional birth attendant. Mothers with first-order births, those who delivered in a health facility, those with more than a secondary education, those in urban areas, and those from the wealthiest households were more likely to have received postnatal care from a skilled provider. The percentage of women receiving postnatal care from a skilled provider was highest in Lusaka and lowest in Central.

Table 9.10 Type of provider of first postnatal checkup for the mother

Among women age 15-49 giving birth in the two years preceding the survey, the percent distribution by type of provider of the mother's first postnatal health check in the two days after the last live birth, according to background characteristics, Zambia 2013-14

Background characteristic	Type of health provider of mother's first postnatal checkup					No postnatal checkup in the first two days after birth	Total	Number of women
	Doctor	Clinical officer	Nurse/midwife	Traditional birth attendant	Community health worker			
<b>Mother's age at birth</b>								
<20	4.6	1.2	54.8	2.8	0.4	36.1	100.0	948
20-34	5.6	1.3	54.3	3.3	0.4	35.0	100.0	3,369
35-49	3.9	0.6	47.2	3.8	0.6	43.9	100.0	757
<b>Birth order</b>								
1	7.7	1.4	60.8	1.8	0.2	28.1	100.0	1,119
2-3	6.0	1.2	56.5	3.3	0.5	32.5	100.0	1,701
4-5	4.1	1.2	50.4	3.7	0.3	40.2	100.0	1,168
6+	2.5	1.1	43.8	4.3	0.6	47.8	100.0	1,086
<b>Place of delivery</b>								
Health facility	7.0	1.6	70.4	1.6	0.1	19.2	100.0	3,671
Elsewhere	0.4	0.3	8.7	7.6	1.1	82.0	100.0	1,401
<b>Residence</b>								
Urban	10.3	1.1	69.1	0.9	0.0	18.6	100.0	1,711
Rural	2.6	1.3	45.3	4.5	0.6	45.7	100.0	3,363
<b>Province</b>								
Central	2.0	1.3	35.2	5.6	0.3	55.6	100.0	512
Copperbelt	12.4	0.6	66.2	2.4	0.0	18.4	100.0	654
Eastern	3.2	2.1	60.7	4.7	0.5	28.8	100.0	641
Luapula	1.4	0.8	46.4	5.5	0.0	45.8	100.0	451
Lusaka	10.0	1.8	70.3	0.9	0.0	17.0	100.0	742
Muchinga	1.9	1.9	43.0	5.2	0.0	48.0	100.0	305
Northern	2.2	1.6	40.3	4.7	0.4	50.8	100.0	480
North Western	2.5	0.3	69.3	2.5	0.7	24.7	100.0	262
Southern	5.3	0.6	48.7	2.0	1.8	41.6	100.0	690
Western	3.4	0.5	39.0	0.2	0.0	56.9	100.0	338
<b>Education</b>								
No education	1.3	0.6	42.8	3.0	0.5	51.9	100.0	533
Primary	3.5	1.1	49.7	4.2	0.5	40.9	100.0	2,744
Secondary	6.9	1.7	62.0	2.1	0.3	27.0	100.0	1,606
More than secondary	26.0	0.1	62.1	0.3	0.0	11.4	100.0	191
<b>Wealth quintile</b>								
Lowest	1.4	0.7	40.0	4.8	0.5	52.6	100.0	1,247
Second	2.8	0.9	46.3	4.8	0.6	44.6	100.0	1,169
Middle	4.5	1.9	54.0	3.8	0.6	35.2	100.0	1,028
Fourth	5.5	2.0	69.7	0.8	0.1	21.9	100.0	899
Highest	15.9	0.9	66.5	0.4	0.0	16.4	100.0	730
Total	5.2	1.2	53.3	3.3	0.4	36.6	100.0	5,074

Note: Total includes 3 women for whom information is missing on place of delivery.

## 9.9 NEWBORN CARE

Newborn care is essential to reduce neonatal problems and death. To identify, manage, and prevent complications, the government of Zambia recommends at least three postnatal checkups for newborns, the first within six hours of delivery, the second six days after delivery, and the third six weeks after delivery (MoH, 2011).

### 9.9.1 Timing of First Postnatal Checkup for the Newborn

Table 9.11 shows the percent distribution of most recent births in the two years preceding the survey by timing of the first postnatal checkup after birth, along with the percentage of newborns with a postnatal checkup in the first two days after birth, according to background characteristics.

Sixteen percent of newborns were taken for their first postnatal checkup within the critical first two days after birth. Five percent had a postnatal checkup less than 1 hour after birth, 6 percent between 1 and 3 hours, and 3 percent between 4 and 23 hours. Fourteen percent of newborns had a postnatal visit within 24 hours after birth.

Table 9.11 Timing of first postnatal checkpoint for the newborn

Percent distribution of last births in the two years preceding the survey by time after birth of first postnatal checkpoint, and the percentage of births with a postnatal checkpoint in the first two days after birth, according to background characteristics, Zambia 2013-14

Background characteristic	Time after birth of newborn's first postnatal checkpoint						No postnatal checkpoint <sup>1</sup>	Total	Percentage of births with a postnatal checkpoint in the first two days after birth	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know/missing				
<b>Mother's age at birth</b>										
<20	4.8	7.5	3.4	0.6	8.5	1.1	74.2	100.0	16.3	948
20-34	5.1	6.7	2.9	1.6	8.4	0.3	75.1	100.0	16.3	3,369
35-49	4.9	3.3	2.3	1.8	8.0	0.0	79.5	100.0	12.4	757
<b>Birth order</b>										
1	5.3	9.2	3.0	1.5	9.4	1.0	70.6	100.0	19.0	1,119
2-3	5.2	6.3	3.0	1.2	8.3	0.3	75.6	100.0	15.8	1,701
4-5	5.0	6.3	2.4	0.8	7.5	0.2	77.8	100.0	14.5	1,168
6+	4.4	3.4	3.2	2.5	8.3	0.1	78.2	100.0	13.5	1,086
<b>Place of delivery</b>										
Health facility	6.5	7.8	3.5	0.8	8.8	0.5	72.0	100.0	18.6	3,671
Elsewhere	1.1	2.5	1.4	3.1	7.2	0.0	84.8	100.0	8.0	1,401
<b>Residence</b>										
Urban	7.6	7.8	3.9	0.7	8.8	0.3	70.8	100.0	20.0	1,711
Rural	3.7	5.6	2.4	1.8	8.1	0.4	78.0	100.0	13.5	3,363
<b>Province</b>										
Central	11.9	5.0	1.0	3.8	9.9	0.5	68.0	100.0	21.7	512
Copperbelt	8.6	7.7	6.0	1.1	7.2	0.6	68.7	100.0	23.5	654
Eastern	6.5	13.2	7.0	1.8	10.6	0.7	60.1	100.0	28.6	641
Luapula	0.3	2.1	0.9	0.8	10.1	0.9	84.8	100.0	4.1	451
Lusaka	6.8	10.5	3.0	0.4	6.9	0.0	72.4	100.0	20.6	742
Muchinga	4.3	4.2	2.6	1.6	7.1	0.4	79.9	100.0	12.7	305
Northern	2.8	3.7	1.9	1.3	7.1	0.0	83.1	100.0	9.7	480
North Western	0.4	0.9	1.0	3.1	15.7	0.3	78.6	100.0	5.4	262
Southern	0.4	2.2	0.4	0.8	3.6	0.2	92.3	100.0	3.8	690
Western	3.8	7.5	2.4	1.3	11.6	0.3	73.1	100.0	15.0	338
<b>Mother's education</b>										
No education	4.9	7.6	2.1	1.7	7.5	0.0	76.2	100.0	16.3	533
Primary	4.1	5.9	2.6	1.4	7.9	0.4	77.6	100.0	14.0	2,744
Secondary	6.5	6.6	3.2	1.5	8.6	0.5	73.1	100.0	17.8	1,606
More than secondary	6.6	7.3	5.7	1.0	14.4	0.0	65.0	100.0	20.6	191
<b>Wealth quintile</b>										
Lowest	2.5	4.5	3.5	1.9	6.8	0.4	80.4	100.0	12.4	1,247
Second	4.5	5.4	1.6	1.5	8.3	0.5	78.4	100.0	12.9	1,169
Middle	5.7	6.5	2.5	1.9	9.7	0.4	73.4	100.0	16.6	1,028
Fourth	6.8	9.2	2.5	1.0	8.7	0.6	71.2	100.0	19.4	899
Highest	6.9	7.3	4.9	0.8	8.9	0.0	71.2	100.0	19.9	730
<b>Total</b>	<b>5.0</b>	<b>6.3</b>	<b>2.9</b>	<b>1.5</b>	<b>8.4</b>	<b>0.4</b>	<b>75.6</b>	<b>100.0</b>	<b>15.7</b>	<b>5,074</b>

Note: Total includes 3 births for whom information is missing on place of delivery.

<sup>1</sup> Includes newborns who received a checkpoint after the first week

The majority of newborns (76 percent) did not receive a postnatal checkpoint. Newborns delivered outside of a health facility were less likely to receive a postnatal checkpoint within the first week after birth (85 percent) than newborns delivered in a health facility (72 percent). Similarly, postnatal checkpoints were less likely for births to mothers age 35-49, births of order two and higher and rural births.

## 9.9.2 Provider of First Postnatal Checkpoint for the Newborn

Table 9.12 presents the percent distribution of most recent births in the two years preceding the survey by type of provider of newborn care during the first two days after delivery, according to background characteristics.

The findings show that 13 percent of newborns received postnatal care from a nurse or midwife in the two days following birth, while 1 percent received care from a doctor or clinical officer. An additional 1 percent of newborns received care from a traditional birth attendant. The distribution of newborns who received care from a nurse or midwife by background characteristics is similar to the pattern described for providers of mothers' postnatal checkpoints.

Table 9.12 Type of provider of first postnatal checkup for the newborn

Percent distribution of last births in the two years preceding the survey by type of provider of the newborn's first postnatal health check during the two days after the last live birth, according to background characteristics, Zambia 2013-14

Background characteristic	Type of health provider of newborn's first postnatal checkup					No postnatal checkup in the first two days after birth	Total	Number of births
	Doctor	Clinical officer	Nurse/midwife	Traditional birth attendant	Community health worker			
<b>Mother's age at birth</b>								
<20	0.7	0.1	14.0	1.4	0.2	83.7	100.0	948
20-34	0.7	0.5	13.9	1.0	0.2	83.7	100.0	3,369
35-49	0.7	0.2	10.4	1.1	0.1	87.6	100.0	757
<b>Birth order</b>								
1	1.0	0.3	16.3	0.8	0.4	81.0	100.0	1,119
2-3	0.5	0.5	13.8	1.0	0.0	84.2	100.0	1,701
4-5	0.6	0.2	12.8	0.9	0.0	85.5	100.0	1,168
6+	0.6	0.5	10.3	1.8	0.3	86.5	100.0	1,086
<b>Place of delivery</b>								
Health facility	0.9	0.4	16.7	0.5	0.1	81.4	100.0	3,671
Elsewhere	0.1	0.3	4.6	2.7	0.4	92.0	100.0	1,401
<b>Residence</b>								
Urban	1.2	0.2	18.2	0.3	0.2	80.0	100.0	1,711
Rural	0.4	0.5	10.9	1.5	0.2	86.5	100.0	3,363
<b>Province</b>								
Central	0.1	1.0	18.3	2.1	0.2	78.3	100.0	512
Copperbelt	1.3	0.0	20.9	1.3	0.0	76.5	100.0	654
Eastern	1.2	0.8	23.2	3.1	0.3	71.4	100.0	641
Luapula	0.0	0.0	3.4	0.7	0.0	95.9	100.0	451
Lusaka	1.2	0.4	18.6	0.1	0.3	79.4	100.0	742
Muchinga	1.0	0.9	10.0	0.9	0.0	87.3	100.0	305
Northern	0.2	0.8	8.3	0.4	0.0	90.3	100.0	480
North Western	0.5	0.0	3.3	1.3	0.3	94.6	100.0	262
Southern	0.2	0.0	2.6	0.7	0.3	96.2	100.0	690
Western	0.4	0.0	14.5	0.0	0.0	85.0	100.0	338
<b>Mother's education</b>								
No education	0.8	0.4	13.5	1.3	0.3	83.7	100.0	533
Primary	0.5	0.4	11.7	1.2	0.1	86.0	100.0	2,744
Secondary	0.3	0.4	15.8	1.0	0.3	82.2	100.0	1,606
More than secondary	4.6	0.0	16.0	0.0	0.0	79.4	100.0	191
<b>Wealth quintile</b>								
Lowest	0.1	0.2	10.7	1.2	0.1	87.6	100.0	1,247
Second	0.5	0.3	10.9	1.2	0.0	87.1	100.0	1,169
Middle	0.4	0.9	12.4	2.5	0.3	83.4	100.0	1,028
Fourth	0.9	0.3	17.9	0.2	0.3	80.6	100.0	899
Highest	1.9	0.1	17.7	0.0	0.1	80.1	100.0	730
<b>Total</b>	0.7	0.4	13.4	1.1	0.2	84.3	100.0	5,074

Note: Total includes 3 births for whom information is missing on place of delivery.

## 9.10 PROBLEMS IN ACCESSING HEALTH CARE

Many factors can prevent women from obtaining medical advice or treatment for themselves when they are sick. Information on such factors is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and at the time of delivery.

In the 2013-14 ZDHS, women were asked whether or not each of the following factors would be a significant problem for them in seeking medical care: getting permission to go for treatment, getting money for treatment, distance to a health facility, having to take transport, not wanting to go alone, concern that there may not be a female health provider, concern that there may not be any health provider, concern that there may not be drugs available for treatment, and concern about rude attitudes among health providers. The majority of women (68 percent) reported that at least one of these problems would pose a barrier in seeking health care for themselves when they are sick (Table 9.13). About two in every five women (41 percent) were concerned that there might be no drugs available. In addition, one in every three women reported that the distance to the health facility (37 percent), having to take transport (34 percent), and rude attitudes among health providers (34 percent) were possible problems in accessing health care. Only 3 percent of women perceived getting permission to go for treatment as a problem.

Table 9.13 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Zambia 2013-14

Background characteristic	Problems in accessing health care										Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Not wanting to go alone	Concern that there may not be a female health provider	Concern that there may not be any health provider	Concern that there may be no drugs available	Rude attitude of health provider	At least one problem accessing health care	
<b>Age</b>											
15-19	3.4	22.0	33.4	28.8	18.9	11.3	26.9	38.8	31.8	65.2	3,625
20-34	2.6	23.4	36.0	33.0	16.2	9.8	28.8	42.1	35.0	67.6	8,295
35-49	2.6	27.5	40.7	38.2	17.5	10.2	27.8	39.4	32.7	69.1	4,491
<b>Number of living children</b>											
0	3.2	19.5	28.8	25.4	17.2	11.3	27.3	39.3	34.0	63.3	4,112
1-2	2.1	21.0	32.4	28.5	14.9	8.9	27.7	40.5	33.2	64.5	4,821
3-4	2.8	25.8	37.4	34.4	14.9	9.3	28.0	40.8	34.2	67.4	3,750
5+	3.1	31.9	50.5	47.9	22.3	11.6	29.6	42.1	33.4	76.1	3,727
<b>Marital status</b>											
Never married	3.0	20.2	28.3	24.9	15.9	10.7	25.7	38.2	32.2	62.3	4,572
Married or living together	2.8	25.2	40.6	37.2	18.2	10.3	29.7	41.8	34.7	69.8	9,859
Divorced/separated/widowed	1.8	28.7	36.9	34.9	15.1	8.9	25.7	40.5	31.9	68.1	1,980
<b>Employed last 12 months</b>											
Not employed	2.9	23.6	32.7	29.4	14.5	8.9	24.9	37.9	31.8	63.5	7,863
Employed for cash	2.4	19.7	33.0	30.2	14.1	9.2	28.6	41.7	36.2	66.0	5,452
Employed not for cash	3.0	33.9	53.8	50.0	29.5	15.4	35.4	45.7	33.8	80.4	3,055
<b>Residence</b>											
Urban	2.1	11.9	12.9	11.4	7.2	8.5	24.4	39.5	35.1	53.3	7,585
Rural	3.3	34.8	57.2	52.4	25.7	11.7	31.3	41.6	32.5	79.7	8,826
<b>Province</b>											
Central	3.6	22.5	46.5	40.7	19.3	7.7	11.8	19.7	14.5	61.4	1,467
Copperbelt	2.2	11.9	21.0	17.3	9.3	6.0	10.6	29.1	25.7	50.1	2,836
Eastern	1.5	39.0	48.1	42.4	22.5	9.2	49.0	57.1	47.6	83.6	1,930
Luapula	2.1	19.1	47.8	46.2	18.9	7.9	23.2	41.5	36.2	77.8	1,143
Lusaka	2.5	11.8	12.2	11.6	7.5	11.8	34.9	47.0	41.8	56.4	3,266
Muchinga	5.7	39.0	55.0	55.5	33.1	25.9	54.6	65.8	43.6	87.9	868
Northern	4.9	20.7	51.6	51.3	22.5	15.8	30.9	36.2	25.6	79.6	1,200
North Western	4.4	41.3	58.1	53.2	20.0	7.9	15.7	29.1	10.6	75.8	713
Southern	1.4	40.0	50.9	45.9	24.4	7.8	28.7	44.0	41.6	77.9	2,007
Western	3.5	27.0	35.4	28.6	18.8	11.7	26.2	35.1	29.5	59.9	980
<b>Education</b>											
No education	4.2	37.2	52.9	48.7	25.4	10.7	28.0	38.3	32.8	78.1	1,375
Primary	3.1	29.4	45.5	42.4	20.4	11.0	29.7	41.7	32.6	72.6	7,685
Secondary	2.2	17.7	26.0	22.6	12.8	9.5	26.5	40.4	34.8	61.5	6,521
More than secondary	1.5	6.6	13.7	11.0	7.7	8.1	26.6	36.7	36.2	50.0	830
<b>Wealth quintile</b>											
Lowest	3.5	42.0	62.4	59.5	30.8	13.3	33.6	44.1	31.3	83.7	2,859
Second	3.7	34.5	56.6	52.9	23.5	11.5	28.8	39.0	31.3	79.9	2,861
Middle	2.6	27.7	44.5	40.2	19.0	9.7	27.2	39.3	32.9	70.5	3,077
Fourth	2.4	16.9	23.3	19.0	9.6	8.3	26.9	42.7	35.9	60.3	3,510
Highest	2.0	8.4	10.7	9.1	8.3	9.2	25.5	38.7	35.6	51.5	4,103
Total	2.8	24.2	36.7	33.5	17.2	10.2	28.1	40.6	33.7	67.5	16,411

Note: Total includes 41 women with information missing on employment in last 12 months.

## 9.11 KNOWLEDGE OF FISTULA AND REPORTING OF FISTULA-LIKE SYMPTOMS

The 2013-14 ZDHS included a series of questions on fistula, a condition that develops when there is damage to the tissues of the vagina, bladder, and/or rectum during prolonged obstructed labour, resulting in the formation of an opening between the bladder or rectum and the vagina through which urine and/or faeces pass uncontrollably. Women who develop fistula are often socially rejected.

All women age 15-49 were asked if they had experienced fistula-like symptoms. Women who mentioned that they experience uncontrollable passage of urine and faeces through the vagina were

considered to have fistulae. Women who did not experience fistula-like symptoms were asked if they had heard of the condition. Table 9.14 shows that one in three (36 percent) women age 15-49 had heard of fistula. Knowledge of fistula increases with age and is highest among women age 45-49 (49 percent). Rural women, highly educated women, and women in the lowest wealth quintile are most likely to be aware of fistula. Also, knowledge of the condition is higher among ever-married than never-married women.

Table 9.14 Knowledge of fistula and experience of fistula-like symptoms

Percentage of all women who have heard of fistula-like symptoms, and percentage reporting fistula-like symptoms, according to age group and socioeconomic characteristics, Zambia 2013-14

Background characteristic	Percentage who have heard of fistula symptoms	Percentage who report ever experiencing symptoms consistent with fistula	Number of women
<b>Age</b>			
15-19	19.2	0.2	3,625
20-24	31.6	0.4	3,006
25-29	40.6	0.6	2,813
30-34	43.0	0.6	2,475
35-39	44.4	0.8	2,009
40-44	44.5	0.5	1,464
45-49	49.3	0.8	1,018
<b>Marital status</b>			
Never married	21.1	0.2	4,572
Married or living together	41.6	0.7	9,859
Divorced/separated/widowed	42.1	0.5	1,980
<b>Residence</b>			
Urban	33.9	0.4	7,585
Rural	37.7	0.6	8,826
<b>Province</b>			
Central	32.8	0.0	1,467
Copperbelt	30.6	0.6	2,836
Eastern	50.9	0.4	1,930
Luapula	45.3	0.8	1,143
Lusaka	31.7	0.2	3,266
Muchinga	41.3	1.3	868
Northern	31.6	1.1	1,200
North Western	40.0	0.3	713
Southern	31.4	0.8	2,007
Western	36.9	0.3	980
<b>Education</b>			
No education	37.9	0.6	1,375
Primary	37.9	0.6	7,685
Secondary	31.9	0.4	6,521
More than secondary	45.7	0.4	830
<b>Wealth quintile</b>			
Lowest	39.1	0.6	2,859
Second	38.4	0.7	2,861
Middle	35.7	0.6	3,077
Fourth	34.5	0.5	3,510
Highest	33.4	0.3	4,103
<b>Total</b>	<b>35.9</b>	<b>0.5</b>	<b>16,411</b>

Table 9.14 further shows that less than 1 percent of women reported experiencing fistula-like symptoms. Due to the small numbers of women who reported fistula-like symptoms, the data described below are not tabulated. Women who reported experiencing fistula-like symptoms were asked a series of additional questions. Three-quarters of these women reported that their symptoms began following a delivery, 3 percent reported that the symptoms were the result of sexual violence, and less than 2 percent cited the problem as resulting from pelvic surgery. The remaining women cited other unspecified causes or did not know what caused their symptoms. One in three women with obstetric fistula-like problems reported that their symptoms began after normal delivery of a live-born infant, 2 percent reported that they began after a normal delivery resulting in a stillbirth, 47 percent reported that they began after a very difficult labour that resulted in a live birth, and 6 percent reported that they began after a very difficult labour that resulted in a stillbirth. Because of the very small numbers of women with fistula-like symptoms, it was not possible to carry out a further breakdown and analysis by treatment sought and timing of treatment.





**Key Findings**

- Sixty-eight percent of children age 12-23 months are fully immunised.
- Four percent of children under age 5 showed symptoms of acute respiratory infection in the two weeks before the survey, and 51 percent of these children received antibiotics.
- Twenty-one percent of children under age 5 had a fever in the two weeks before the survey, and 72 percent of them were taken to a health facility or provider for advice or treatment.
- Sixteen percent of children under age 5 had diarrhoea in the two weeks before the survey.
- Sixty-six percent of children with diarrhoea were taken to a health facility or provider for advice or treatment.

**Z**ambian children under age 5 face multiple obstacles with respect to their survival and development. The majority of neonatal deaths in Zambia are due to sepsis, prematurity, and asphyxia. Beyond the neonatal period, pneumonia, malaria, and diarrhoea are leading contributors to the high under-5 mortality rate (MoH, 2012a).

Exposure to infectious diseases, malnutrition, poor hygiene and sanitation, and unhealthy environments compromises early childhood development. In addition, a mother's nutritional status during pregnancy and her general well-being impact the health of her child during pregnancy as well as after delivery.

The Integrated Management of Childhood Illness (IMCI) strategy was developed by UNICEF and WHO in the early 1990s to provide a holistic approach to child health. The three main components of this strategy are improving the case management skills of health care staff; improving overall health systems, and improving family and community practices related to home management of illnesses. In addition to this strategy, the Child Health Unit at the Zambian Ministry of Health (MoH) launched several child survival interventions to improve the health of children. The Expanded Programme on Immunisation (EPI) was initiated in the late 1970s, following the eradication of smallpox; the Control of Diarrhoeal Diseases (CDD) Programme started in 1986; and the Control of Acute Respiratory Infections (ARI) Programme was integrated into the CDD in 1989. The paediatric HIV programme was introduced in 2010 in order to strengthen implementation of the fourth prong of the comprehensive strategy to prevent mother-to-child transmission of HIV. Other units, including the Malaria, Nutrition, and Integrated Reproductive Health Units, have also contributed to improved child health by implementing interventions such as malaria prevention initiatives, management of acute malnutrition, and programs focusing on exclusive breastfeeding and infant and young child feeding practices. Over the past decade, implementation of these child survival interventions has contributed to the country's notable reductions in under-5 mortality (MCDMCH, 2013a).

This chapter presents findings on several areas of importance relating to child health, including infant birth weight and size at birth; childhood vaccination coverage by timing, source of information on coverage, and background characteristics; prevalence and treatment of ARI symptoms (a proxy for pneumonia); prevalence and treatment of fever; and prevalence and treatment of diarrhoea, feeding practices during diarrhoea, knowledge of oral rehydration salt (ORS) packets, and disposal of children's stools.

Information on birth weight or size at birth is important for the design and implementation of programmes aimed at reducing neonatal and infant mortality. Vaccination coverage information focuses on the 12- to 23-month age group (i.e., the typical age by which children should have received all basic vaccinations). Data on differences in vaccination coverage between subgroups of the population aid in programme planning. Data on treatment practices and contact with health services among children ill with the three most important childhood illnesses (acute respiratory infection, fever, and diarrhoea) help in the assessment of national programmes aimed at reducing the mortality impact of these illnesses. Information is provided on the prevalence and treatment of ARIs, including treatment with antibiotics, and the prevalence of fever and its treatment with antimalarial drugs and antibiotics. Data on the treatment of diarrhoeal disease with oral rehydration therapy (ORT) and increased fluids help in the assessment of programmes that recommend such treatments. Because sanitary practices can help prevent and reduce the severity of diarrhoeal disease, information is also provided on disposal of children's faecal matter. The information on child health presented in this chapter pertains only to children born during the five years preceding the survey unless otherwise specified.

## **10.1 CHILD'S WEIGHT AND SIZE AT BIRTH**

A child's birth weight or size at birth is an important indicator of the child's vulnerability to the risk of childhood illnesses and chances of survival. Children whose birth weight is less than 2.5 kilograms, or children reported to be "very small" or "smaller than average," are considered to have a higher than average risk of early childhood death. For births in the five years preceding the survey, information on birth weight was recorded if it was available from either a written record or the mother's recall. Since birth weight may not be known for many babies, the mother's estimate of the baby's size at birth was also obtained. Such estimates, although subjective, can be a useful proxy for the weight of the child.

Table 10.1 presents information on children's weight and size at birth according to background characteristics. Sixty-six percent of children born in the past five years were weighed at birth, an improvement relative to the figure recorded in the 2007 survey (48 percent). This change reflects an increase in institutional deliveries, as birth weights of children delivered in a health facility are more likely to be recorded. Among children born in the five years before the survey with a reported birth weight, 9 percent were of low birth weight (less than 2.5 kg).

Children of the youngest mothers (less than age 20) were more likely to be of low birth weight (13 percent) than children of mothers age 20-49 (8-9 percent). Also, low birth weight was more common among children of birth order one than among children of higher birth orders. One in ten children in Copperbelt, Lusaka, and Southern had low birth weights.

In the absence of birth weight, a mother's subjective assessment of the size of her baby at birth may be a useful proxy. Two percent of children were reported to be very small at birth, 9 percent were reported to be smaller than average, and 87 percent were reported to be average or larger in size.

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the five years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the five years preceding the survey that have a reported birth weight, and among live births in the five years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Zambia 2013-14

Background characteristic	Percent distribution of all live births by size of child at birth					Percentage of all births that have a reported birth weight <sup>1</sup>	Number of births	Births with a reported birth weight <sup>1</sup>	
	Very small	Smaller than average	Average or larger	Don't know/missing	Total			Percentage less than 2.5 kg	Number of births
<b>Mother's age at birth</b>									
<20	2.6	10.7	84.7	2.0	100.0	69.3	2,480	12.9	1,720
20-34	1.7	8.6	88.1	1.6	100.0	67.0	8,997	8.3	6,031
35-49	2.0	9.5	86.4	2.2	100.0	57.7	1,906	8.6	1,101
<b>Birth order</b>									
1	2.7	11.4	84.3	1.7	100.0	76.9	2,865	12.7	2,203
2-3	1.9	8.4	88.4	1.3	100.0	69.9	4,475	8.3	3,128
4-5	1.3	8.5	88.3	2.0	100.0	63.6	3,065	8.2	1,949
6+	1.9	8.8	87.1	2.3	100.0	52.8	2,977	7.4	1,571
<b>Mother's smoking status</b>									
Smokes cigarettes/tobacco	(4.1)	(12.2)	(83.7)	(0.0)	100.0	(67.9)	53	(3.1)	36
Does not smoke	1.9	9.1	87.2	1.8	100.0	66.1	13,329	9.3	8,814
<b>Residence</b>									
Urban	1.8	8.0	89.2	1.0	100.0	89.6	4,574	10.1	4,100
Rural	1.9	9.7	86.2	2.1	100.0	53.9	8,809	8.5	4,750
<b>Province</b>									
Central	3.3	11.2	83.9	1.6	100.0	47.1	1,308	7.4	616
Copperbelt	2.0	7.3	90.3	0.4	100.0	84.8	1,732	10.3	1,470
Eastern	2.5	5.3	90.8	1.4	100.0	69.4	1,737	9.1	1,205
Luapula	0.7	7.7	90.6	1.0	100.0	59.2	1,189	8.5	704
Lusaka	1.5	7.8	89.0	1.7	100.0	93.3	1,961	10.3	1,829
Muchinga	3.2	11.1	85.2	0.5	100.0	50.4	815	8.7	411
Northern	1.2	14.0	78.1	6.6	100.0	42.0	1,270	8.5	534
North Western	1.0	10.3	85.0	3.7	100.0	77.0	670	6.9	516
Southern	1.3	8.5	89.3	1.0	100.0	57.5	1,842	10.0	1,059
Western	2.7	13.9	82.6	0.8	100.0	59.1	859	7.7	507
<b>Mother's education</b>									
No education	3.1	8.8	85.7	2.4	100.0	46.4	1,482	9.7	688
Primary	1.6	9.7	86.7	2.1	100.0	58.7	7,518	9.3	4,414
Secondary	2.0	9.1	87.9	0.9	100.0	84.0	3,912	9.5	3,287
More than secondary	2.0	2.2	94.7	1.1	100.0	98.1	470	6.5	462
<b>Wealth quintile</b>									
Lowest	2.3	10.9	83.8	3.0	100.0	45.3	3,223	10.0	1,459
Second	1.4	9.5	86.9	2.1	100.0	55.0	3,079	7.6	1,694
Middle	2.3	8.7	88.0	1.1	100.0	65.7	2,749	8.9	1,806
Fourth	1.8	8.1	88.5	1.5	100.0	85.3	2,357	10.3	2,010
Highest	1.5	7.5	90.4	0.5	100.0	95.3	1,974	9.4	1,882
<b>Total</b>	1.9	9.1	87.2	1.8	100.0	66.1	13,383	9.2	8,851

Note: Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Based on either a written record or the mother's recall

## 10.2 VACCINATION COVERAGE

The National Immunisation Programme (known at the time as the Universal Child Immunisation Programme) was initiated in the late 1970s and included all six recommended antigens (BCG; diphtheria, pertussis, and tetanus [DTP]; oral polio vaccine [OPV]; and measles). The tetravalent DTP-Hib vaccine was introduced in 2004, and this vaccine was later switched to a pentavalent (DTP-HepB-Hib) single injection. All children should receive the scheduled number of doses of BCG, DTP-HepB-Hib, OPV, and measles vaccines during their first year of life. Each of the vaccines in the routine immunisation schedule is provided free of cost in all public health facilities in Zambia (MoH, 2009).

Universal immunisation of children against the six vaccine-preventable diseases—tuberculosis, diphtheria, whooping cough, tetanus, polio, and measles—is crucial to reducing infant and child mortality. Data on differences in immunisation coverage among subgroups of the population are useful for programme planning and targeting resources to areas most in need. Additionally, information on immunisation coverage is important in monitoring and evaluating the Expanded Programme of Immunisation.

The 2013-14 ZDHS collected information on immunisation coverage for all living children born in the five years preceding the survey. According to WHO guidelines, children are considered fully immunised when they have received one dose of the vaccine against tuberculosis (BCG), three doses each of the DTP and polio vaccines, and one dose of measles vaccine. BCG is given at birth or at first clinical contact; DTP and polio require three doses at approximately age 6, 10, and 14 weeks; and the measles vaccine is given soon after age 9 months.

In the 2013-14 ZDHS, as in previous ZDHS surveys, information on immunisation coverage was collected in two ways: from immunisation cards shown to the interviewer and from mothers' reports. In instances where the cards were available, the interviewer copied the immunisation dates directly onto the questionnaire. When there was no immunisation card, or if a vaccine had not been recorded on the card as being administered, the respondent was asked to recall the specific vaccines given to her child.

Table 10.2 shows vaccination coverage among children age 12-23 months by source of information (i.e., vaccination record or mother's report). This is the youngest cohort of children who have reached the age by which they should be fully immunised. Fifty-eight percent of children had received all of the basic vaccinations by age 12 months. Overall, 68 percent of children age 12-23 months were fully immunised by the time of the survey. With regard to specific vaccines, 95 percent of children had received the BCG immunisation, and 85 percent had been immunised against measles. Coverage of the first dose of the DTP and polio vaccines was relatively high (96 percent each); however, only 86 percent and 78 percent of these children, respectively, went on to receive the third doses of these vaccines, contributing to respective dropout rates of 11 percent and 19 percent between the first and third doses. The findings show that 2 percent of children age 12-23 months did not receive any vaccine at all.

**Table 10.2 Vaccinations by source of information**

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by age 12 months, Zambia 2013-14

Source of information	BCG	DTP-HepB-Hib			Polio <sup>1</sup>				Measles	All basic vaccinations <sup>2</sup>	No vaccinations	Number of children
		1	2	3	0	1	2	3				
<b>Vaccinated at any time before survey</b>												
Vaccination card	77.8	79.1	77.0	71.5	38.4	79.6	76.4	69.3	69.7	61.0	0.0	2,069
Mother's report	17.0	16.9	16.2	14.4	11.5	16.7	15.1	8.2	15.2	7.2	2.3	506
Either source	94.9	95.9	93.2	85.8	50.0	96.3	91.5	77.6	84.9	68.3	2.3	2,575
<b>Vaccinated by age 12 months<sup>3</sup></b>												
	94.1	94.8	91.3	82.4	49.7	95.2	89.5	74.3	72.5	58.1	3.2	2,575

<sup>1</sup> Polio 0 is the polio vaccination given at birth.

<sup>2</sup> BCG, measles, and three doses each of DPT-HepB-Hib and polio vaccine (excluding polio vaccine given at birth)

<sup>3</sup> For children whose information is based on the mother's report, the proportion of vaccinations given during the first year of life is assumed to be the same as for children with a written record of vaccination.

### 10.3 VACCINATION BY BACKGROUND CHARACTERISTICS

Table 10.3 shows the percentage of children age 12-23 months who received specific vaccines at any time before the survey, according to background characteristics. Differences in full immunisation coverage by child sex are small. Immunisation coverage decreases with increasing birth order, from 73 percent among first-born children to 63 percent among children of birth order six and above.

Seventy-six percent of urban children are fully immunised, as compared with 65 percent of rural children. Full immunisation coverage ranges from a low of 60 percent in Luapula to a high of 81 percent in Copperbelt.

Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Zambia 2013-14

Background characteristic	DPT-HepB-Hib				Polio <sup>1</sup>				Measles	All basic vaccinations <sup>2</sup>	No vaccinations	Percentage with a vaccination card seen	Number of children
	BCG	1	2	3	0	1	2	3					
<b>Sex</b>													
Male	95.0	95.8	93.5	86.4	49.9	96.6	91.6	78.9	84.4	68.9	2.4	80.2	1,290
Female	94.7	96.1	92.8	85.3	50.1	96.0	91.3	76.2	85.5	67.7	2.2	80.5	1,286
<b>Birth order</b>													
1	97.2	97.7	95.7	89.0	55.0	97.7	92.6	79.1	90.4	72.7	1.1	80.2	547
2-3	94.6	96.2	93.1	87.5	53.5	96.2	91.5	77.9	85.7	69.9	3.0	79.2	866
4-5	94.6	95.6	93.2	84.1	47.3	96.6	91.2	77.0	83.1	67.2	1.9	80.9	579
6+	93.3	94.2	90.9	82.1	42.7	94.9	90.5	76.2	80.4	62.8	2.8	81.7	583
<b>Residence</b>													
Urban	97.2	98.1	97.0	92.4	73.4	97.8	95.0	83.1	89.3	75.9	1.5	76.6	852
Rural	93.7	94.9	91.3	82.6	38.4	95.6	89.7	74.8	82.8	64.5	2.7	82.2	1,723
<b>Province</b>													
Central	89.2	90.8	88.8	82.7	37.9	91.9	87.5	73.5	80.6	66.3	7.6	77.1	246
Copperbelt	97.8	98.7	97.8	94.4	71.5	98.2	95.2	85.9	91.2	81.1	1.0	74.3	328
Eastern	97.6	96.5	94.8	87.8	42.2	97.9	92.6	73.4	86.4	63.6	1.3	84.4	322
Luapula	92.9	95.5	91.1	79.2	51.4	96.4	91.1	75.9	78.0	59.5	0.8	82.0	239
Lusaka	97.3	97.8	96.7	91.0	75.1	97.3	94.7	79.7	87.6	72.1	1.7	79.0	370
Muchinga	95.5	95.0	91.4	79.4	34.8	96.4	90.3	72.1	83.2	60.8	1.5	76.8	158
Northern	94.6	97.2	92.5	86.6	27.4	98.3	92.5	81.3	87.7	72.2	1.5	81.9	241
North Western	97.1	96.1	92.5	82.8	45.6	96.4	90.2	77.6	84.5	62.8	0.8	81.8	132
Southern	92.2	95.8	91.2	83.3	45.8	94.7	88.7	77.4	86.0	69.0	3.1	84.8	361
Western	93.5	93.0	90.0	81.2	42.7	94.3	87.8	73.0	76.1	63.5	3.9	80.2	178
<b>Mother's education</b>													
No education	88.1	88.9	85.5	75.3	38.3	91.9	83.1	65.4	75.6	51.6	5.6	77.7	283
Primary	94.6	96.2	92.8	84.3	44.4	96.4	91.4	76.5	83.7	66.6	2.1	80.4	1,420
Secondary	97.3	97.7	96.1	91.1	61.3	97.7	94.1	82.9	89.7	75.8	1.6	81.2	769
More than secondary	98.1	98.1	97.3	96.4	73.9	97.3	94.8	85.9	91.5	80.9	1.9	80.7	104
<b>Wealth quintile</b>													
Lowest	92.6	93.3	89.0	79.3	35.1	94.9	88.1	72.6	80.9	62.5	2.3	82.8	674
Second	93.9	94.9	91.6	83.4	37.7	95.8	90.8	76.2	80.6	63.4	3.4	80.5	604
Middle	94.4	97.0	93.0	85.1	49.0	96.0	90.0	75.1	85.3	67.0	2.5	76.7	503
Fourth	97.9	98.3	98.1	92.4	67.9	98.3	95.9	84.8	90.0	75.4	1.1	81.6	407
Highest	97.7	98.2	98.0	95.1	77.5	98.0	95.5	84.0	92.7	80.2	1.6	79.4	387
<b>Total</b>	94.9	95.9	93.2	85.8	50.0	96.3	91.5	77.6	84.9	68.3	2.3	80.4	2,575

<sup>1</sup> Polio 0 is the polio vaccination given at birth.

<sup>2</sup> BCG, measles, and three doses each of DPT-HepB-Hib and polio vaccine (excluding polio vaccine given at birth)

The percentage of children fully immunised rises with increasing mother's education, from 52 percent among children of mothers with no education to 81 percent among children of mothers with more than a secondary education. Similarly, children in households in the highest wealth quintile (80 percent) are much more likely to be fully immunised than those in the lower three wealth quintiles (less than 70 percent).

Table 10.3 also shows that an immunisation card was seen for 80 percent of children age 12-23 months. There were no major differences in the percentage of cards seen by child sex or birth order. Cards were more likely to have been seen for children in rural than urban areas (82 percent versus 77 percent). Southern and Eastern had the highest percentages of children whose cards were seen (85 percent and 84 percent, respectively), while Copperbelt had the lowest percentage (74 percent). Differences were less pronounced by mother's education and wealth.

## 10.4 TRENDS IN IMMUNISATION COVERAGE

One way of measuring trends in vaccination coverage is to compare coverage among children of different ages in the 2013-14 ZDHS. Table 10.4 shows the percentage of children age 12-59 months who received vaccinations during the first year of life by current age. This measures the programmatic performance of the immunisation in reaching a specific birth cohort by their first birthday as per WHO recommendation. These data show trends in vaccination coverage over the past four years.

Table 10.4 Vaccinations in first year of life

Percentage of children age 12-59 months at the time of the survey who received specific vaccines by age 12 months, and percentage with a vaccination card, by current age of child, Zambia 2013-14

Age in months	DPT-HepB-Hib				Polio <sup>1</sup>				Measles	All basic vaccinations <sup>2</sup>	No vaccinations	Percentage with a vaccination card seen	Number of children
	BCG	1	2	3	0	1	2	3					
12-23	94.1	94.8	91.3	82.4	49.7	95.2	89.5	74.3	72.5	58.1	3.2	80.4	2,575
24-35	94.5	94.3	91.8	84.5	56.0	95.1	90.9	76.5	72.5	58.4	4.4	72.1	2,507
36-47	91.5	91.8	88.7	80.5	49.8	91.8	87.9	71.8	73.8	56.7	6.9	64.0	2,447
48-59	93.1	93.0	90.5	81.3	48.4	93.7	89.5	70.1	69.5	54.4	6.0	57.0	2,627
Total	93.4	93.5	90.7	82.3	51.0	94.1	89.5	73.3	72.4	57.1	5.0	68.3	10,156

Note: Information was obtained from the vaccination card or, if there was no written record, from the mother. For children whose information is based on the mother's report, the proportion of vaccinations given during the first year of life is assumed to be the same as for children with a written record of vaccinations.

<sup>1</sup> Polio 0 is the polio vaccination given at birth.

<sup>2</sup> BCG, measles, and three doses each of DPT-HepB-Hib and polio vaccine (excluding polio vaccine given at birth)

There have been improvements in vaccination coverage among children age 12-59 months. The percentage of children who received no vaccinations by age 12 months has declined over the past three years, from 7 percent among children age 36-47 months to 3 percent among children age 12-23 months. The percentage of children fully immunised by age 12 months has increased from 54 percent among children in the oldest age cohort to 58 percent among those in the youngest two cohorts. Vaccination cards were seen for 80 percent of children age 12-23 months, as compared with only 57 percent of children age 48-59 months. The reason for this difference may be that vaccination cards for older children were discarded or lost. There is no consistent pattern by age for individual vaccines.

The percentage of children in Zambia who are fully vaccinated has not changed since the 2007 ZDHS (Table 10.5). There is no apparent trend in vaccination coverage across the five ZDHS surveys (1992, 1996, 2001-02, 2007, and 2013-14). Although coverage of DTP 3 (or DTP-HepB-Hib 3) and measles vaccinations has increased since the 1992 ZDHS, coverage of the complete vaccination schedule has remained almost the same.

Table 10.5 Trends in vaccination coverage among children age 12-23 months, Zambia 1992-2014

Year	Vaccination type					
	BCG	DPT/DTP-HepB-Hib 3	Polio 3	Measles	All basic vaccinations	None
1992	95	77	76	77	67	4
1996	97	86	84	87	78	2
2001-02	94	80	80	84	70	3
2007	92	80	77	85	68	6
2013-14	95	86	78	85	68	2

## 10.5 ACUTE RESPIRATORY INFECTION

The MCDMCH recognises acute respiratory infections (ARI) as a major public health problem among children under age 5 (MoH, 2012b). The IMCI is an integrated package that addresses the management of diseases such as pneumonia, diarrhoea, malaria, and measles, as well as malnutrition, among children age 2 months to age 5. The programme follows WHO guidelines on standard ARI case management. All ARI cases assessed by health workers are classified into one of the following categories: severe or very severe pneumonia, pneumonia, or no pneumonia (cough and cold). The programme recognises the important role of mothers and other caretakers in identifying the difference between the need for home care, in the case of cough and cold symptoms that do not result in pneumonia, and the need for referral to health facilities in the case of severe pneumonia.

ARIs are a leading cause of childhood morbidity and mortality in Zambia. Early diagnosis and treatment with appropriate antibiotics can reduce the number of deaths caused by ARIs, particularly deaths resulting from pneumonia. Pneumonia has emerged as one of the leading causes of death among children under age 5 in Zambia (MCDMCH, 2013b). In 2010, the integrated community case management approach was initiated to increase accessibility to care and reduce mortality resulting from pneumonia and malaria (Yeboah-Antwi et al., 2010) to complement the facility based IMCI approach. Under this programme, community health workers are trained to identify pneumonia and to treat affected children at the community level with amoxicillin.

In the 2013-14 ZDHS, the prevalence of ARI symptoms was estimated by asking mothers whether, in the two weeks preceding the survey, their children under age 5 had been ill with a cough accompanied by short, rapid breathing and difficulty breathing as a result of a chest-related problem. These symptoms are consistent with conditions leading to pneumonia. It should be noted that the data collected on ARI symptoms are subjective because they are based on a mother's perception of illness without validation by medical personnel.

Table 10.6 shows that 4 percent of children under age 5 exhibited symptoms of ARI in the two weeks preceding the survey. The prevalence of ARI symptoms varied by the age of the child. Children age 6-23 months were more likely to have symptoms of ARI (5 percent) than children in the other age groups. Children from Copperbelt, Eastern, and Northern were most likely to exhibit symptoms of ARI. Symptoms were least likely to be reported among children whose mothers had more than a secondary education. Differences by wealth quintile were small.

Seventy percent of children with symptoms of ARI were taken to a health facility or provider. Fifty-one percent of children with ARI symptoms received antibiotics. The proportion of children who received antibiotics was much higher in urban areas (70 percent) than in rural areas (43 percent). Due to the small number of cases in some provinces, these data cannot be used to draw conclusions on variations.

Table 10.6 Prevalence and treatment of symptoms of ARI

Among children under age 5, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey and among children with symptoms of ARI, the percentage for whom advice or treatment was sought from a health facility or provider and the percentage who received antibiotics as treatment, according to background characteristics, Zambia 2013-14

Background characteristic	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
	Percentage with symptoms of ARI <sup>1</sup>	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider <sup>2</sup>	Percentage who received antibiotics	Number of children
<b>Age in months</b>					
<6	2.3	1,204	(52.9)	(29.8)	28
6-11	5.1	1,274	76.3	55.7	65
12-23	4.9	2,575	69.9	51.5	125
24-35	3.9	2,507	75.8	51.3	97
36-47	3.2	2,447	67.7	45.9	78
48-59	2.8	2,627	63.9	56.3	75
<b>Sex</b>					
Male	3.6	6,393	73.6	52.1	231
Female	3.8	6,240	65.9	49.1	238
<b>Mother's smoking status</b>					
Smokes cigarettes/tobacco	(0.0)	49	na	na	na
Does not smoke	3.7	12,584	69.7	50.6	469
<b>Cooking fuel</b>					
Electricity or gas	2.6	1,016	*	*	26
Charcoal	3.2	4,342	76.2	67.0	140
Wood/straw <sup>3</sup>	4.2	7,264	65.3	41.9	303
<b>Residence</b>					
Urban	3.2	4,318	79.7	70.4	136
Rural	4.0	8,316	65.6	42.5	333
<b>Province</b>					
Central	3.1	1,241	(60.0)	(51.4)	38
Copperbelt	4.8	1,634	77.8	68.2	78
Eastern	4.9	1,603	77.0	34.9	78
Luapula	2.5	1,112	(57.4)	(42.2)	27
Lusaka	2.3	1,855	*	*	43
Muchinga	4.1	771	61.9	46.1	32
Northern	4.6	1,203	57.7	35.1	55
North Western	2.3	641	(79.2)	(65.1)	15
Southern	4.1	1,754	68.1	54.0	71
Western	3.8	821	(69.9)	(47.0)	31
<b>Mother's education</b>					
No education	4.1	1,387	72.5	29.1	56
Primary	3.7	7,098	63.9	45.8	260
Secondary	3.9	3,696	77.3	66.0	144
More than secondary	1.8	453	*	*	8
<b>Wealth quintile</b>					
Lowest	3.8	3,032	66.9	46.2	115
Second	4.1	2,905	65.6	39.7	119
Middle	3.7	2,604	67.4	48.1	96
Fourth	3.6	2,208	75.1	59.9	80
Highest	3.1	1,884	79.6	72.4	59
Total	3.7	12,634	69.7	50.6	469

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes 10 children living in households using kerosene, coal/lignite, and animal dung who are not shown separately.

na = Not applicable

<sup>1</sup> Symptoms of ARI (cough accompanied by short, rapid breathing that was chest-related and/or by difficult breathing that was chest-related) are considered a proxy for pneumonia.

<sup>2</sup> Excludes pharmacy, shop, and traditional practitioner

<sup>3</sup> Includes grass, shrubs, and crop residues



## 10.6 FEVER

Fever is a major manifestation of malaria and other acute infections in children. Malaria contributes to high levels of morbidity and mortality. While fever can occur year-round, malaria is more prevalent following the end of the rainy season. In the past, malaria treatment guidelines as well as the IMCI guidelines were based on the assumption that fever on its own was an indication of malaria, in line with the then-prevailing epidemiological pattern of malaria in the country. Over the last five years, with the incorporation of intensive malaria interventions, there have been notable reductions in the incidence of malaria. This has led to the revision of malaria treatment guidelines as well as the Integrated Management of Childhood Illness guidelines. Presumptive treatment of fever is no longer recommended. Instead, a rapid diagnostic test or microscopy is recommended for all children with fever (MCDMCH, 2013b).

The long period of fieldwork in the 2013-14 ZDHS, which was carried out from August 2013 to April 2014, resulted in data being collected during both the rainy season and the dry season. As such, the prevalence of fever and the resulting treatment patterns should be interpreted with caution, as they may or may not be malaria-related. Table 10.7 shows the percentage of children under age 5 with a fever during the two weeks preceding the survey and the percentage receiving various treatments, by selected background characteristics. Twenty-one percent of children under age 5 were reported to have had a fever in the two weeks preceding the survey. Fever prevalence varied by the age of the child, with the highest percentage occurring among children age 12-23 months (27 percent). The prevalence of fever was highest among children in Northern (26 percent) and lowest among those in Lusaka (15 percent). Fever prevalence decreased with increasing mother's education, from 24 percent among children whose mothers had no education to 16 percent among children whose mothers had more than a secondary education. Children of mothers in the highest wealth quintile (18 percent) were less likely than children of mothers in the second (24 percent) and lowest (23 percent) quintiles to have had a fever in the two weeks preceding the survey.

Seventy-two percent of children with a fever were taken to a health facility or provider for treatment. Children age 6-23 months, male children, urban children, children of mothers with a secondary education or higher, and children in the highest two wealth quintiles were more likely than other children to be taken to a health facility or provider for treatment. Eighty-six percent of children in North Western were taken to a facility or provider, as compared with 62 percent of children in Central.

Table 10.7 also shows that 40 percent of children took antimalarials for their fever and 34 percent took antibiotics. Children less than age 6 months, those residing in urban areas, and those living in Lusaka were more likely than other children to receive antibiotic treatment. Conversely, they were least likely to have taken antimalarials. Children of mothers with a secondary education or higher and those living in households in the highest wealth quintile were more likely to receive antibiotics than their counterparts. On the other hand, children of mothers with a primary education and children in the second wealth quintile were most likely to take antimalarials. The percentage of children with fever for whom advice or treatment was sought from a health facility or provider has increased since the 2007 survey (from 63 percent to 72 percent).

Table 10.7 Prevalence and treatment of fever

Among children under age 5, the percentage who had a fever in the two weeks preceding the survey; and among children with fever, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage who took antimalarial drugs, and the percentage who received antibiotics as treatment, by background characteristics, Zambia 2013-14

Background characteristic	Among children under age 5:		Among children under age 5 with fever			
	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider <sup>1</sup>	Percentage who took antimalarial drugs	Percentage who took antibiotic drugs	Number of children
<b>Age in months</b>						
<6	12.6	1,204	69.9	22.1	39.9	151
6-11	25.3	1,274	75.9	31.6	38.5	322
12-23	27.1	2,575	74.8	38.8	34.0	699
24-35	23.9	2,507	72.8	40.8	37.5	599
36-47	19.9	2,447	69.4	44.8	29.1	487
48-59	15.1	2,627	66.1	47.4	31.2	397
<b>Sex</b>						
Male	20.4	6,393	73.1	41.2	34.4	1,307
Female	21.6	6,240	70.8	38.5	34.4	1,348
<b>Residence</b>						
Urban	18.6	4,318	76.2	28.9	51.3	802
Rural	22.3	8,316	70.0	44.6	27.0	1,853
<b>Province</b>						
Central	18.6	1,241	61.9	33.4	36.5	230
Copperbelt	19.5	1,634	78.0	39.3	45.0	319
Eastern	22.6	1,603	72.7	42.9	19.4	362
Luapula	23.1	1,112	79.6	76.0	17.4	257
Lusaka	15.3	1,855	74.8	13.6	59.0	283
Muchinga	22.8	771	67.3	50.5	29.5	175
Northern	26.0	1,203	68.1	66.6	17.4	312
North Western	23.3	641	86.0	75.9	18.9	149
Southern	21.2	1,754	68.5	6.8	54.4	371
Western	23.8	821	63.8	16.1	34.0	195
<b>Mother's education</b>						
No education	24.2	1,387	65.0	39.1	17.1	335
Primary	21.1	7,098	70.9	44.4	31.9	1,500
Secondary	20.3	3,696	76.2	30.9	45.9	749
More than secondary	15.7	453	79.8	41.0	46.4	71
<b>Wealth quintile</b>						
Lowest	22.7	3,032	68.6	45.7	19.7	687
Second	23.6	2,905	72.5	50.2	28.1	684
Middle	20.9	2,604	71.0	39.5	36.0	544
Fourth	18.5	2,208	75.0	26.5	48.3	409
Highest	17.6	1,884	75.2	23.4	57.9	331
Total	21.0	12,634	71.9	39.8	34.4	2,655

<sup>1</sup> Excludes pharmacy, shop, market, and traditional practitioner

## 10.7 DIARRHOEA

Diarrhoea continues to be a major cause of childhood morbidity and mortality in Zambia (MoH, 2012a). The 2013-14 ZDHS asked mothers of children born during the five years preceding the survey a series of questions about episodes of diarrhoea suffered by their children in the two weeks before the survey, including questions on feeding practices during diarrhoea, treatment of the condition, and their knowledge and use of ORS.

Table 10.8 shows the percentage of children under age 5 with diarrhoea in the two weeks preceding the survey, by selected background characteristics. Overall, 16 percent of children under age 5 had diarrhoea, and 3 percent had diarrhoea with blood. As there are seasonal variations in the prevalence of diarrhoea, the percentages shown in Table 10.7 may not reflect the situation throughout the year. It is noteworthy to point out that the 2013-14 ZDHS was fielded from August 2013 to April 2014, which included only part of the hot rainy season when diarrhoea prevalence is high. Thus, the prevalence of diarrhoea may be understated. Children age 6-23 months are most susceptible to diarrhoea (28 percent). The prevalence of diarrhoea is highest among children living in Copperbelt (20 percent).

Differences by gender, source of drinking water, type of toilet facility, and mother's education and wealth are less obvious.

## 10.8 DIARRHOEA TREATMENT

Management of diarrhoeal diseases among children under age 5 is one focus of the IMCI strategy. In 2008, Zambia adapted its strategy to include zinc in the treatment protocol of diarrhoea along with low-osmolarity oral rehydration solution (MoH, 2008).

The government has a standard diarrhoea case management strategy including ORT, counselling on continued feeding, and provision of zinc tablets through health institutions and at the community level. ORT services have been established in all hospitals, primary health care centres, and health posts throughout the country. Health facilities and community health volunteers serve as the primary health providers in treating diarrhoea with ORS and zinc supplementation. ORT thus includes fluids prepared from lower osmolar ORS packets.

In the 2013-14 ZDHS, mothers of children who had diarrhoea were asked about what was done to treat the illness. Table 10.9 shows the percentage of children with diarrhoea who received specific treatments, according to background characteristics. Sixty-six percent of children with diarrhoea were taken to a health facility or provider for treatment. Children age 12-23 months, children with bloody diarrhoea, and children living in Eastern and Luapula were more likely than their counterparts in the other categories to be taken to a health facility or provider. Differences by gender, residence, and mother's education and wealth were less pronounced.

Table 10.8 Prevalence of diarrhoea

Percentage of children under age 5 who had diarrhoea in the two weeks preceding the survey, by background characteristics, Zambia 2013-14

Background characteristic	Diarrhoea in the two weeks preceding the survey		Number of children
	All diarrhoea	Diarrhoea with blood	
<b>Age in months</b>			
<6	6.3	0.5	1,204
6-11	27.8	2.4	1,274
12-23	27.6	4.6	2,575
24-35	17.6	3.3	2,507
36-47	11.4	1.9	2,447
48-59	6.4	1.3	2,627
<b>Sex</b>			
Male	16.6	2.5	6,393
Female	15.6	2.5	6,240
<b>Source of drinking water<sup>1</sup></b>			
Improved	16.5	2.4	7,578
Not improved	15.4	2.7	5,041
<b>Toilet facility<sup>2</sup></b>			
Improved, not shared	15.1	1.8	2,854
Shared <sup>3</sup>	17.2	2.3	2,198
Non-improved	16.1	2.8	7,563
<b>Residence</b>			
Urban	17.9	1.9	4,318
Rural	15.1	2.8	8,316
<b>Province</b>			
Central	13.4	1.9	1,241
Copperbelt	20.1	2.6	1,634
Eastern	15.1	2.3	1,603
Luapula	14.7	1.5	1,112
Lusaka	15.5	1.1	1,855
Muchinga	16.7	3.5	771
Northern	15.9	3.6	1,203
North Western	15.1	2.4	641
Southern	18.0	4.1	1,754
Western	13.8	2.2	821
<b>Mother's education</b>			
No education	16.1	3.0	1,387
Primary	15.7	2.7	7,098
Secondary	17.0	2.2	3,696
More than secondary	13.4	0.4	453
<b>Wealth quintile</b>			
Lowest	14.9	2.6	3,032
Second	15.3	3.1	2,905
Middle	15.9	2.5	2,604
Fourth	19.4	2.3	2,208
Highest	15.5	1.6	1,884
<b>Total</b>	<b>16.1</b>	<b>2.5</b>	<b>12,634</b>

Note: Total includes 15 children with missing information on source of drinking water and 19 children with missing information on type of toilet facility.

<sup>1</sup> See Table 2.1 for definition of categories.

<sup>2</sup> See Table 2.2 for definition of categories.

<sup>3</sup> Facilities that would be considered improved if they were not shared by two or more households

Table 10.9 Diarrhoea treatment

Among children under age 5 who had diarrhoea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, and the percentage who were given other treatments, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of children with diarrhoea for whom advice or treatment was sought from a health facility or provider <sup>1</sup>	Oral rehydration therapy (ORT)				Other treatments							Number of children with diarrhoea	
		Recom-mended home fluids (RHF)		Either ORS or RHF	Increased fluids	ORT or increased fluids	Antibiotic drugs	Anti-motility drugs	Intravenous solution	Home remedy/other	Missing			
		Fluid from ORS packets (ORS)	home fluids (RHF)											
<b>Age in months</b>														
<6	60.5	47.6	9.0	52.7	8.0	56.3	23.5	0.0	0.0	0.0	19.6	1.1	30.5	75
6-11	67.9	68.4	12.1	72.2	19.4	73.9	29.0	2.7	0.2	0.2	15.2	0.7	15.4	354
12-23	71.9	70.9	14.9	75.2	19.4	79.0	31.7	1.7	0.1	0.1	19.6	2.0	13.7	711
24-35	63.3	57.9	17.3	67.5	21.9	74.9	29.9	1.5	0.5	0.5	16.3	0.6	17.2	442
36-47	54.0	58.9	12.7	65.3	24.5	71.9	26.1	1.5	0.0	0.0	15.6	0.4	19.0	279
48-59	61.0	59.0	18.8	65.9	18.6	72.8	33.5	1.4	1.3	1.3	14.5	0.4	14.9	169
<b>Sex</b>														
Male	64.8	64.2	14.5	69.9	18.6	74.5	30.1	1.9	0.3	0.3	15.4	0.9	15.9	1,058
Female	66.3	64.1	15.0	70.1	21.9	75.3	29.7	1.5	0.3	0.3	19.0	1.3	16.6	972
<b>Type of diarrhoea</b>														
Non-bloody	64.2	63.5	13.5	68.6	21.2	73.9	28.6	1.4	0.3	0.3	16.6	1.1	17.0	1,650
Bloody	74.1	70.4	21.2	79.7	17.2	83.4	37.8	2.7	0.5	0.5	21.3	0.2	9.8	316
Missing	58.9	50.3	14.2	59.0	8.7	60.1	25.1	4.1	0.0	0.0	11.0	4.8	26.0	64
<b>Residence</b>														
Urban	64.1	67.7	12.5	73.2	26.1	78.6	31.3	2.3	0.5	0.5	14.5	0.8	13.7	772
Rural	66.5	61.9	16.1	68.1	16.5	72.7	29.1	1.3	0.2	0.2	18.8	1.2	17.7	1,258
<b>Province</b>														
Central	57.9	58.8	17.7	65.3	6.3	66.6	28.8	0.0	0.3	0.3	22.4	4.0	19.5	166
Copperbelt	58.5	62.6	15.5	71.3	25.7	77.5	26.2	3.2	0.0	0.0	15.9	0.4	15.5	328
Eastern	73.6	65.6	14.8	69.2	26.5	78.1	36.6	0.9	0.0	0.0	10.0	0.0	14.9	241
Luapula	72.9	72.5	15.9	78.7	9.0	78.9	16.4	3.9	0.4	0.4	19.7	1.2	13.1	163
Lusaka	64.9	73.8	11.3	78.6	35.1	83.3	26.5	1.1	0.8	1.1	10.9	1.1	12.5	287
Muchinga	58.2	51.4	14.6	60.0	29.5	70.2	27.5	4.1	0.2	0.2	34.4	0.7	15.5	129
Northern	64.0	53.6	10.3	60.1	17.6	68.0	26.5	2.8	0.0	0.0	13.8	0.8	22.0	191
North Western	69.5	65.7	5.6	67.3	15.8	72.9	22.8	1.7	0.0	0.0	30.1	2.0	15.2	97
Southern	69.8	64.7	21.0	71.0	12.9	72.9	47.0	0.0	0.7	0.7	14.2	0.5	16.3	315
Western	66.8	65.8	13.3	68.9	7.0	70.2	23.1	0.3	0.0	0.0	23.2	2.1	21.1	113
<b>Mother's education</b>														
No education	59.7	47.9	14.5	55.3	19.2	63.9	23.4	1.3	0.0	0.0	16.1	4.2	25.7	223
Primary	67.0	65.3	14.3	71.3	20.1	75.7	31.9	1.7	0.3	0.3	18.7	0.6	15.9	1,117
Secondary	65.1	67.2	14.9	72.6	19.3	77.3	28.3	2.0	0.4	0.4	14.6	0.9	13.6	629
More than secondary	64.2	69.8	22.6	74.1	34.3	76.0	33.8	0.0	1.3	1.3	17.4	0.0	13.7	61
<b>Wealth quintile</b>														
Lowest	63.4	59.1	14.9	65.0	16.1	70.1	27.2	1.5	0.2	0.2	18.6	2.1	20.7	453
Second	67.2	64.9	14.2	68.9	13.0	71.7	30.2	0.7	0.1	0.1	19.3	0.5	17.7	445
Middle	67.8	59.8	18.3	67.7	20.4	74.2	26.1	4.0	0.4	0.4	19.6	0.8	16.6	413
Fourth	66.7	70.4	10.5	76.7	28.1	83.6	34.5	0.8	0.0	0.0	14.8	0.9	9.1	428
Highest	61.6	67.5	16.6	73.1	25.5	75.5	32.3	1.7	1.1	1.1	11.5	0.9	16.6	291
Total	65.6	64.1	14.8	70.0	20.2	74.9	29.9	1.7	0.3	0.3	17.1	1.1	16.2	2,030

Note: ORT includes fluid prepared from oral rehydration salt (ORS) packets and recommended home fluids (RHF).

<sup>1</sup> Excludes pharmacy, shop, and traditional practitioner

Seventy percent of children were treated with ORT (that is, either ORS or recommended home fluids), 20 percent were given increased fluids, and 75 percent were given either ORT or increased fluids. Thirty percent of children with diarrhoea were given antibiotic drugs, and 17 percent were treated with home remedies. However, about 16 percent of children with diarrhoea did not receive any treatment at all.

Use of ORT or increased fluids varied by age, from a low of 56 percent among children less than age 6 months to a high of 79 percent among children age 12-23 months. Children with bloody diarrhoea were most likely to be given ORT or increased fluids. Children in urban areas were more likely to be given ORT or increased fluids than rural children (79 percent versus 73 percent). The percentage of children treated with ORT or increased fluids ranged from 67 percent in Central to 83 percent in Lusaka. Children of mothers with some education were much more likely than children of mothers with no education to receive ORT or increased fluids. Treatment with ORT or increased fluids ranged from 70 percent among children in the lowest wealth quintile to 84 percent among children in the fourth wealth quintile.

## **10.9 FEEDING PRACTICES DURING DIARRHOEA**

Mothers are encouraged to continue feeding children with diarrhoea normally and to increase the amount of fluids given. Table 10.10 shows that 39 percent of children who had diarrhoea were given the same amount of fluid as usual, 20 percent were given more, 26 percent were given somewhat less than the usual amount, and 13 percent were given much less. Two percent of children with diarrhoea were not given any liquids.

Thirty-seven percent of children with diarrhoea were given the same amount of food as usual. On the other hand, 31 percent of children were given somewhat less than the usual amount of food, and 17 percent were given much less than the usual amount.

Children under age 6 months were least likely to be given ORT and/or increased fluids and to be fed normally during an episode of diarrhoea. There were variations in feeding practices by other background characteristics as well. Children in urban areas, children of mothers with more than a secondary education, and children from the fourth wealth quintile were more likely than other children to receive ORT and/or increased fluids with continued feeding. Less than half of children in Northern and Central received ORT and/or increased fluids with continued feeding.

The percentage of children with diarrhoea who are given increased fluids and who continue to be fed has declined since 2007, from 25 percent to 15 percent. However, the practice of giving ORT and/or increased fluids along with continued feeding has remained the same in the last six years (56 percent).

## **10.10 KNOWLEDGE OF ORS PACKETS**

A simple and effective response to dehydration caused by diarrhoea is a prompt increase in the child's fluid intake through some form of ORT, including the use of a solution prepared from ORS packets. To assess knowledge of treatment for diarrhoea, all mothers age 15-49 with a live birth in the five years preceding the survey who had not treated a child under age 5 with ORS packets were asked if they had heard of these packets. Mothers who had treated any child were assumed to have knowledge of diarrhoea treatment.

Table 10.10. Feeding practices during diarrhoea

Percent distribution of children under age 5 who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, the percentage of children given increased fluids and continued feeding during the diarrhoea episode, and the percentage of children who continued feeding and were given ORT and/or increased fluids during the episode of diarrhoea, by background characteristics, Zambia 2013-14																		
Background characteristic	Amount of liquids given						Amount of food given						Percentage given increased fluids and continued feeding <sup>1</sup>	Percentage who continued feeding and were given ORT and/or increased fluids <sup>1</sup>	Number of children with diarrhoea			
	More	Same as usual	Some-what less	Much less	None	Don't know/missing	Total	More	Same as usual	Some-what less	Much less	None				Never gave food	Don't know/missing	Total
Age in months																		
<6	8.0	38.1	23.4	8.2	17.9	4.5	100.0	2.4	24.6	17.9	5.5	1.1	43.3	5.3	100.0	26.0	75	
6-11	19.4	38.7	26.0	14.3	1.7	0.0	100.0	8.7	34.6	24.9	19.6	8.5	3.9	0.0	100.0	13.4	354	
12-23	19.4	37.0	27.3	15.0	0.9	0.4	100.0	8.5	33.8	33.2	19.0	4.4	0.8	0.2	100.0	13.8	711	
24-35	21.9	38.3	27.1	11.9	0.5	0.3	100.0	5.9	40.6	34.1	15.4	3.6	0.3	0.1	100.0	16.7	442	
36-47	24.5	40.5	24.1	10.2	0.0	0.6	100.0	10.2	41.7	31.8	13.8	1.6	0.3	0.6	100.0	19.5	279	
48-59	18.6	42.4	22.2	12.8	0.7	3.4	100.0	4.5	41.8	32.9	15.5	1.5	0.5	3.4	100.0	14.1	169	
Sex																		
Male	18.6	41.8	24.3	12.7	2.0	0.5	100.0	6.4	39.0	30.6	15.9	4.3	3.3	0.5	100.0	13.9	1,058	
Female	21.9	35.0	27.8	13.5	0.9	1.0	100.0	8.9	34.4	31.7	17.8	4.1	2.2	0.9	100.0	15.9	972	
Type of diarrhoea																		
Non-bloody	21.2	39.0	25.4	12.3	1.4	0.7	100.0	7.8	37.7	31.1	15.9	4.1	2.8	0.7	100.0	15.8	1,650	
Bloody	17.2	34.1	27.7	18.7	1.5	0.7	100.0	7.2	31.3	31.4	22.2	5.1	2.3	0.4	100.0	11.8	316	
Missing	8.7	49.7	32.0	5.6	2.2	1.9	100.0	4.4	41.3	32.3	13.1	3.2	3.8	1.9	100.0	5.6	64	
Residence																		
Urban	26.1	34.9	24.6	12.7	1.0	0.6	100.0	10.9	35.8	29.7	18.7	2.9	1.4	0.6	100.0	18.6	772	
Rural	16.5	40.8	26.8	13.3	1.7	0.8	100.0	5.6	37.5	32.0	15.6	5.0	3.6	0.7	100.0	12.6	1,258	
Province																		
Central	6.3	59.4	24.4	7.0	2.4	0.5	100.0	1.9	41.4	26.4	16.7	9.2	4.5	0.0	100.0	5.4	166	
Copperbelt	25.7	34.0	23.8	15.2	0.4	0.9	100.0	7.2	33.3	35.1	18.0	3.0	2.3	0.9	100.0	17.0	328	
Eastern	26.5	38.9	22.2	9.1	3.3	0.0	100.0	3.1	38.6	32.5	12.8	8.1	4.9	0.0	100.0	21.4	241	
Luapula	9.0	33.2	37.0	18.2	0.6	2.0	100.0	1.7	34.0	39.9	20.5	0.7	1.8	1.4	100.0	6.2	163	
Lusaka	35.1	28.9	25.1	10.1	0.0	0.7	100.0	16.6	36.1	24.9	20.6	0.8	0.2	0.7	100.0	25.4	287	
Muchinga	29.5	43.7	16.5	9.3	0.7	0.3	100.0	3.6	37.6	40.5	10.9	2.5	4.9	0.1	100.0	24.8	129	
Northern	17.6	42.3	21.2	16.5	2.2	0.2	100.0	5.1	40.0	25.1	21.0	5.0	3.6	0.2	100.0	12.2	191	
North Western	15.8	46.2	27.5	5.1	5.4	0.0	100.0	1.5	44.3	35.6	8.2	6.1	4.3	0.0	100.0	12.4	97	
Southern	12.9	29.7	36.5	18.3	1.0	1.6	100.0	16.8	27.5	31.3	14.9	5.6	2.1	1.8	100.0	10.1	315	
Western	7.0	58.4	17.6	15.4	1.6	0.0	100.0	0.9	55.6	22.5	19.6	0.3	1.1	0.0	100.0	3.1	113	
Mother's education																		
No education	19.2	41.1	27.7	10.9	1.2	0.0	100.0	6.3	37.3	34.7	11.4	7.5	2.9	0.0	100.0	14.2	223	
Primary	20.1	38.3	24.8	14.7	1.7	0.5	100.0	7.6	38.1	29.8	17.6	3.5	3.0	0.3	100.0	15.3	1,117	
Secondary	19.3	38.4	27.9	11.8	1.3	1.2	100.0	7.3	34.6	32.1	17.6	4.6	2.5	1.3	100.0	13.5	629	
More than secondary	34.3	36.1	21.8	4.9	0.0	2.9	100.0	16.1	34.8	33.1	13.1	0.0	0.0	2.9	100.0	24.9	61	

Continued...

Table 10.10—Continued

Background characteristic	Amount of liquids given						Amount of food given						Percentage given increased fluids and continued feeding <sup>1</sup>	Percentage who continued feeding and were given ORT and/or increased fluids <sup>1</sup>	Number of children with diarrhoea		
	More	Same as usual	Some-what less	Much less	None	Don't know/missing	Total	More	Same as usual	Some-what less	Much less	None				Never gave food	Don't know/missing
<b>Wealth quintile</b>																	
Lowest	16.1	46.0	23.0	13.5	1.0	0.4	100.0	4.7	42.7	28.0	16.9	4.6	2.6	0.4	100.0	51.7	453
Second	13.0	43.8	26.1	13.8	2.0	1.4	100.0	3.0	39.0	31.1	16.7	4.2	4.8	1.2	100.0	50.7	445
Middle	20.4	36.8	27.2	13.3	1.6	0.6	100.0	9.1	34.1	32.1	15.3	6.3	2.8	0.3	100.0	57.8	413
Fourth	28.1	29.8	27.1	13.3	1.8	0.0	100.0	12.8	33.3	33.2	15.5	3.3	1.8	0.1	100.0	66.2	428
Highest	25.5	34.5	27.2	10.7	0.7	1.5	100.0	9.5	33.3	31.7	21.1	1.8	1.1	1.5	100.0	54.6	291
Total	20.2	38.6	26.0	13.1	1.5	0.7	100.0	7.6	36.8	31.1	16.8	4.2	2.7	0.7	100.0	56.2	2,030

Note: It is recommended that children should be given more liquids to drink during diarrhoea and food should not be reduced.

<sup>1</sup> Continued feeding practices includes children who were given more, same as usual, or somewhat less food during the diarrhoea episode.

Knowledge of ORS was nearly universal among women with a birth in the five years preceding the survey, with 97 percent being aware of ORS packets (Table 10.11).

## 10.11 DISPOSAL OF CHILDREN'S STOOLS

Unsafe disposal of human faeces spreads disease, either by direct contact or through indirect transmission. Hence, proper disposal of children's stools is extremely important in preventing the spread of disease.

Table 10.12 presents information on disposal of children's stools. The stools of 84 percent of children are disposed of safely; 19 percent of children under age 5 use a toilet or latrine, the stools of 57 percent of children are disposed of in a toilet or latrine, and the stools of 8 percent of children are buried. On the other hand, the stools of 6 percent of children are put or rinsed into a drain or ditch, the stools of 4 percent are thrown into the garbage, and the stools of 4 percent are left in the open.

Safe disposal of stools increases with the age of the child. Children's stools are more likely to be disposed of safely in urban areas (92 percent) than in rural areas (79 percent). The proportion of children whose stools are disposed of safely varies from 74 percent in Southern to 91 percent in Lusaka. Safe disposal of children's stools is positively associated with mother's education and household wealth. Eighty-eight percent of mothers with a secondary education and 87 percent of those with more than a secondary education dispose of their children's stools safely, as compared with only 76 percent of mothers with no education. Similarly, the stools of 92 percent of children from the fourth and highest wealth quintiles are disposed off in a safe manner, as compared with only 77 percent of the stools of children from households in the lowest wealth quintile.

Although the marked difference in safe disposal of children's stools between urban and rural areas can be partially attributed to urban residents' greater access to toilet facilities, it is notable that even in households with improved toilet facilities, children's stools are not necessarily disposed of safely; stools of 6 percent of children are put/rinsed into a drain or ditch, and 4 percent are thrown in the garbage. In rural areas, the stools of 5 percent of children are thrown in the garbage, and the stools of 7 percent are left in the open, as compared with 3 percent and less than 1 percent, respectively, in urban areas. Twenty-five percent of urban children use a toilet or latrine, compared with 15 percent of rural children.

There has been an improvement in the safe disposal of children's stools over the last six years. In 2007, 74 percent of mothers disposed of their children's stools safely, as compared with 84 percent in 2013-14.

**Table 10.11 Knowledge of ORS packets or pre-packaged liquids**

Percentage of women age 15-49 with a live birth in the five years preceding the survey who know about ORS packets for treatment of diarrhoea by background characteristics, Zambia 2013-14

Background characteristic	Percentage of women who know about ORS packets	Number of women
<b>Age</b>		
15-19	95.0	840
20-24	96.8	2,127
25-34	96.8	4,192
35-49	98.0	2,166
<b>Residence</b>		
Urban	98.0	3,528
Rural	96.2	5,796
<b>Province</b>		
Central	98.8	875
Copperbelt	97.7	1,305
Eastern	95.3	1,188
Luapula	95.1	765
Lusaka	97.9	1,522
Muchinga	95.0	544
Northern	95.9	803
North Western	97.0	443
Southern	97.5	1,263
Western	96.9	616
<b>Education</b>		
No education	93.4	961
Primary	96.9	4,996
Secondary	97.8	2,999
More than secondary	99.1	368
<b>Wealth quintile</b>		
Lowest	95.8	2,055
Second	96.6	1,963
Middle	96.8	1,920
Fourth	97.4	1,800
Highest	98.3	1,587
Total	96.9	9,324

ORS = Oral rehydration salts



Table 10.12 Disposal of children's stools

Percent distribution of youngest children under age 5 living with their mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Zambia 2013-14

Background characteristic	Manner of disposal of children's stools								Total	Percentage of children whose stools are disposed of safely <sup>1</sup>	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Other	Missing			
<b>Age in months</b>											
<6	3.1	58.2	2.8	17.3	9.4	4.7	4.1	0.4	100.0	64.1	1,185
6-11	2.6	68.4	7.8	8.8	6.5	2.5	2.5	0.8	100.0	78.8	1,249
12-23	5.0	69.4	10.0	5.6	4.7	3.8	0.7	0.8	100.0	84.4	2,453
24-35	17.4	60.8	10.2	2.3	2.7	5.1	0.4	1.1	100.0	88.5	1,924
36-47	43.7	38.7	7.8	1.1	1.9	5.6	0.3	0.9	100.0	90.2	1,219
48-59	69.0	20.5	5.2	0.8	0.6	2.8	0.3	0.8	100.0	94.7	872
<b>Toilet facility<sup>2</sup></b>											
Improved, not shared	25.3	60.4	2.0	5.5	3.5	0.7	1.4	1.1	100.0	87.7	2,063
Shared <sup>3</sup>	20.4	69.6	1.7	4.2	1.9	0.9	0.5	0.7	100.0	91.8	1,690
Non-improved or shared	15.5	51.3	12.5	6.5	5.5	6.6	1.4	0.7	100.0	79.3	5,138
<b>Residence</b>											
Urban	25.4	65.0	1.4	4.2	2.6	0.2	0.4	0.8	100.0	91.8	3,288
Rural	14.7	52.2	11.9	6.8	5.4	6.5	1.7	0.9	100.0	78.8	5,613
<b>Province</b>											
Central	21.0	57.3	5.3	6.9	5.5	1.7	1.6	0.7	100.0	83.6	845
Copperbelt	34.8	54.2	1.4	5.9	2.4	0.4	0.2	0.8	100.0	90.4	1,232
Eastern	11.3	54.0	9.3	7.0	5.7	11.2	0.2	1.3	100.0	74.6	1,141
Luapula	20.7	67.1	1.8	2.2	1.6	0.2	4.6	1.8	100.0	89.5	727
Lusaka	19.2	70.5	1.0	4.5	3.9	0.4	0.3	0.2	100.0	90.7	1,408
Muchinga	18.2	64.9	1.1	8.2	4.8	2.2	0.2	0.4	100.0	84.3	526
Northern	16.7	67.7	2.8	4.8	3.6	1.4	2.7	0.3	100.0	87.2	787
North Western	17.6	63.5	1.1	5.9	4.4	1.6	3.7	2.2	100.0	82.2	431
Southern	11.9	44.9	17.4	6.6	4.4	13.9	0.1	0.8	100.0	74.1	1,207
Western	10.0	21.3	46.2	7.3	9.0	3.4	2.3	0.5	100.0	77.5	596
<b>Mother's education</b>											
No education	13.5	50.1	12.1	7.5	6.4	8.0	1.7	0.7	100.0	75.7	933
Primary	17.6	55.3	9.3	5.8	4.3	5.1	1.6	0.9	100.0	82.3	4,792
Secondary	20.9	61.9	5.3	5.3	3.4	1.8	0.5	0.9	100.0	88.1	2,827
More than secondary	29.2	56.7	0.7	6.3	6.9	0.0	0.1	0.2	100.0	86.6	348
<b>Wealth quintile</b>											
Lowest	11.3	50.6	15.1	6.2	6.5	7.4	2.2	0.9	100.0	77.0	1,985
Second	13.3	52.7	11.7	6.8	5.5	7.0	2.2	0.8	100.0	77.6	1,912
Middle	18.6	56.7	7.8	7.1	3.9	4.1	0.9	0.8	100.0	83.1	1,836
Fourth	22.5	67.2	2.1	4.7	1.6	0.8	0.3	0.8	100.0	91.7	1,671
Highest	31.1	59.5	0.9	3.9	3.7	0.0	0.2	0.7	100.0	91.5	1,498
<b>Total</b>	<b>18.7</b>	<b>56.9</b>	<b>8.0</b>	<b>5.8</b>	<b>4.4</b>	<b>4.2</b>	<b>1.2</b>	<b>0.8</b>	<b>100.0</b>	<b>83.6</b>	<b>8,901</b>

Note: Total includes 10 children with missing information on type of toilet facility.

<sup>1</sup> Children's stools are considered to be disposed of safely if the child used a toilet or latrine, if the faecal matter was put/rinsed into a toilet or latrine, or if it was buried.

<sup>2</sup> See Table 2.2 for definition of categories.

<sup>3</sup> Facilities that would be considered improved if they were not shared by two or more households



**Key Findings**

- Forty percent of children under age 5 are stunted, 6 percent are wasted, and 15 percent are underweight.
- Breastfeeding is nearly universal in Zambia. Ninety-eight percent of children born in the last two years have ever been breastfed.
- The median duration of breastfeeding among children born in the three years before the survey is 20.1 months.
- Seventy-three percent of children less than age 6 months are exclusively breastfed, and the median duration of exclusive breastfeeding is 4.1 months.
- More than eight in ten (82 percent) children age 6-8 months (both breastfed and nonbreastfed) are introduced to complementary foods at an appropriate time.
- Overall, only 11 percent of children age 6-23 months are fed appropriately based on recommended infant and young child feeding (IYCF) practices.
- Ten percent of women age 15-49 are underweight, that is, they fall below the body mass index (BMI) cutoff of 18.5. Twenty-three percent of women are overweight or obese. The percentage of women who are overweight or obese has increased steadily over the last decade.
- Fifty-nine percent of women age 15-49 with a birth in the last five years took iron tablets or syrup for more than 90 days, 64 percent took de-worming medication during their most recent pregnancy, and 62 percent received a vitamin A dose postpartum.

Good nutrition is a prerequisite for the national development of countries and for the well-being of individuals. Although problems related to poor nutrition affect the entire population, women and children are especially vulnerable because of their unique physiology and socioeconomic characteristics.

Adequate nutrition is critical to children's growth and development. The period from birth to age 2 is especially important for optimal physical, mental, and cognitive growth, health, and development. Unfortunately, this period is often marked by macro- and micronutrient deficiencies that interfere with optimal growth. Childhood illnesses such as diarrhoea, measles and acute respiratory infections are also common.

A woman's nutritional status has important implications for her health as well as for the health of her children. Malnutrition in women results in reduced productivity, increased susceptibility to infections, slowed recovery from illness, and a heightened risk of adverse pregnancy outcomes. For example, a woman with poor nutritional status, as indicated by a low body mass index (BMI), short stature, anaemia, or other micronutrient deficiencies, has a greater risk of obstructed labour, of having a baby with a low birth weight, of producing low-quality breast milk, of death from postpartum haemorrhage, and of morbidity for both herself and her baby.

This chapter reviews the nutritional status of children and women in Zambia. Specific issues discussed include child nutrition based on anthropometric measurements, infant and young child feeding practices, and micronutrient intake among children and women.

## 11.1 NUTRITIONAL STATUS OF CHILDREN

The nutritional status of children under age 5 is an important proxy measure of children's health. The anthropometric data on height and weight collected in the 2013-14 ZDHS permit the measurement and evaluation of the nutritional status of young children in Zambia. This evaluation allows identification of subgroups of the child population that are at increased risk of faltered growth, disease, impaired mental development, and death.

### 11.1.1 Measurement of Nutritional Status among Young Children

The 2013-14 ZDHS collected data on the nutritional status of children by measuring the height and weight of all children under age 5 in selected households. These measurements allow the calculation of three anthropometric indices: height-for-age, weight-for-height, and weight-for-age.

Indicators of the nutritional status of children were calculated using growth standards published by the World Health Organization in 2006. These growth standards were generated through data collected in the WHO Multicentre Growth Reference Study (WHO, 2006). The findings of that study, which sampled 8,440 children in six countries (Brazil, Ghana, India, Norway, Oman, and the United States), representing all continents, demonstrated how children should grow under optimal conditions. The WHO child growth standards can therefore be used to assess children all over the world, regardless of ethnicity, social and economic influences, or feeding practices. The 2006 growth standards replaced the previously used NCHS/CDC/WHO reference standards.

It should be noted that the WHO child growth standards are not comparable to the previously used NCHS/CDC/WHO standards. When the WHO standards are used instead of the previous standards, several changes are evident (WHO, 2006):

- The level of stunting is higher.
- The level of wasting in infancy is substantially higher.
- The level of underweight is substantially higher during the first half of infancy (0-6 months) and decreases thereafter.
- The level of overweight/obesity is higher.

The three anthropometric indices are expressed in standard deviation units from the Multicentre Growth Reference Study median.

The height-for-age index is an indicator of linear growth retardation and cumulative growth deficits in children. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the WHO reference population are considered short for their age (stunted), or chronically malnourished. Children who are below minus three standard deviations (-3 SD) from the reference median are considered severely stunted. Stunting reflects failure to receive adequate nutrition over a long period of time and can also be affected by recurrent and chronic illness. Height-for-age, therefore, represents the long-term effects of undernutrition in a population and is not sensitive to recent, short-term changes in dietary intake.

The weight-for-height index measures body mass in relation to body height or length and describes current nutritional status. Children with Z-scores below minus two standard deviations (-2 SD) from the reference population median are considered thin (wasted) or acutely malnourished. Wasting represents the failure to receive adequate nutrition in the short time period immediately preceding the survey and may be the result of inadequate food intake or a recent episode of illness causing loss of weight and the onset of malnutrition. Children with a weight-for-height index below minus three standard

deviations (-3 SD) from the reference median are considered severely wasted. The weight-for-height index also provides data on overweight and obesity. Children more than two standard deviations (+2 SD) above the weight-for-height median are considered overweight or obese.

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both chronic and acute undernutrition. Children whose weight-for-age is below minus two standard deviations (-2 SD) from the reference population median are classified as underweight. Children whose weight-for-age is below minus three standard deviations (-3 SD) from the reference median are considered severely underweight.

### **11.1.2 Data Collection**

Measurements of height and weight were obtained for all children born in the five years preceding the survey in the subsample of households selected for the male survey and listed in the Household Questionnaire. Children who were not biological children of the women interviewed in the survey were included. Each team of interviewers carried a scale and measuring board. Measurements were made using lightweight SECA scales (with digital screens) designed and manufactured under the authority of the United Nations Children's Fund (UNICEF). The measuring boards employed were specially produced by Shorr Productions for use in survey settings. Children who were under age 2 or less than 87 cm (when the age was unknown) were measured lying down on the board (recumbent length), and standing height was measured for all other children, between 2 and 5 years old.

Data were collected for all children under age 6; for purposes of comparability, however, the analysis is limited to children under age 5. Height and weight measurements were obtained for 91 percent of the 13,589 eligible children (unweighted). Height and weight were missing for 5 percent of children, the data for 3 percent were flagged (out-of-range), and less than 1 percent had incomplete information on age in months.

The following analysis focuses on children for whom complete and credible anthropometric data and valid age data were collected.

### **11.1.3 Measures of Child Nutritional Status**

#### *Height-for-age*

Table 11.1 and Figure 11.1 present the nutritional status of children under age 5 by various background characteristics. Nationally, 40 percent of children under age 5 are stunted, and 17 percent are severely stunted. Analysis by age groups shows that stunting is highest (54 percent) in children age 18-23 months and lowest (14 percent) in children less than 6 months of age. Severe stunting shows a similar pattern, with the highest proportion among children age 18-23 months (25 percent). Stunting is higher in male than in female children (42 percent versus 38 percent). Stunting decreases as the length of the preceding birth interval increases; it is highest among children born less than 24 months following a previous birth (46 percent) and lowest among children born 48 or more months after a preceding birth (34 percent). More than half of children whose size at birth was very small (62 percent) or small (52 percent) are stunted. Mothers' nutritional status, as measured by their body mass index, also has an impact on the level of stunting in their children. Stunting is most likely (50 percent) among children whose mothers are thin (BMI of less than 18.5) and least likely (32 percent) among children whose mothers are overweight or obese (BMI of 25 or above).

Children in rural areas (42 percent) are more likely to be stunted than those in urban areas (36 percent). At the provincial level, Northern has the highest proportion of stunted children (49 percent), while Copperbelt, Lusaka, and Western have the lowest proportions (36 percent each).

Mother's level of education generally has an inverse relationship with stunting levels; stunting ranges from a low of 18 percent among children whose mothers have more than a secondary education to a high of 45 percent among those whose mothers have no education. A similar inverse relationship is observed between stunting and wealth. Children in the poorest households are much more likely to be stunted (47 percent) than children in the wealthiest households (28 percent).

### *Weight-for-height*

Table 11.1 also shows the nutritional status of children less than age 5 as measured by weight-for-height. Overall, 6 percent of children are wasted. Analysis by age group shows that wasting ranges from 5 percent among children age 24-59 months to 10 percent among those age 9-11 months. Wasting does not vary extensively by gender, by length of preceding birth interval, or by residence. Wasting is most likely among babies who were very small or small at birth (9 percent) and least likely among those whose birth size was average or larger (6 percent). Wasting is slightly higher among children whose mothers are thin than among those whose mothers are normal, overweight or obese (8 percent versus 6 percent). By province, wasting is highest among children in Luapula (13 percent) and lowest among children in Muchinga, Northern, and Southern (4 percent each). There is no major variation in wasting by mother's education or household wealth. Overall, childhood overweight and obesity remains at 1 percent. Analysis by age group shows that percentage overweight and obese is highest among children below 6 months of age (3 percent) and it decreases with age.

### *Weight-for-age*

As shown in Table 11.1, 15 percent of children under age 5 are underweight (low weight-for-age), and 3 percent are severely underweight. The proportion of underweight children is highest among those age 18-23 months (18 percent). Male children are slightly more likely to be underweight than female children (16 percent versus 14 percent). There is a notable correlation between underweight and birth weight. The percentage of children who are underweight is highest among those who were very small at birth (32 percent) and those born to mothers who are thin (26 percent). Rural children are more likely to be underweight (16 percent) than urban children (13 percent). Luapula has the highest percentage of underweight children (21 percent), while Lusaka has the lowest (11 percent).

As with stunting, mother's education and household wealth are inversely associated with underweight. The proportion of children who are underweight ranges from a low of 5 percent among those whose mothers have more than a secondary education to a high of 20 percent among those whose mothers have no education. In addition, children in the poorest households are more than twice as likely to be underweight as children in the wealthiest households (20 percent versus 9 percent).

Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Zambia 2013-14

Background characteristic	Height-for-age <sup>1</sup>			Weight-for-height			Weight-for-age			Number of children
	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Percentage above +2 SD	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Percentage above +2 SD	
Age in months										
<6	5.3	13.6	-0.4	3.1	8.0	15.4	0.9	5.8	2.5	1,032
6-8	9.6	25.1	-1.0	2.5	9.0	11.6	3.9	11.4	1.6	585
9-11	17.6	38.5	-1.5	2.3	10.1	10.4	5.7	17.4	1.7	606
12-17	19.6	43.1	-1.5	2.3	7.6	6.1	2.2	13.5	1.2	1,300
18-23	25.4	54.0	-2.0	2.2	6.1	5.7	4.1	17.8	1.2	1,206
24-35	24.8	51.0	-2.0	2.2	5.2	4.0	3.9	17.1	0.5	2,450
36-47	16.4	41.6	-1.7	1.9	5.1	3.4	2.8	15.2	0.4	2,496
48-59	12.3	34.6	-1.6	1.8	4.5	3.3	2.8	14.9	0.2	2,653
Sex										
Male	19.0	42.4	-1.7	2.5	6.2	6.1	3.5	16.0	0.9	6,188
Female	15.4	37.6	-1.5	1.8	5.8	5.4	2.8	13.5	0.8	6,140
Birth interval in months <sup>3</sup>										
First birth <sup>4</sup>	17.5	40.0	-1.6	2.0	6.0	5.8	2.6	13.8	0.6	2,277
<24	21.5	46.1	-1.9	1.7	5.8	5.7	4.1	19.6	0.6	1,360
24-47	16.8	40.5	-1.6	2.1	5.6	5.6	3.1	14.7	0.9	5,500
48+	14.4	34.4	-1.3	2.4	7.5	6.6	2.6	12.2	1.0	2,175
Size at birth <sup>3</sup>										
Very small	30.4	62.1	-2.1	6.0	9.3	2.7	10.4	32.4	2.3	183
Small	23.5	51.5	-1.9	3.1	9.2	4.8	6.9	25.8	0.4	988
Average or larger	16.1	38.3	-1.5	1.9	5.7	6.0	2.5	13.2	0.8	9,968
Mother's interview status										
Interviewed	17.1	39.9	-1.6	2.1	6.0	5.9	3.1	14.6	0.8	11,312
Not interviewed but in household	21.1	44.6	-1.7	1.9	5.1	3.7	2.7	13.1	1.5	263
Not interviewed and not in the household <sup>5</sup>	18.0	40.7	-1.7	3.1	6.4	4.7	4.5	16.9	0.5	752
Mother's nutritional status <sup>6</sup>										
Thin (BMI <18.5)	22.8	50.4	-2.0	1.6	7.6	3.0	5.8	25.5	0.1	904
Normal (BMI 18.5-24.9)	17.7	40.5	-1.6	2.2	6.0	5.9	2.9	14.6	0.7	6,905
Overweight/obese (BMI ≥ 25)	11.5	31.6	-1.3	1.5	5.9	7.9	1.8	9.4	1.7	2,064
Residence										
Urban	15.7	36.0	-1.4	2.3	6.4	6.5	2.6	12.9	1.3	4,140
Rural	18.0	42.1	-1.7	2.1	5.9	5.4	3.4	15.7	0.6	8,188
Province										
Central	19.1	42.5	-1.7	1.6	4.6	6.7	2.2	15.3	0.4	1,166
Copperbelt	14.4	36.2	-1.5	2.5	5.8	5.2	2.9	14.1	1.2	1,561
Eastern	17.4	43.3	-1.7	1.4	5.1	6.0	2.2	12.8	0.5	1,576
Luapula	22.8	43.0	-1.5	5.9	13.1	4.9	6.8	21.2	0.8	1,076
Lusaka	15.8	35.7	-1.3	2.3	7.0	8.0	2.3	11.0	1.6	1,801

Continued...

Table 11.1—Continued

Background characteristic	Height-for-age <sup>1</sup>			Weight-for-height			Weight-for-age			Number of children
	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Percentage above +2 SD	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Percentage above +2 SD	
Muchinga	16.2	43.6	-1.8	1.0	4.1	5.2	3.6	15.6	0.8	765
Northern	23.6	48.5	-1.9	1.4	3.7	5.3	4.2	19.0	0.6	1,197
North Western	15.9	36.9	-1.5	2.9	8.2	7.4	2.2	13.8	1.1	633
Southern	14.1	37.2	-1.6	1.0	4.2	4.6	2.3	13.1	0.6	1,777
Western	14.5	36.2	-1.6	2.5	6.5	3.1	3.8	16.2	0.4	777
Mother's education <sup>7</sup>										
No education	23.1	44.7	-1.8	2.0	7.0	5.9	4.9	19.9	0.5	1,307
Primary	18.3	42.0	-1.7	2.2	5.8	5.5	3.1	15.5	0.7	6,518
Secondary	13.7	36.9	-1.4	1.9	6.1	5.9	2.4	11.9	1.0	3,334
More than secondary	7.8	18.1	-0.8	2.6	5.1	9.2	0.9	4.6	3.8	407
Wealth quintile										
Lowest	22.1	47.3	-1.8	2.9	6.8	5.3	4.4	20.1	0.6	2,951
Second	17.2	41.7	-1.6	1.7	5.9	4.9	3.5	15.7	0.7	2,807
Middle	17.0	40.2	-1.7	1.9	5.2	6.2	2.7	13.7	0.4	2,604
Fourth	16.2	37.6	-1.5	2.5	6.5	6.1	2.8	12.7	1.2	2,152
Highest	10.8	28.4	-1.1	1.7	5.7	6.7	1.5	8.7	1.7	1,814
Total	17.2	40.1	-1.6	2.2	6.0	5.7	3.1	14.8	0.8	12,328

Note: Table is based on children who stayed in the household on the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO child growth standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used NCHS/CDC/WHO reference. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Total includes 170 children for whom information on size at birth is missing and 10 children whose mothers' information on education is missing.

<sup>1</sup> Recumbent length is measured for children under age 2, or in the few cases when the age of the child is unknown and the child is less than 87 cm; standing height is measured for all other children.

<sup>2</sup> Includes children who are below -3 standard deviations (SD) from the WHO child growth standards population median

<sup>3</sup> Excludes children whose mothers were not interviewed

<sup>4</sup> First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

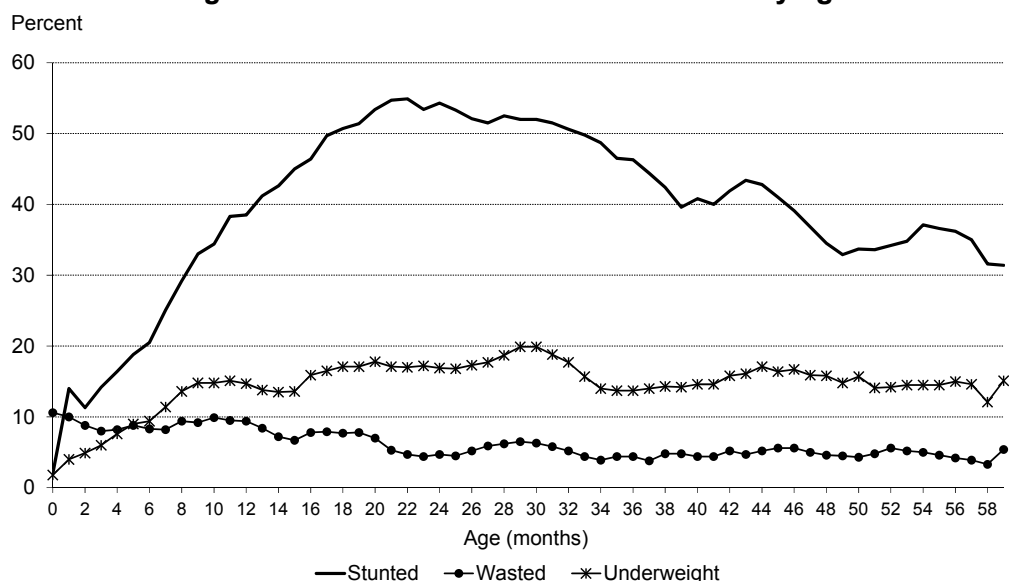
<sup>5</sup> Includes children whose mothers are deceased

<sup>6</sup> Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (body mass index) is presented in Table 11.9.

<sup>7</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.



**Figure 11.1 Nutritional status of children by age**



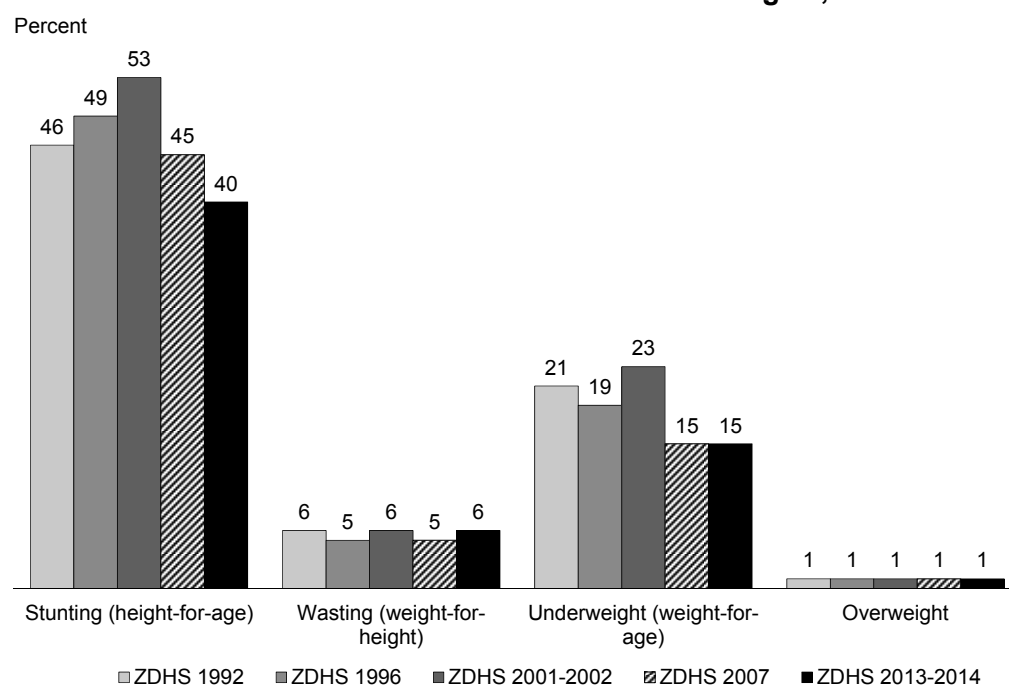
Note: *Stunting* reflects chronic malnutrition; *wasting* reflects acute malnutrition; *underweight* reflects chronic or acute malnutrition or a combination of both. Plotted values are smoothed by a five-month moving average.

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#### 11.1.4 Trends in Children's Nutritional Status

Trends in the nutritional status of children under age 5 are presented in Figure 11.2 (figures are based on the WHO child growth standards adopted in 2006). The percentage of children who are stunted increased from 46 percent in the 1992 ZDHS to 53 percent in the 2001-02 survey and then declined to 40 percent in the 2013-14 ZDHS. There has been a slight rise in the proportion of children who are wasted over the past six years, from 5 percent in 2007 to 6 percent in 2013-14. There were no changes in the proportion of underweight children between 2007 and 2013-14 (with a figure of 15 percent in both surveys). Childhood obesity does not seem to be a problem in Zambia as the levels seem to have remained the same at 1 percent since 1992.

**Figure 11.2 Trends in nutritional status of children under age 5, Zambia 1992-2014**



Note: The data for all surveys are based on the WHO Child Growth standards adopted in 2006. *Stunting* reflects chronic malnutrition; *wasting* reflects chronic or acute malnutrition or a combination of both.

## 11.2 BREASTFEEDING AND COMPLEMENTARY FEEDING

Feeding practices play a critical role in child development. Poor feeding practices can adversely impact the health and nutritional status of children, which in turn has dire consequences for their mental and physical development. The duration and intensity of breastfeeding also affect a mother's period of postpartum infertility and, hence, the length of the birth interval and fertility levels.

### Initiation of Breastfeeding

Early initiation of breastfeeding is important for both the mother and the child. Early suckling stimulates the release of prolactin, which helps in the production of milk, and oxytocin, which is responsible for the ejection of milk. Oxytocin stimulates contraction of the uterus after childbirth and reduces postpartum blood loss. The first yellowish liquid to come from the breast, known as colostrum, is produced in the first few days after delivery. Colostrum is highly nutritious and contains antibodies that provide natural immunity to the infant. It is important that every child should be fed on colostrums. To effectively initiate breast feeding, it is recommended that the baby be put on the breast within one hour. Continuous suckling improves on the flow of breast milk

Table 11.2 shows the percentage of last-born children born in the two years preceding the survey according to whether they were ever breastfed, when they began breastfeeding, and whether they were fed anything other than breast milk prior to the commencement of breastfeeding. Ninety-eight percent of children have been breastfed at some time, with negligible differences by background characteristics. More than six in ten children (66 percent) are breastfed within one hour of birth. The vast majority of children (94 percent) are breastfed within one day of birth.

Early initiation of breastfeeding among young children varies by background characteristics. Breastfeeding within one hour of birth is slightly more common in urban than in rural areas (67 percent versus 65 percent). Children born in a health facility are more likely to start breastfeeding within one hour of birth (69 percent) than children delivered at home (58 percent) or elsewhere (43 percent). By province, initiation of breastfeeding within one hour of birth is highest in Luapula (81 percent) and lowest in Central (49 percent). The percentage of children who started breastfeeding within one hour of birth is lowest among those whose mothers have no education (60 percent) and those from the poorest households (62 percent).

The practice of providing a prelacteal feed is discouraged because it limits the frequency of suckling by the infant, disturbs the supply of breast milk and exposes the baby to the risk of infection. The data show that 4 percent of children who were ever breastfed were given a prelacteal feed. Prelacteal feeding varies by province, from a high of 10 percent in Eastern to a low of 1 percent in Luapula. Also, prelacteal feeding is more common among children whose mothers have a secondary education or higher (17 percent) and those in the highest wealth quintile (7 percent).

Table 11.2 Initial breastfeeding

Among last-born children who were born in the two years preceding the survey, the percentage who were ever breastfed and the percentages who started breastfeeding within one hour and within one day of birth; and among last-born children born in the two years preceding the survey who were ever breastfed, the percentage who received a prelacteal feed, by background characteristics, Zambia 2013-14

Background characteristic	Among last-born children born in the past two years:				Among last-born children born in the past two years who were ever breastfed:	
	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth <sup>1</sup>	Number of last-born children	Percentage who received a prelacteal feed <sup>2</sup>	Number of last-born children ever breastfed
<b>Sex</b>						
Male	97.7	64.8	94.2	2,578	4.7	2,519
Female	97.8	66.8	94.4	2,497	3.4	2,442
<b>Assistance at delivery</b>						
Health professional <sup>3</sup>	97.5	69.3	94.4	3,493	4.1	3,407
Traditional birth attendant	99.0	62.5	95.1	687	3.3	680
Other	97.4	56.7	93.5	741	4.2	722
No one	99.2	43.6	93.9	146	5.8	145
<b>Place of delivery</b>						
Health facility	97.5	69.1	94.5	3,671	4.1	3,578
At home	98.6	57.8	93.9	1,335	3.7	1,315
Other	98.0	43.1	93.8	66	6.9	65
<b>Residence</b>						
Urban	96.2	67.3	92.8	1,711	4.3	1,645
Rural	98.6	65.0	95.1	3,363	3.9	3,316
<b>Province</b>						
Central	98.4	48.8	93.8	512	2.0	504
Copperbelt	95.8	55.5	91.6	654	6.2	627
Eastern	98.5	58.9	96.6	641	10.1	631
Luapula	98.8	80.5	95.3	451	1.2	445
Lusaka	96.5	75.0	93.9	742	2.4	717
Muchinga	98.7	49.8	95.0	305	3.3	301
Northern	99.2	74.7	95.6	480	2.2	476
North Western	98.5	77.3	94.9	262	4.1	258
Southern	97.4	76.1	96.3	690	3.1	672
Western	97.7	56.7	88.4	338	4.1	330
<b>Mother's education</b>						
No education	98.9	59.7	94.7	533	4.2	528
Primary	98.3	66.0	94.7	2,744	3.7	2,699
Secondary	97.1	67.5	94.6	1,606	3.1	1,559
More than secondary	92.0	65.0	84.6	191	17.0	176
<b>Wealth quintile</b>						
Lowest	98.8	61.8	94.3	1,247	4.1	1,233
Second	98.7	67.1	95.4	1,169	3.9	1,155
Middle	98.4	67.5	95.9	1,028	2.9	1,012
Fourth	97.6	69.9	95.1	899	2.9	877
Highest	93.6	63.0	89.2	730	7.4	684
<b>Total</b>	<b>97.8</b>	<b>65.8</b>	<b>94.3</b>	<b>5,074</b>	<b>4.1</b>	<b>4,961</b>

Note: Table is based on last-born children born in the two years preceding the survey regardless of whether the children are living or dead at the time of interview. Total includes 7 children for whom information on assistance at delivery is missing and 3 children for whom information on place of delivery is missing.

<sup>1</sup> Includes children who started breastfeeding within one hour of birth

<sup>2</sup> Children given something other than breast milk during the first three days of life

<sup>3</sup> Doctor, clinical officer, or nurse/midwife

### 11.3 BREASTFEEDING STATUS BY AGE

UNICEF and WHO recommend that children be exclusively breastfed during the first six months of life and that they be given age-appropriate solid or semisolid complementary food in addition to continued breastfeeding from 6 months of age to at least age 24 months (WHO/UNICEF, 2002; PAHO/WHO, 2004). The National Food and Nutrition Strategic Plan 2011-2015 (National Food and Nutrition Commission [NFNC], 2011), the First 1,000 Most Critical Days Programme 2013-2015 (NFNC, 2013), and the National Health Strategic Plan 2011-2015 (MoH, 2011) promote exclusive breastfeeding from birth through to age 6 months and, thereafter, the introduction of semisolid or solid foods along with continued breast milk until the child is at least age 2. Introducing breast milk substitutes to infants before 6 completed months can contribute to breastfeeding failure. These substitutes, such as milk formula, other kinds of milk, and porridge, lack important nutrients such as fatty acids and antibodies required especially

to improve on the health of the baby. Furthermore, possible contamination of these substitutes exposes infants to the risk of illness. Zambia's Statutory Instrument No. 48 of 2006 promotes and protects breastfeeding and regulates the unauthorised or unsolicited sale and distribution of breast milk substitutes (Government of Zambia, 2006).

After six completed months, a child requires adequate complementary foods for normal growth. Lack of appropriate complementary feeding may lead to malnutrition and frequent illnesses, which in turn may lead to death. However, even with complementary feeding, the child should continue to be breastfed for two years or more.

Information on complementary feeding was obtained by asking mothers about the current breastfeeding status of all children under age 5 and, for the youngest child born in the three-year period before the survey and living with the mother, the foods and liquids given to the child the day and night before the survey.

**Table 11.3 Breastfeeding status by age**

Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under age 2 using a bottle with a nipple, according to age in months, Zambia 2013-14

Age in months	Breastfeeding status						Total	Percentage currently breastfeeding	Number of youngest child under age 2 living with the mother	Percentage using a bottle with a nipple	Number of all children under age 2
	Not breast-feeding	Exclusively breastfed	Breast-feeding and consuming plain water only	Breast-feeding and consuming non-milk liquids <sup>1</sup>	Breast-feeding and consuming other milk	Breastfeeding and consuming complementary foods					
0-1	1.2	94.3	3.0	0.4	0.6	0.5	100.0	98.8	307	1.1	310
2-3	1.2	85.1	4.5	0.8	1.5	7.0	100.0	98.8	434	3.7	442
4-5	1.6	45.2	10.5	2.5	0.8	39.3	100.0	98.4	444	6.8	453
6-8	2.6	6.5	7.3	2.2	1.0	80.4	100.0	97.4	624	6.1	631
9-11	4.3	0.7	2.1	1.0	0.4	91.6	100.0	95.7	626	5.9	643
12-17	10.2	0.6	2.1	0.6	0.3	86.1	100.0	89.8	1,299	6.1	1,336
18-23	48.6	0.2	0.9	0.3	0.0	50.0	100.0	51.4	1,153	3.1	1,240
0-3	1.2	88.9	3.9	0.7	1.1	4.3	100.0	98.8	741	2.7	752
0-5	1.3	72.5	6.4	1.3	1.0	17.4	100.0	98.7	1,185	4.2	1,204
6-9	3.3	5.2	5.8	2.0	0.8	82.9	100.0	96.7	814	6.2	826
12-15	7.8	0.8	2.2	0.8	0.4	88.0	100.0	92.2	879	7.0	898
12-23	28.3	0.4	1.5	0.5	0.2	69.1	100.0	71.7	2,453	4.7	2,575
20-23	58.2	0.1	0.5	0.2	0.0	41.0	100.0	41.8	743	2.9	814

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

<sup>1</sup> Non-milk liquids include juice, juice drinks, clear broth, or other liquids.

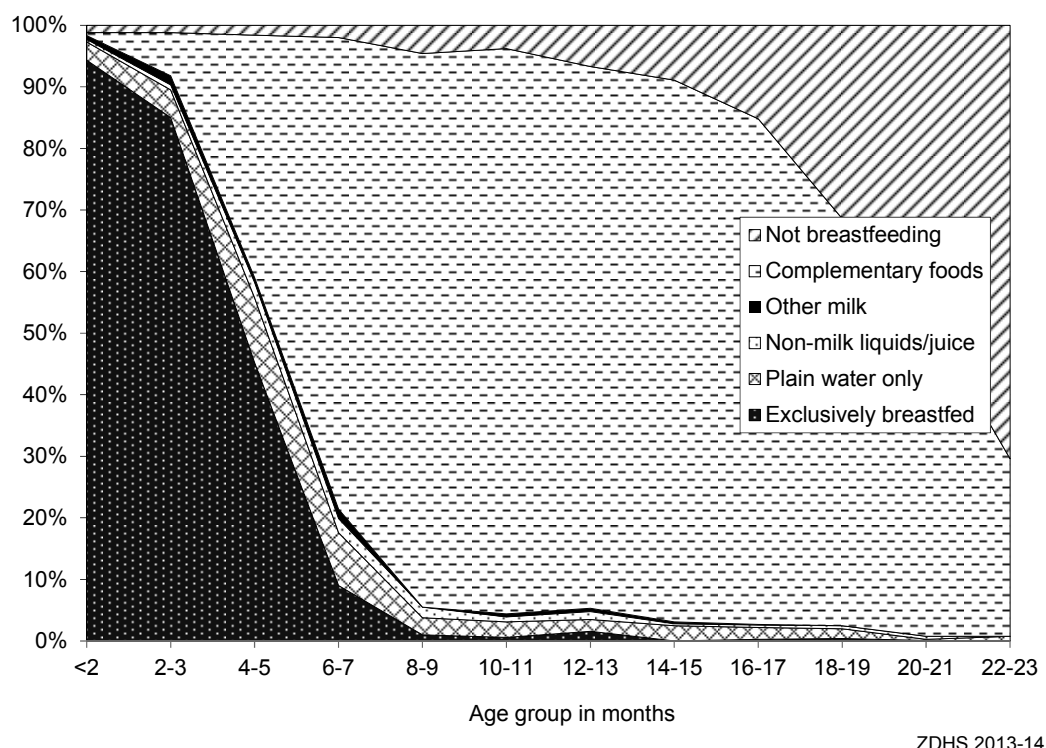
Table 11.3 shows the percentage of youngest children under age 2 living with their mother by breastfeeding status, the percentage currently breastfeeding, and the percentage using a bottle with a nipple, according to age in months. The data show that, after the first six months, the percentage of children breastfed decreases steadily with age. Ninety-nine percent of children age 0-5 months are breastfed, as compared with 96 percent of children age 9-11 months and 51 percent of children age 18-23 months.

Consistent with recommendations, 73 percent of children were exclusively breastfed for the first six months of life, an increase from the figure of 61 percent reported in the 2007 ZDHS. Six percent of children under age 6 months receive plain water in addition to breast milk, and 1 percent receive other milk in addition to breast milk.

Also, Table 11.3 and Figure 11.3 show complementary feeding practices among children of different ages. Complementary foods are often introduced early in Zambia, with 17 percent of children under age 6 months and 39 percent of children age 4-5 months consuming solid or semisolid foods in addition to breast milk. Although all children age 6-9 months should receive complementary foods, Table

11.3 shows that only 83 percent of children in this age group are breastfeeding and receiving complementary foods, a decline from the figure of 93 percent reported in the 2007 survey.

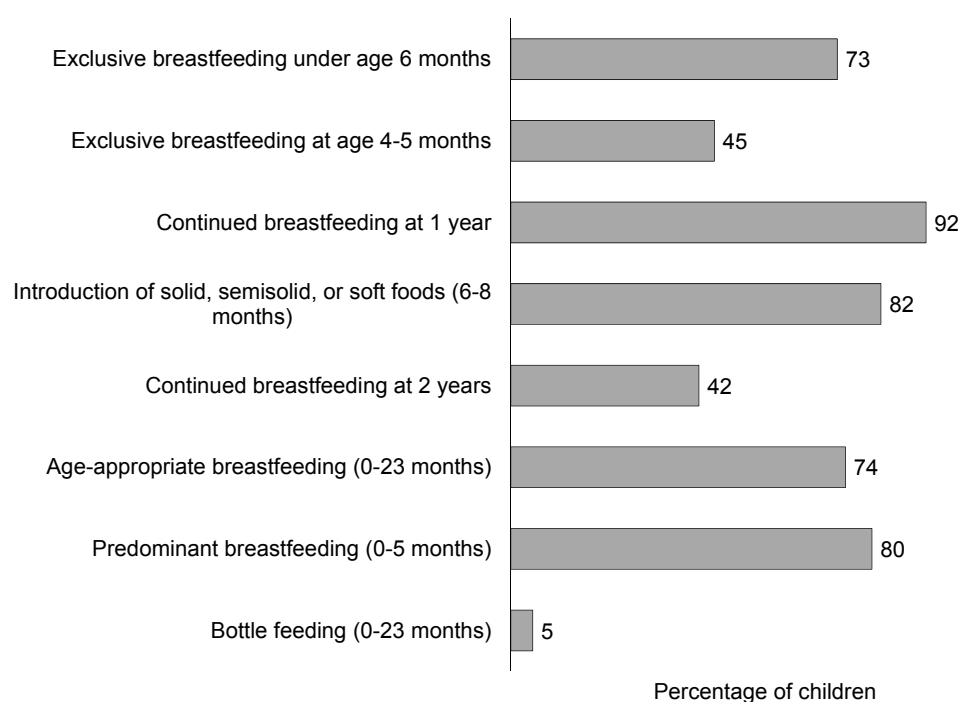
**Figure 11.3 Infant feeding practices by age**



The use of a bottle with a nipple, regardless of the contents (breast milk, milk formula, or any other liquid) is not recommended in Zambia. This is because it requires hygienic handling to avoid contamination, which is not the case in most households. Poor hygienic handling of the bottle places the infant at risk of getting infection such as diarrhoea. The data show that 4 percent of infants less than age 6 months are fed using a bottle with a nipple.

Figure 11.4 presents the 2013-14 ZDHS results on infant and young child feeding (IYCF) practices. As noted above, 73 percent of children under age 6 months are exclusively breastfed. More than eight in ten (82 percent) children age 6-8 months (both breastfed and nonbreastfed) are introduced to complementary foods at an appropriate time. Ninety-two percent of all children are still breastfeeding at age 1, and 42 percent are still breastfeeding at age 2. About three-quarters (74 percent) of Zambian children age 0-23 months are breastfed appropriately for their age. This includes exclusive breastfeeding for children age 0-5 months and continued breastfeeding along with complementary foods for children age 6-23 months. Eighty percent of children under age 6 months are predominantly breastfed. This percentage includes children who are exclusively breastfed and those who receive breast milk and only plain water or non-milk liquids such as juice. Finally, 5 percent of children under age 2 are bottle fed.

**Figure 11.4 IYCF indicators on breastfeeding status**



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## 11.4 DURATION OF BREASTFEEDING

Table 11.4 provides information on the median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey. The median duration of any breastfeeding in Zambia is 20 months, similar to the median duration of breastfeeding reported in the 2007 ZDHS. The mean duration of breastfeeding is also 20 months. Median duration of breastfeeding is somewhat lower among children in urban than in rural areas (17.5 months versus 21.2 months). It ranges from 17.1 months in Copperbelt to 22.1 months in Muchinga. There is an inverse relationship between median duration of breastfeeding and mother's education and household wealth. For example, the median duration decreases from 22.2 months among children whose mothers have no education to 15.4 months among those whose mothers have more than a secondary education. The longest median duration of breastfeeding is among the poorest children (22.4 months), and the shortest duration is among the richest children (16.8 months).

The median duration of exclusive breastfeeding is 4.1 months and the mean duration is 4.9 months, both of which represent increases from the 2007 ZDHS figures (3.1 months and 4.0 months, respectively).

Table 11.4 also shows the median duration of predominant breastfeeding, which is defined as exclusive breastfeeding or breastfeeding in combination with plain water, water-based liquids, or juices. The median duration of predominant breastfeeding is 4.8 months, an increase from 3.8 months in the 2007 ZDHS.

Differences in median durations of exclusive or predominant breastfeeding by background characteristics are similar to those observed for any breastfeeding but are much less pronounced.

**Table 11.4 Median duration of breastfeeding**

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, by background characteristics, Zambia 2013-14

Background characteristic	Median duration (months) of breastfeeding among children born in the past three years <sup>1</sup>		
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding <sup>2</sup>
<b>Sex</b>			
Male	20.2	4.1	4.8
Female	20.1	4.1	4.9
<b>Residence</b>			
Urban	17.5	4.0	4.6
Rural	21.2	4.2	5.0
<b>Province</b>			
Central	19.5	4.3	5.0
Copperbelt	17.1	3.3	4.0
Eastern	21.7	3.9	4.5
Luapula	21.4	3.4	4.2
Lusaka	17.9	4.3	4.9
Muchinga	22.1	3.4	4.5
Northern	21.6	4.2	5.1
North Western	20.2	3.0	4.0
Southern	19.7	5.6	6.1
Western	21.9	4.8	5.1
<b>Mother's education</b>			
No education	22.2	4.3	5.1
Primary	20.9	4.0	4.8
Secondary	18.5	4.3	5.0
More than secondary	15.4	(2.5)	(3.0)
<b>Wealth quintile</b>			
Lowest	22.4	4.2	4.9
Second	21.0	4.1	5.1
Middle	19.8	4.2	4.8
Fourth	17.9	4.3	4.8
Highest	16.8	3.5	4.2
Total	20.1	4.1	4.8
Mean for all children	20.1	4.9	5.9

Note: Median and mean durations are based on the distributions at the time of the survey of the proportion of births by months since birth. Includes children living and deceased at the time of the survey. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding.

<sup>2</sup> Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

## 11.5 TYPES OF COMPLEMENTARY FOODS

It is recommended that complementary foods (solid or semisolid foods fed to infants in addition to breast milk) be started at age 6 months. The reason is that, at this age, breast milk alone is no longer sufficient to maintain the child's recommended daily allowances of nutritional requirements and enhance growth. Children are fed small quantities of solid and semisolid foods while continuing to breastfeed up to age 2 or beyond. The amount of food is increased gradually from 6 to 23 months, which is the period of transition to eating the regular family diet. This period is characterised by an increase in the prevalence of malnutrition because of poor feeding practices and infections. Table 11.5 shows the percentage of youngest children under age 2 who are living with their mother by types of foods consumed in the day or night preceding the interview, according to breastfeeding status and age.

The data show that, contrary to WHO recommendations, the practice of feeding children with solid or semisolid foods starts early in life. Seven percent of breastfeeding children age 2-3 months receive some kind of solid or semisolid food, and this proportion increases to 40 percent by age 4-5 months.

Table 11.5 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Zambia 2013-14

Age in months	Liquids				Solid or semisolid foods										Number of children	
	Infant formula	Other milk <sup>1</sup>	Other liquids <sup>2</sup>	Fortified baby foods	Fruits and vegetables		Food made from roots and tubers		Food made from legumes and nuts		Meat, fish, poultry	Eggs	Cheese, yogurt, other milk products	Caterpillars, insects, or other small protein foods		Any solid or semi-solid food
					rich in vitamin A <sup>4</sup>	Other fruits and vegetables	Food made from grains <sup>3</sup>	Food made from roots and tubers	Food made from roots and tubers	Food made from legumes and nuts						
BREASTFEEDING CHILDREN																
0-1	0.2	0.4	0.6	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.5	303
2-3	1.9	0.1	1.4	3.8	2.7	0.0	0.3	0.1	0.4	0.1	0.0	0.1	0.0	0.1	7.0	429
4-5	1.3	1.7	12.1	18.3	19.4	4.3	0.9	0.7	2.3	2.5	1.1	1.5	0.0	1.1	40.0	437
6-8	2.8	3.3	35.8	30.7	48.3	25.9	7.5	3.9	12.0	19.5	9.7	9.7	0.1	3.9	82.5	607
9-11	1.4	5.7	53.8	25.0	64.4	58.6	16.2	6.5	18.2	38.6	6.7	18.8	1.2	6.7	95.7	599
12-17	1.2	4.1	49.4	17.9	71.5	67.1	18.6	10.0	18.6	42.8	4.8	19.2	1.9	4.8	95.9	1,167
18-23	0.1	4.0	46.1	12.6	77.4	76.4	22.9	16.5	23.9	43.7	4.2	17.7	1.8	4.2	97.3	592
6-23	1.4	4.2	46.8	20.9	66.5	58.8	16.7	9.3	18.2	37.4	4.9	16.8	1.4	4.9	93.4	2,965
Total	1.3	3.2	35.1	17.3	50.1	42.7	12.1	6.8	13.4	27.1	3.6	12.3	1.0	3.6	72.0	4,134
NONBREASTFEEDING CHILDREN																
0-11	21.5	7.9	55.8	35.2	42.6	29.3	7.1	4.4	16.0	28.3	10.7	8.4	0.0	10.7	74.2	59
12-17	2.2	11.8	64.2	37.7	76.7	78.2	31.4	10.3	22.4	57.0	16.9	36.8	1.2	16.9	98.3	133
18-23	1.4	5.9	67.8	20.4	75.3	73.9	28.1	14.1	22.1	52.3	8.7	26.6	4.2	8.7	96.9	561
6-23	2.3	7.0	67.0	24.5	74.5	72.7	27.6	12.9	22.1	52.3	10.5	27.5	3.4	10.5	96.4	737
Total	3.1	7.1	66.2	24.6	73.0	71.2	27.0	12.7	21.7	51.2	10.3	27.0	3.3	10.3	95.3	753

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). <sup>1</sup> Other milk includes fresh, tinned, and powdered cow or other animal milk.

<sup>2</sup> Does not include plain water

<sup>3</sup> Includes fortified baby food

<sup>4</sup> Includes pumpkin, carrots, squash, sweet potatoes, dark green leafy vegetables, cassava leaves, rape, sweet potato leaves, ripe mangoes, papaya, apricot, and watermelon.



Overall, 93 percent of breastfed children age 6-23 months receive solid or semisolid complementary foods in addition to breast milk. These complementary foods include foods made from grains (67 percent), fruits and vegetables rich in vitamin A (59 percent), fortified baby foods (21 percent), other fruits and vegetables (17 percent), and food made from roots and tubers (9 percent). Children are also fed protein-rich foods such as meat, fish, and poultry (37 percent); legumes and nuts (18 percent); and eggs (17 percent). Five percent of children are given cheese, yogurt, and other milk products. Also, 4 percent of children in this age group are given other milk, and 47 percent are given other liquids. Use of infant formula is minimal (1 percent). One percent of Zambian children also consume small protein foods such as caterpillars or other insects.

Table 11.5 also presents data on the types of complementary foods consumed by nonbreastfeeding children age 6-23 months. All nonbreastfeeding children are fed solid or semisolid foods, and consumption by type of food is higher among nonbreastfeeding children than breastfeeding children.

## 11.6 INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES

Table 11.6 presents the percentages of children less than age 2 living with their mother who are fed according to three IYCF practices, by breastfeeding status. These three indicators take into account the percentages of children for whom feeding practices meet minimum standards with respect to food diversity (i.e., number of food groups consumed), feeding frequency (i.e., number of times the child is fed), and consumption of breast milk or other types of milk or milk products. Breastfed children are considered to be fed within the minimum standards if they consume at least four food groups and receive food other than breast milk at least twice a day in the case of infants age 6-8 months and at least three times a day in the case of children age 9-23 months. Nonbreastfed children are considered to be fed in accordance with the minimum standards if they consume milk or milk products, consume food from at least four food groups (including milk products), and are fed at least four times a day.

Table 11.6 shows that, among breastfed children age 6-23 months, 19 percent were given foods from four or more food groups in the 24 hours preceding the survey. Forty-six percent of breastfed children were fed the minimum number of times in the previous 24 hours. The combined proportion of children who are both given foods from four or more groups and fed the minimum number of times per day is 12 percent. The proportion of breastfeeding children given a variety of foods at least three times daily increases with age, from 8 percent among children age 6-8 months to 14 percent among those age 18-23 months. In addition, children living in urban areas are more likely than those living in rural areas to consume a diverse diet (17 percent versus 10 percent). By province, the percentage of children given a variety of foods at least three times each day ranges from 3 percent in North Western to 20 percent in Southern. This percentage is lowest among children of mothers with no education or a primary education (10-11 percent) and highest among children of mothers with a secondary education or higher (29 percent). Similarly, children of mothers in the lowest wealth quintile are least likely to be given a variety of foods at least three times a day (8 percent), and children of mothers in the highest quintile are most likely to be fed in accordance with these standards (22 percent).

Eight percent of nonbreastfed children age 6-23 months were given milk or milk products, 34 percent were given foods from four or more food groups, and 25 percent were fed the minimum number of times in the 24 hours preceding the survey. Only 4 percent of nonbreastfed children were fed in accordance with the three recommended IYCF practices. There are some variations by background characteristics. Children age 12-17 months (8 percent), male children (5 percent), children living in urban areas (5 percent), children in Copperbelt and Lusaka (7 percent and 6 percent, respectively), children of mothers with a secondary education or higher (14 percent), and children in the richest households (8 percent) are most likely to be fed according to the three recommended IYCF practices.

Table 11.6 Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, by background characteristics, Zambia 2013-14

Background characteristic	Among breastfed children 6-23 months, percentage fed:			Among nonbreastfed children 6-23 months, percentage fed:			Among all children 6-23 months, percentage fed:			Number of non-breastfed children 6-23 months	Breast milk, milk, or milk products <sup>6</sup>	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>7</sup>	With 3 IYCF practices <sup>5</sup>	With 3 IYCF practices	Number of all children 6-23 months
	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>2</sup>	Both 4+ food groups and minimum meal frequency	Milk or milk products <sup>3</sup>	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>4</sup>	With 3 IYCF practices <sup>5</sup>	With 3 IYCF practices	With 3 IYCF practices							
<b>Age in months</b>																
6-8	9.4	62.1	8.2	*	*	*	*	*	*	16	97.8	9.4	60.9	8.0	8.0	624
9-11	19.7	42.3	12.6	*	*	*	*	*	*	27	96.6	19.9	41.5	12.1	12.1	626
12-17	21.2	43.6	13.0	16.0	42.8	31.0	7.6	7.6	7.6	133	91.4	23.4	42.3	12.4	12.4	1,299
18-23	23.9	39.6	14.2	5.5	33.4	24.5	3.1	3.1	3.1	561	54.0	28.5	32.2	8.8	8.8	1,153
<b>Sex</b>																
Male	19.3	45.5	12.3	11.5	35.9	26.4	4.9	4.9	4.9	392	81.4	22.8	41.5	10.7	10.7	1,866
Female	18.7	47.1	12.0	4.3	32.5	24.2	2.4	2.4	2.4	345	82.0	21.3	42.8	10.2	10.2	1,836
<b>Residence</b>																
Urban	25.8	53.4	16.8	12.1	42.0	30.4	5.4	5.4	5.4	381	73.1	30.8	46.3	13.3	13.3	1,247
Rural	16.2	43.4	10.3	3.9	26.0	20.0	1.9	1.9	1.9	356	86.1	17.6	40.0	9.0	9.0	2,455
<b>Province</b>																
Central	14.7	60.4	11.9	3.5	15.8	24.3	2.8	2.8	2.8	77	79.9	14.9	52.9	10.0	10.0	370
Copperbelt	31.9	49.1	18.5	12.6	39.9	27.1	7.0	7.0	7.0	165	69.8	34.7	41.5	14.5	14.5	477
Eastern	13.1	50.3	9.8	2.3	29.6	6.0	0.0	0.0	0.0	43	91.0	14.6	46.2	8.9	8.9	463
Lusaka	13.2	32.4	9.2	4.0	14.5	9.7	0.6	0.6	0.6	46	86.2	13.4	29.1	8.0	8.0	323
Lusaka	21.3	52.4	12.7	14.9	46.2	31.5	6.1	6.1	6.1	155	75.7	28.4	46.5	10.8	10.8	543
Muchinga	18.7	39.3	9.3	4.2	37.1	20.6	4.2	4.2	4.2	27	88.4	20.9	37.0	8.7	8.7	227
Northern	20.3	34.6	8.7	0.9	29.8	14.5	0.9	0.9	0.9	47	86.4	21.6	31.8	7.6	7.6	345
North Western	10.0	26.3	2.7	5.0	18.1	10.4	1.3	1.3	1.3	36	82.4	11.5	23.4	2.4	2.4	194
Southern	24.3	57.0	19.6	5.2	41.0	39.2	1.6	1.6	1.6	111	79.4	27.9	53.1	15.7	15.7	509
Western	16.2	40.4	11.5	(5.0)	(25.1)	(27.5)	(0.0)	(0.0)	(0.0)	30	88.8	17.3	38.9	10.2	10.2	251
<b>Mother's education</b>																
No education	16.1	39.2	10.6	2.5	15.9	13.5	0.0	0.0	0.0	57	85.7	16.1	35.5	9.1	9.1	389
Primary	16.1	42.6	9.6	3.8	26.8	19.1	1.3	1.3	1.3	333	84.2	17.8	38.8	8.2	8.2	2,034
Secondary	23.7	54.8	16.4	9.8	40.1	29.2	4.8	4.8	4.8	280	77.8	27.7	48.5	13.6	13.6	1,136
More than secondary	43.8	65.0	29.1	27.8	62.7	51.4	14.2	14.2	14.2	66	66.7	52.5	58.7	22.3	22.3	143
<b>Wealth quintile</b>																
Lowest	14.7	37.8	8.1	3.6	19.6	9.2	0.0	0.0	0.0	91	90.6	15.2	35.0	7.3	7.3	927
Second	16.8	45.1	11.2	2.4	23.3	16.2	1.3	1.3	1.3	131	84.8	17.8	40.6	9.7	9.7	842
Middle	15.7	46.2	10.9	5.8	28.9	24.6	4.2	4.2	4.2	150	81.6	18.2	42.0	9.6	9.6	770
Fourth	23.8	54.8	15.7	5.2	31.5	25.7	1.7	1.7	1.7	161	75.4	25.8	47.2	12.1	12.1	619
Highest	33.7	58.6	21.5	17.9	54.0	38.9	8.1	8.1	8.1	204	69.3	41.3	51.2	16.5	16.5	544
Total	19.0	46.3	12.2	8.1	34.3	25.4	3.7	3.7	3.7	737	81.7	22.0	42.2	10.5	10.5	3,702

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Food groups: a. infant formula, milk other than breast milk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c. vitamin A-rich fruits and vegetables (and red palm oil); d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts.

<sup>2</sup> For breastfed children, minimum meal frequency is receiving solid or semisolid food at least twice a day for infants age 6-8 months and at least three times a day for children age 9-23 months.

<sup>3</sup> Includes two or more feedings of commercial infant formula, fresh, tinned, and powdered animal milk, and yogurt.

<sup>4</sup> For nonbreastfed children age 6-23 months, minimum meal frequency is receiving solid or semisolid food or milk feeds at least four times a day.

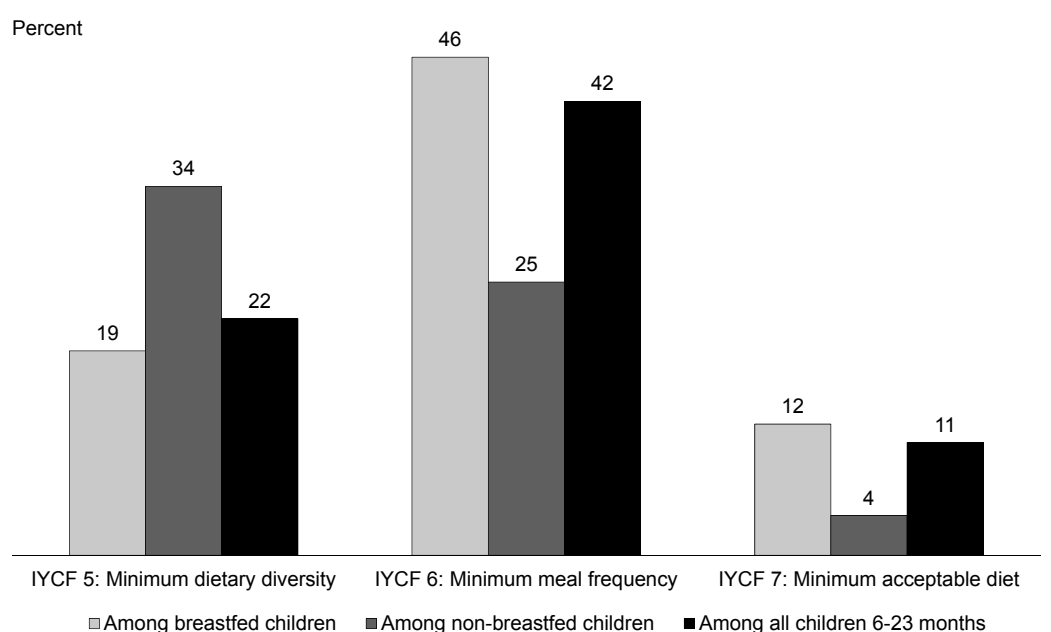
<sup>5</sup> Nonbreastfed children age 6-23 months are considered to be fed with a minimum standard of three infant and young child feeding practices if they receive other milk or milk products at least twice a day, receive the minimum meal frequency, and receive solid or semisolid foods from at least four food groups not including the milk or milk products food group.

<sup>6</sup> Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula, fresh, tinned, and powdered animal milk, and yogurt.

<sup>7</sup> Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 4.

Eighty-two percent of children age 6-23 months (both breastfed and nonbreastfed) were given either breast milk or other milk products in the 24 hours preceding the survey (Table 11.6). Twenty-two percent of children were given foods from four or more food groups, and 42 percent were fed an appropriate number of times (Figure 11.5). Overall, 11 percent of children in Zambia are fed in accordance with the three IYCF practices. Children age 9-17 months (12 percent), those in urban areas (13 percent), and those in Southern and Copperbelt (16 percent and 15 percent, respectively) are most likely to be fed in accordance with these three practices. In general, the percentage of children fed according to the recommended practices increases with increasing mother's education and wealth. For example, only 8-9 percent of children whose mothers have primary or no education are fed according to the three IYCF practices, as compared with 22 percent of children whose mothers have a secondary education or higher. Similarly, children in the richest households are more than twice as likely to be fed appropriately as those in the poorest households (17 percent versus 7 percent).

**Figure 11.5 IYCF indicators on minimum acceptable diet**



ZDHS 2013-14

There have been changes in the definitions of the standard IYCF indicators (such as the removal of “foods made with fats” as a food group, the requirement that breastfed children receive four instead of three food groups, the requirement that nonbreastfed children receive two or more servings of milk or milk products, and the removal of cheese from the milk or milk products group) since the 2007 ZDHS, and thus direct comparisons of these indicators are problematic. However, for purposes of comparison, the 2013-14 ZDHS data were recalculated based on the former IYCF definition. The findings indicate that the percentage of children fed in accordance with the recommended three IYCF practices decreased from 37 percent in 2007 to 19 percent in 2013-14. However, this result should be interpreted with caution, as it could have been influenced by methodological differences in data collection procedures.

## 11.7 MICRONUTRIENT INTAKE AMONG CHILDREN

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Children can receive micronutrients from foods they consume, food fortification, and direct supplementation. Periodic dosing (usually every six months) of vitamin A supplements is one method of ensuring that children at risk do not develop vitamin A deficiency (VAD). Zambia has campaigns in place for biannual mass supplementation of vitamin A capsules (for children age 6-59 months) and distribution of deworming tablets (for children age 12-59 months) under the national child health survival strategy (NFNC, 2006).

Vitamin A is an essential micronutrient for the immune system that plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage and reduced immunity. VAD can also increase the severity of infections, such as measles and diarrhoeal diseases in children, and slow recovery from illness. Vitamin A is found in breast milk, other milk, liver, eggs, fish, butter, mangoes, papayas, carrots, pumpkins, and dark green leafy vegetables. The liver can store an adequate amount of vitamin A for four to six months.

The 2013-14 ZDHS collected information on consumption of foods rich in vitamin A and iron and the status of children receiving vitamin A capsules, iron supplements, and deworming medication during national campaigns. Table 11.7 shows, by background characteristics, the percentage of youngest children age 6-23 months living with their mother who consumed foods rich in vitamin A and iron in the day or night preceding the survey, the percentage of all children age 6-59 months who were given vitamin A supplements in the six months preceding the survey and who were given iron supplements in the past seven days, the percentage of children age 12-59 months who were given deworming medication in the six months preceding the survey, and, among all children age 6-59 months living in households that were tested for the presence of iodised salt, the percentage who lived in households with iodised salt.

Seventy-five percent of children age 6-23 months consumed foods rich in vitamin A the day or night preceding the survey. The proportion of children consuming vitamin A-rich foods increases with age, from 35 percent among those age 6-8 months to 88 percent among those age 18-23 months. Breastfed children are much less likely to consume foods rich in vitamin A than nonbreastfed children (72 percent versus 87 percent). At the provincial level, the percentage of children consuming vitamin A-rich foods is highest in Eastern (78 percent) and lowest in Northern (68 percent). Children of young mothers (age 15-19) are least likely to consume vitamin A-rich foods (69 percent), and children of older mothers (age 40-49) are most likely to do so (81 percent). Variations by mother's education and household wealth are minimal.

Iron is essential for cognitive development, and low iron intake can contribute to anaemia. Iron requirements are greatest at age 6-23 months, when growth is extremely rapid. The 2013-14 ZDHS data show that about one in two children (49 percent) consumed foods rich in iron in the 24 hours prior to the survey (Table 11.7). Consumption of iron-rich foods is highest among children age 18-23 months (58 percent), male children (51 percent), nonbreastfed children (64 percent), and children in urban areas (59 percent). By province, the percentage of children consuming iron-rich foods ranges from 37 percent in Eastern to 61 percent in Copperbelt. Children's consumption of foods rich in iron increases with increasing mother's education and wealth. For example, 71 percent of children whose mothers have a secondary education or higher consume iron-rich foods, as compared with 43 percent of children whose mothers have no education.

The 2013-14 ZDHS collected data on vitamin A and iron supplementation among children under age 5. Table 11.7 shows that 77 percent of children age 6-59 months were given vitamin A supplements in the six months before the survey. The proportion of children receiving a vitamin A supplement initially increases with age, from 43 percent at age 6-8 months to 81 percent at age 18-23 months, before declining to 77 percent at age 48-59 months. Children in urban areas are more likely to receive vitamin A supplements (80 percent) than those in rural areas (75 percent). Copperbelt has the highest proportion of children receiving vitamin A supplements (84 percent), and Central, Northern, and Western have the lowest proportions (73 percent each). The percentage of children receiving vitamin A supplements generally increases with increasing mother's education and wealth.

Seven percent of children age 6-59 months were given iron supplements in the seven days preceding the survey. Differences by background characteristics were minor.

Table 11.7 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, and among all children age 6-59 months, the percentages who were given vitamin A supplements in the six months preceding the survey, who were given iron supplements in the past seven days, and who were given deworming medication in the six months preceding the survey, and among all children age 6-59 months who live in households that were tested for iodised salt, the percentage who live in households with iodised salt, by background characteristics, Zambia 2013-14

Background characteristic	Among youngest children age 6-23 months living with the mother:			Among all children age 6-59 months:				Among children age 6-59 months living in households tested for iodised salt:	
	Percentage who consumed foods rich in vitamin A in last 24 hours <sup>1</sup>	Percentage who consumed foods rich in iron in last 24 hours <sup>2</sup>	Number of children	Percentage given vitamin A supplements in last 6 months	Percentage given iron supplements in last 7 days	Percentage given deworming medication in last 6 months <sup>3</sup>	Number of children	Percentage living in households with iodised salt <sup>4</sup>	Number of children
<b>Age in months</b>									
6-8	34.9	24.3	624	42.6	2.9	9.7	631	95.2	549
9-11	75.1	48.6	626	70.7	8.0	25.7	643	96.3	548
12-17	82.3	53.6	1,299	79.1	7.1	53.0	1,336	96.0	1,122
18-23	88.4	57.5	1,153	80.9	8.5	66.4	1,240	93.7	1,059
24-35	na	na	na	80.3	7.7	67.1	2,507	95.5	2,124
36-47	na	na	na	78.4	7.7	67.1	2,447	95.1	2,125
48-59	na	na	na	77.2	7.2	66.7	2,627	95.6	2,204
<b>Sex</b>									
Male	74.2	50.8	1,866	76.5	7.4	59.7	5,771	95.3	4,896
Female	75.7	47.2	1,836	76.5	7.4	59.9	5,658	95.4	4,835
<b>Breastfeeding status</b>									
Breastfeeding	72.1	45.4	2,965	70.7	6.7	41.5	3,217	95.8	2,712
Not breastfeeding	87.3	64.0	718	78.8	7.7	67.0	8,053	95.1	6,899
<b>Mother's age at birth</b>									
15-19	69.2	44.1	449	70.3	8.1	43.5	694	95.8	584
20-29	74.4	49.5	1,863	77.1	7.0	59.9	5,684	94.9	4,887
30-39	76.9	50.3	1,166	77.1	7.8	62.5	4,044	96.0	3,429
40-49	81.1	48.1	224	75.2	7.6	59.3	1,008	94.8	830
<b>Residence</b>									
Urban	75.2	58.5	1,247	79.8	9.9	64.8	3,929	96.0	3,454
Rural	74.8	44.2	2,455	74.8	6.1	57.2	7,501	94.9	6,276
<b>Province</b>									
Central	72.4	43.6	370	72.7	2.9	61.3	1,108	95.3	1,024
Copperbelt	77.1	60.8	477	83.6	12.0	72.9	1,480	96.8	1,308
Eastern	78.3	37.2	463	75.3	9.3	49.2	1,448	94.9	1,010
Luapula	77.4	43.0	323	80.4	3.2	66.0	1,007	92.9	845
Lusaka	75.2	58.5	543	76.3	11.0	57.5	1,686	95.3	1,511
Muchinga	73.5	44.3	227	73.8	4.9	57.5	701	96.5	614
Northern	67.6	38.0	345	72.9	5.9	57.7	1,081	93.1	981
North Western	74.8	52.0	194	77.2	3.7	54.9	580	96.3	546
Southern	75.5	54.9	509	76.2	4.9	60.6	1,594	94.8	1,335
Western	75.4	49.3	251	73.2	11.1	56.1	743	99.5	557
<b>Mother's education</b>									
No education	77.1	42.7	389	71.4	6.8	53.8	1,253	95.5	975
Primary	74.0	45.4	2,034	74.8	7.2	57.8	6,463	95.0	5,406
Secondary	75.6	54.9	1,136	81.4	7.8	65.0	3,302	95.9	2,965
More than secondary	77.7	71.0	143	79.9	8.8	66.5	412	94.9	384
<b>Wealth quintile</b>									
Lowest	72.8	36.0	927	70.5	5.4	51.7	2,751	95.0	2,117
Second	75.3	46.1	842	77.7	5.2	60.2	2,600	94.6	2,221
Middle	74.6	48.9	770	75.8	7.7	59.6	2,376	95.4	2,050
Fourth	75.6	56.9	619	78.8	10.8	62.8	1,975	95.9	1,757
Highest	77.9	66.9	544	82.6	9.6	69.1	1,727	96.1	1,586
<b>Total</b>	<b>75.0</b>	<b>49.0</b>	<b>3,702</b>	<b>76.5</b>	<b>7.4</b>	<b>59.8</b>	<b>11,430</b>	<b>95.3</b>	<b>9,730</b>

Note: Information on vitamin A is based on both mother's recall and the immunisation card (where available). Information on iron supplements and deworming medication is based on the mother's recall. Total includes 160 children for whom information on breastfeeding status is missing.

na = Not applicable

<sup>1</sup> Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A

<sup>2</sup> Includes meat (and organ meat), fish, poultry, and eggs

<sup>3</sup> Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.

<sup>4</sup> Excludes children in households in which salt was not tested

Certain types of intestinal parasites can cause anaemia. Periodic deworming for organisms such as helminthes can improve children's micronutrient, especially iron status. Table 11.7 shows that 60 percent of children age 6-59 months received deworming medication in the six months before the survey. Children age 18-59 months (66-67 percent), children who are not breastfeeding (67 percent), and children in urban areas (65 percent) are more likely than children in other subgroups to receive deworming medication. By province, Copperbelt has the highest proportion of children who receive deworming medication (73 percent), while North Western has the lowest proportion (55 percent). The likelihood of children receiving deworming medication increases with increasing mother's education and wealth. For example, only 52 percent of children in the poorest households received deworming medication in the six months before the survey, as compared with 69 percent of children in the richest households.

Iodine deficiency, most frequently caused by inadequate iodine intake, has serious effects on body growth and mental development. Fortification of salt with iodine is the most common method of preventing iodine deficiency.

In Zambia, the compound used for fortification of salt is potassium iodate. According to the World Health Organization, a country's salt iodisation programme is considered to be on a good track toward eliminating iodine deficiency when 90 percent of households are using iodised salt. The Zambia Food and Drugs Act (CAP 303) provides for mandatory fortification of salt with iodine and sets out specifications for iodated salt, including packaging and labelling. The current levels of iodation outlined in Regulation 385 of the act are 15-40 parts of iodine per million parts of salt (15-40 ppm) or 25-66 ppm as sodium iodate (MoH and NFNC, 2012).

To assess the use of iodised salt in Zambia, the 2013-14 ZDHS included salt testing at the household level using the MBI rapid test kit. Interviewers asked households to provide a teaspoon of salt used for cooking. When the salt showed no change in colour (to lower the pH with high alkalinity), a recheck solution was used, and the salt was tested again. The MBI rapid test kit provides a good qualitative indication of the presence or absence of iodine. It cannot give a precise measurement of the iodine content in salt. But as studies indicate that use of iodised salt in Zambia is universal (MoH and NFNC, 2012), the interest from a programme perspective has been in assessing the proportion of households using adequately iodised salt (15+ ppm). However, the findings on salt iodisation in the 2013-14 ZDHS refer to children living in households with any iodine in salt; the adequacy of the iodine in the salt was not assessed. The results show that, among children age 6-59 months in households tested for the presence of salt, 95 percent live in households that use iodised salt. There are no major variations by background characteristics.

## **11.8 PRESENCE OF IODISED SALT IN HOUSEHOLDS**

Salt is used for several purposes in a household. It plays a role in cooking and food preservation. As noted, in line with food and drug regulations, household salt should be fortified with iodine sufficient to ensure a concentration of at least 15 parts per million when consumed. Iodine is an essential micronutrient, and iodised salt prevents goitre among children and adults. As mentioned above, the 2013-14 ZDHS tested for the presence of iodine in household salt. Salt was tested in 84 percent of households (Table 11.8). (Household salt was tested for the presence or absence of iodine only; the iodine level in the salt was not measured.)

Among households in which salt was tested, 96 percent were consuming iodised salt. The percentages of households with iodised salt vary only slightly by background characteristics.

Table 11.8 Presence of iodised salt in household

Among all households, the percentage with salt tested for iodine content and the percentage with no salt in the household; and among households with salt tested, the percentage with iodised salt, according to background characteristics, Zambia 2013-14

Background characteristic	Among all households, the percentage:			Among households with tested salt:	
	With salt tested	With no salt in the household	Number of households	Percentage with iodised salt	Number of households
<b>Residence</b>					
Urban	87.4	12.6	6,640	96.2	5,805
Rural	81.9	18.1	9,280	95.2	7,598
<b>Province</b>					
Central	91.0	9.0	1,472	96.1	1,340
Copperbelt	88.2	11.8	2,455	96.0	2,165
Eastern	70.4	29.6	1,938	95.9	1,363
Luapula	82.7	17.3	1,265	93.1	1,046
Lusaka	88.7	11.3	2,925	96.0	2,594
Muchinga	84.3	15.7	881	96.9	743
Northern	88.9	11.1	1,269	92.4	1,128
North Western	92.9	7.1	724	96.6	672
Southern	82.0	18.0	1,934	94.6	1,586
Western	72.5	27.5	1,057	99.3	766
<b>Wealth quintile</b>					
Lowest	74.3	25.7	3,514	94.9	2,611
Second	83.6	16.4	3,055	95.0	2,555
Middle	85.0	15.0	2,958	95.7	2,515
Fourth	87.6	12.4	3,252	95.3	2,848
Highest	91.5	8.5	3,141	96.9	2,875
Total	84.2	15.8	15,920	95.6	13,403

## 11.9 NUTRITIONAL STATUS OF WOMEN

The nutritional status of women was assessed using height measurement and body mass index (BMI). To derive BMI index, the 2013-14 ZDHS took height and weight measurements among women age 15-49. Women who were pregnant and women who had given birth in the two months preceding the survey were excluded from the analysis.

Short stature reflects poor socioeconomic conditions and inadequate nutrition during childhood and adolescence. In a woman, short stature is a risk factor for poor birth outcomes and obstetric complications. For example, short stature is associated with small pelvic size, which increases the likelihood of difficulty during delivery and the risk of bearing low birth weight babies. A woman is considered to be at risk if her height is below 145 cm.

According to Table 11.9, 2 percent of women are shorter than 145 cm. Young women age 15-19 (3 percent); women in Luapula, Muchinga, and Northern (4 percent each); women with no education (3 percent); and women in the lowest wealth quintile (4 percent) are more likely to be below 145 cm.

BMI (expressed as the ratio of weight in kilograms to the square of height in metres [ $\text{kg}/\text{m}^2$ ]) is used to measure thinness or obesity. A BMI below  $18.5 \text{ kg}/\text{m}^2$  indicates thinness or acute undernutrition, and a BMI of  $25.0 \text{ kg}/\text{m}^2$  or above indicates overweight or obesity. A BMI below  $16 \text{ kg}/\text{m}^2$  indicates severe undernutrition and is associated with increased morbidity and mortality. Low pre-pregnancy BMI, as with short stature, is associated with poor birth outcomes and obstetric complications.

Table 11.9 shows that the mean BMI among women age 15-49 is  $23 \text{ kg}/\text{m}^2$ . Mean BMI increases somewhat with age and is higher among urban than rural women ( $24 \text{ kg}/\text{m}^2$  versus  $22 \text{ kg}/\text{m}^2$ ). It is positively correlated with women's level of education and household wealth. For example, mean BMI increases from  $21 \text{ kg}/\text{m}^2$  among women in the lowest wealth quintile to  $24 \text{ kg}/\text{m}^2$  among those in the highest quintile.

Table 11.9 Nutritional status of women

Among women age 15-49, the percentage with height under 145 cm, mean body mass index (BMI), and the percentage with specific BMI levels, by background characteristics, Zambia 2013-14

Background characteristic	Height		Mean body mass index (BMI)	Body mass index <sup>1</sup>							Number of women
				Normal	Thin		Overweight/obese				
	Percent-age below 145 cm	Number of women		18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total over-weight or obese)	25.0-29.9 (over-weight)	≥30.0 (obese)	
<b>Age</b>											
15-19	3.3	3,591	21.1	75.0	16.4	11.8	4.6	8.6	7.5	1.1	3,298
20-29	1.9	5,757	22.6	71.5	8.5	7.1	1.5	20.0	15.2	4.8	4,922
30-39	1.2	4,444	23.7	61.9	8.0	6.0	2.0	30.0	19.9	10.2	3,917
40-49	1.4	2,440	24.1	54.7	9.0	6.2	2.8	36.3	24.0	12.4	2,365
<b>Residence</b>											
Urban	1.4	7,509	23.8	59.8	8.3	6.2	2.1	31.9	21.1	10.8	6,881
Rural	2.4	8,722	21.9	73.4	12.0	9.1	2.9	14.6	11.7	2.9	7,621
<b>Province</b>											
Central	0.8	1,442	22.4	70.6	10.5	8.5	2.0	18.9	13.9	5.0	1,289
Copperbelt	1.3	2,785	23.5	60.7	9.0	6.0	3.0	30.3	20.4	9.9	2,529
Eastern	2.9	1,907	22.6	72.5	7.8	6.0	1.9	19.6	15.6	4.0	1,700
Luapula	4.1	1,132	21.9	76.3	11.1	8.9	2.1	12.7	10.6	2.1	965
Lusaka	1.4	3,244	24.2	56.8	8.2	6.3	1.9	35.0	22.3	12.7	2,966
Muchinga	3.6	858	21.6	72.7	14.0	10.6	3.3	13.4	10.4	3.0	755
Northern	3.9	1,191	21.5	74.2	13.5	9.9	3.6	12.3	10.3	2.0	1,028
North Western	1.5	708	22.1	75.5	9.2	7.0	2.2	15.3	10.9	4.4	626
Southern	1.0	1,992	22.6	68.6	9.4	7.5	1.9	21.9	16.2	5.7	1,777
Western	1.3	971	21.0	69.9	19.9	14.1	5.7	10.2	8.8	1.4	868
<b>Education</b>											
No education	2.9	1,346	22.3	69.7	11.9	9.7	2.3	18.4	15.1	3.2	1,163
Primary	2.4	7,605	22.3	68.8	11.8	8.8	3.0	19.4	14.1	5.2	6,719
Secondary	1.4	6,465	23.1	66.7	8.8	6.5	2.2	24.5	17.1	7.4	5,872
More than secondary	0.6	815	25.4	47.8	5.2	4.0	1.2	47.0	28.2	18.8	748
<b>Wealth quintile</b>											
Lowest	3.5	2,815	21.1	75.6	15.7	11.8	3.9	8.7	7.8	0.8	2,432
Second	2.3	2,822	21.6	74.8	13.0	9.8	3.2	12.2	10.2	1.9	2,435
Middle	1.9	3,055	22.3	72.6	9.9	7.4	2.5	17.5	13.9	3.7	2,725
Fourth	1.4	3,484	23.5	63.2	7.3	6.2	1.1	29.5	20.3	9.2	3,139
Highest	1.1	4,056	24.4	55.3	7.7	5.2	2.5	36.9	23.5	13.5	3,772
Total	1.9	16,231	22.8	67.0	10.3	7.7	2.5	22.8	16.1	6.7	14,502

Note: The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in metres (kg/m<sup>2</sup>).

<sup>1</sup> Excludes pregnant women and women with a birth in the preceding 2 months

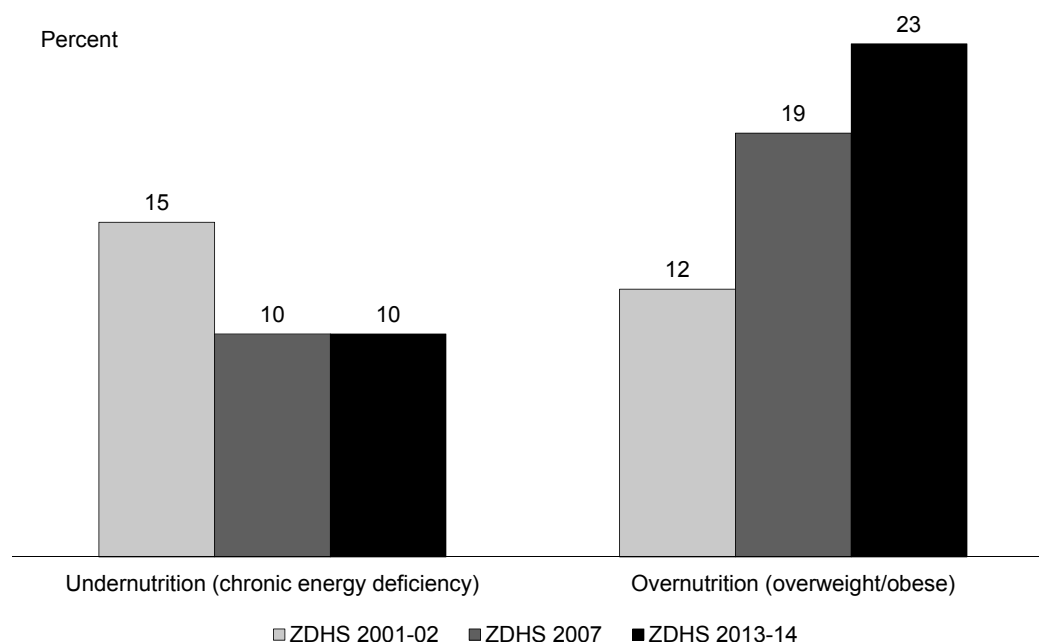
Ten percent of women of reproductive age are thin or undernourished (BMI less than 18.5 kg/m<sup>2</sup>). Despite the absence of a linear correlation with age, the data show that younger women (age 15-19) are most likely to be thin (16 percent). Rural women are more likely to be thin (12 percent) than urban women (8 percent). Among provinces, Western has the highest proportion of women who are thin (20 percent), while Eastern and Lusaka have the lowest proportions (8 percent each). Thinness is most common among women with no education or a primary education (12 percent) and least common among those with a secondary education or higher (5 percent). The percentage of women who are thin decreases from 16 percent among those in the lowest wealth quintile to 7-8 percent among those in the highest two quintiles.

Sixteen percent of women are overweight (BMI of 25-29 kg/m<sup>2</sup>), and 7 percent are obese (BMI of 30 kg/m<sup>2</sup> or above). The percentage of women who are overweight or obese increases with age. Nine percent of women age 15-19 are overweight or obese, as compared with 36 percent in the 40-49 age group. Urban women are more than twice as likely to be overweight or obese (32 percent) as rural women (15 percent). Among the provinces, the highest proportion of overweight or obese women is in Lusaka (35 percent), while the lowest proportion is in Western (10 percent). Overweight and obesity are positively correlated with education and wealth. For example, the proportion of overweight or obese women increases steadily from 9 percent of those in the lowest wealth quintile to 37 percent of those in the highest wealth quintile.



Figure 11.6 shows trends in the nutritional status of women in Zambia since the 2001-02 ZDHS survey. The percentage of women who are thin decreased from 15 percent to 10 percent between the 2001-02 and 2007 surveys and has remained stable over the last six years. On the other hand, the prevalence of overweight/obesity has increased steadily during the same period, from 12 percent in 2001-02 to 19 percent in 2007 and 23 percent in 2013-14.

**Figure 11.6 Trends in nutritional status of women age 15-49**



### 11.10 MICRONUTRIENT INTAKE AMONG MOTHERS

Adequate micronutrient intake by women has important benefits for both women and their children. Breastfeeding children benefit from micronutrient supplementation that mothers receive, especially iron and vitamin A.

A single high-dose vitamin A capsule (200,000 IU) is typically given to women within 60 days of childbirth, as reflected in current nutrition and maternal policies. This is aimed at increasing the mother's vitamin A level and, hence, the level of the vitamin in her breast milk for the benefit of her child. Because of the risk of teratogenesis (abnormal development of the foetus) resulting from high doses of vitamin A during pregnancy should not be given to pregnant women. However, the new WHO guidelines on postpartum vitamin A supplements do not recommend providing vitamin A to postpartum women as a public health intervention aimed at preventing maternal and infant morbidity and mortality, and thus Zambia needs to consider a policy change in this area (WHO, 2011) based on the results from the recent food consumption survey. To ensure adequate nutrition, postpartum women should focus on consuming a healthy diet.

The 2013-14 ZDHS collected data on the use of vitamin A and iron-folic acid supplements among women age 15-49 with a child born in the past five years, the use of deworming medication during the last pregnancy, and the percentage of women living in households with iodised salt.

Table 11.10 includes measures that are useful in assessing micronutrient intake by women during pregnancy and the two months after delivery (postpartum period). The findings show that 62 percent of women received a vitamin A dose during the postpartum period. A higher percentage of women in urban areas received postpartum vitamin A than women in rural areas (73 percent and 56 percent, respectively). Women in Lusaka are most likely to receive vitamin A during the postpartum period (76 percent), while

women in Northern are least likely to do so (44 percent). The percentage of women receiving postpartum vitamin A supplementation increases substantially with increasing education and wealth. Forty-nine percent of women with no education and 48 percent of those in the poorest households received postpartum vitamin A, as compared with 76 percent each of women with a secondary education or higher and those in the richest households.

Nutritional deficiencies such as anaemia are often exacerbated during pregnancy because of the additional nutrient demands associated with foetal growth. Iron status can be enhanced by encouraging women to consume foods enriched with iron and controlling intestinal parasites and infections such as malaria. Iron supplementation is necessary for pregnant women because their needs are usually too high to be met solely by food intake. Pregnant women are advised to take an iron tablet daily throughout their pregnancy and lactating period, starting from the second trimester and continuing to 45 days after childbirth (MoH, 2008). Table 11.10 shows that 59 percent of women took iron tablets daily for 90 or more days during their last pregnancy. Twelve percent took iron supplements for 60 to 89 days, and 18 percent took supplements for fewer than 60 days. Five percent of pregnant women did not take iron supplements at all.

**Table 11.10 Micronutrient intake among mothers**

Among women age 15-49 with a child born in the past five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child, the percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, and the percentage who took deworming medication during the pregnancy of the last child; and among women age 15-49 with a child born in the past five years and who live in households that were tested for iodised salt, the percentage who live in households with iodised salt, by background characteristics, Zambia 2013-14

Background characteristic	Among women with a child in the past five years:								Among women with a child born in the last five years who live in households that were tested for iodised salt:		
	Percentage who received vitamin A dose postpartum <sup>1</sup>	Number of days women took iron tablets or syrup during pregnancy of last birth					Percentage of women who took deworming medication during pregnancy of last birth	Number of women	Percentage living in households with iodised salt <sup>2</sup>	Number of women	
		None	<60	60-89	90+	Don't know/missing					Total
<b>Age</b>											
15-19	59.4	3.8	18.4	16.0	55.3	6.5	100.0	59.9	840	96.1	710
20-29	62.9	3.9	18.9	11.5	59.3	6.4	100.0	65.8	4,409	95.1	3,780
30-39	64.1	4.6	16.0	11.8	60.1	7.5	100.0	65.9	3,208	96.1	2,729
40-49	55.7	7.8	16.3	9.6	58.1	8.2	100.0	55.7	867	94.0	715
<b>Residence</b>											
Urban	72.6	2.8	16.1	11.0	64.5	5.5	100.0	69.9	3,528	96.1	3,092
Rural	56.1	5.5	18.6	12.3	55.8	7.8	100.0	61.0	5,796	95.0	4,841
<b>Province</b>											
Central	55.8	3.7	18.0	18.8	52.9	6.5	100.0	64.8	875	95.9	809
Copperbelt	70.5	3.9	22.6	9.0	55.7	8.8	100.0	66.1	1,305	97.1	1,151
Eastern	58.5	4.5	31.1	12.0	45.4	7.1	100.0	61.6	1,188	95.4	834
Luapula	49.5	7.0	9.7	7.2	55.7	20.4	100.0	63.8	765	92.4	649
Lusaka	76.1	2.6	10.9	11.3	72.6	2.5	100.0	72.0	1,522	95.2	1,356
Muchinga	54.1	6.2	32.9	12.6	38.2	10.0	100.0	55.4	544	96.4	473
Northern	43.7	8.3	18.3	10.5	51.2	11.6	100.0	54.7	803	92.8	730
North Western	70.5	4.0	8.1	12.2	75.1	0.6	100.0	73.8	443	96.5	417
Southern	67.5	3.1	10.7	12.6	70.8	2.8	100.0	66.7	1,263	94.5	1,052
Western	58.7	5.3	13.5	13.6	65.9	1.8	100.0	56.1	616	99.4	463
<b>Education</b>											
No education	49.3	9.5	22.4	11.1	50.2	6.8	100.0	55.5	961	95.7	749
Primary	59.4	5.0	17.5	12.4	57.9	7.3	100.0	62.7	4,996	94.8	4,166
Secondary	69.8	2.6	16.6	11.8	63.0	6.0	100.0	69.0	2,999	96.2	2,674
More than secondary	76.2	0.9	15.3	6.4	67.4	9.9	100.0	72.4	368	96.4	344
<b>Wealth quintile</b>											
Lowest	48.1	7.4	18.9	12.4	52.3	9.1	100.0	55.3	2,055	94.9	1,584
Second	58.3	5.2	18.4	12.2	56.5	7.6	100.0	63.1	1,963	94.7	1,666
Middle	63.0	4.1	18.3	12.4	58.7	6.6	100.0	66.3	1,920	96.0	1,635
Fourth	70.7	2.9	17.0	12.3	62.9	4.9	100.0	68.1	1,800	95.5	1,591
Highest	75.6	2.3	15.0	9.4	67.3	6.0	100.0	71.0	1,587	96.1	1,457
Total	62.3	4.5	17.6	11.8	59.1	6.9	100.0	64.4	9,324	95.4	7,934

<sup>1</sup> In the first two months after delivery of last birth

<sup>2</sup> Excludes women in households where salt was not tested

The proportion of women taking daily iron supplements for 90 or more days differs substantially between urban and rural areas (65 percent and 56 percent, respectively). By province, it is highest in North Western (75 percent) and lowest in Muchinga (38 percent). Women with a secondary education or higher are more likely to take iron tablets for at least 90 days (67 percent) than women with no education (50 percent). Sixty-seven percent of women in the highest wealth quintile take iron tablets for 90 or more days, as compared with 52 percent of those in the lowest wealth quintile.

Infections caused by helminthes (intestinal parasites) are one of the factors contributing to anaemia among pregnant women. Deworming during pregnancy is a cost-effective intervention against intestinal worms that allows better absorption of nutrients and iron, thus reducing the prevalence of iron deficiency and anaemia.

Table 11.10 shows that 64 percent of women took deworming medication during their last pregnancy. Urban women are more likely to take deworming medication (70 percent) than rural women (61 percent). At the provincial level, the percentage of women who took deworming medication during their last pregnancy ranges from 55 percent each in Northern and Muchinga to 74 percent in North Western. There is a positive correlation between women's education and wealth and their use of deworming medication. For example, the proportion of women who take deworming medication is highest among those with more than a secondary education (72 percent) and lowest among those with no education (56 percent). Similarly, the proportion of pregnant women taking deworming tablets steadily increases from 55 percent of those in the lowest wealth quintile to 71 percent of those in the highest quintile.

Iodine deficiency has adverse effects on all population groups, but women of reproductive age are often the most affected. Iodine deficiency is related to adverse pregnancy outcomes such as abortion, foetal brain damage and congenital malformation, stillbirth, and perinatal death. As a result, use of iodised salt by women of reproductive age is emphasised.

Table 11.10 shows that 95 percent of women with a child born in the five years preceding the survey live in households with iodised salt. Differences by background characteristics are minor.



**Key Findings**

- Seventy-three percent of households in Zambia have at least one mosquito net; 68 percent have at least one insecticide-treated mosquito net (ITN), the majority of which are long-lasting insecticidal nets.
- Twenty-eight percent of households reported that they had received indoor residual spraying during the past 12 months.
- On the night before the survey, 41 percent of children under age 5 slept under an ITN. Among households with at least one ITN, 57 percent of children under age 5 slept under an ITN.
- Overall, 41 percent of pregnant women slept under an ITN the night before the survey. Among pregnant women living in households that possess an ITN, 62 percent slept under an ITN the night before the survey.
- Seventy-three percent of women who had their last birth in the two years preceding the survey received intermittent preventive treatment during their pregnancy; that is, they took two or more doses of sulfadoxine-pyrimethamine (SP)/Fansidar and received at least one during an antenatal care visit.
- Ninety-one percent of children with a fever in the two weeks preceding the survey who took antimalarial drugs were treated with artemisinin-based combination therapy (ACT).

**M**alaria is one of the leading causes of death in sub-Saharan Africa. Although preventable and curable, the disease remains a public health problem in Zambia. The most vulnerable populations, including children under age 5, pregnant women, and individuals whose immune systems are compromised, are especially at risk for malaria. Malaria is endemic in all of Zambia's 10 provinces and in both urban and rural areas. As outlined in the National Malaria Strategic Plan (NMSP) 2011-2015, the malaria burden in Zambia is divided into three epidemiological zones: Zone 1, with a malaria prevalence of less than 1 percent, comprises the province of Lusaka; Zone 2, with a prevalence between 1 percent and 14 percent in young children at the peak of the transmission season, includes Central, Copperbelt, North Western, Southern, and Western; and Zone 3, with a prevalence of 15 percent or higher in young children at the peak of the transmission season, includes Eastern, Luapula, Muchinga, and Northern (MoH, 2011). In 2012, the national malaria parasite prevalence was estimated at 15 percent, and the prevalence of severe malaria was estimated at 7 percent among children under age 5 (MoH, 2012c).

This chapter presents data that are useful for assessing the implementation of malaria control strategies, including indoor residual spraying of dwellings with insecticides, the availability and use of mosquito nets, the prophylactic and therapeutic use of antimalarial drugs, and diagnostic testing of children with fever.

## 12.1 OWNERSHIP OF MOSQUITO NETS

The use of insecticide-treated nets (ITNs) is a primary health intervention designed to reduce malaria transmission. An ITN is a factory-treated mosquito net that does not require any further treatment or a net that has been soaked with insecticide within the past 12 months. Long-lasting insecticidal nets (LLINs) are factory-treated mosquito nets made with netting material that has insecticide incorporated

within or bound around the fibres. The current generation of LLINs last three to five years, after which they should be replaced. Use of LLINs is highly recommended, as they greatly reduce the cost and operational difficulties associated with retreatment of nets. In Zambia, most mosquito nets are provided free of charge with the goal of ensuring at least one net per sleeping space. The target for the NMSP 2011-2015 is 100 percent ownership of targeted households and 80 percent utilisation of LLINs by 2015 (MoH, 2011).

All households in the 2013-14 ZDHS were asked whether they owned mosquito nets and, if so, how many. Table 12.1 shows household ownership of nets by type (any type, ITN, or LLIN) and average number of nets per household, by background characteristics. Overall, 73 percent of households in Zambia own at least one net, regardless of type. Sixty-eight percent of households own at least one net that meets one of the ITN criteria (i.e., a factory-treated net that does not require retreatment, a pretreated net obtained within the previous 12 months, or a net soaked in insecticide at some time within the 12 months prior to the survey). The majority of these ITNs are long-lasting insecticidal nets; 67 percent of households own at least one LLIN.

There has been an increase in household ownership of any type of net and of ITNs over the last six years, from 64 percent and 53 percent, respectively, in the 2007 ZDHS to 73 percent and 68 percent, respectively, in the 2013-14 ZDHS.

**Table 12.1 Household possession of mosquito nets**

Percentage of households with at least one mosquito net (treated or untreated), insecticide-treated net (ITN), and long-lasting insecticidal net (LLIN); average number of nets, ITNs, and LLINs per household; and percentage of households with at least one net, ITN, and LLIN per two persons who stayed in the household last night, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of households with at least one mosquito net			Average number of nets per household			Number of households	Percentage of households with at least one net for every two persons who stayed in the household last night <sup>1</sup>			Number of households with at least one person who stayed in the household last night
	Any mosquito net	Insecticide-treated mosquito net (ITN) <sup>2</sup>	Long-lasting insecticidal net (LLIN)	Any mosquito net	Insecticide-treated mosquito net (ITN) <sup>2</sup>	Long-lasting insecticidal net (LLIN)		Any mosquito net	Insecticide-treated mosquito net (ITN) <sup>2</sup>	Long-lasting insecticidal net (LLIN)	
<b>Residence</b>											
Urban	68.2	62.3	61.8	1.3	1.2	1.2	6,640	31.2	28.1	27.8	6,632
Rural	76.3	71.5	71.4	1.5	1.4	1.4	9,280	29.1	26.8	26.8	9,267
<b>Province</b>											
Central	72.5	67.3	67.1	1.4	1.3	1.3	1,472	28.9	26.5	26.5	1,472
Copperbelt	79.6	74.6	74.0	1.7	1.5	1.5	2,455	37.1	33.3	32.9	2,453
Eastern	80.8	77.1	77.0	1.5	1.5	1.5	1,938	30.2	28.3	28.3	1,937
Luapula	66.7	63.3	63.1	1.2	1.1	1.1	1,265	25.6	24.4	24.4	1,263
Lusaka	55.7	48.8	48.3	1.0	0.9	0.9	2,925	22.8	20.2	19.9	2,921
Muchinga	77.4	72.9	72.7	1.5	1.4	1.4	881	31.3	29.6	29.5	878
Northern	64.3	60.2	59.7	1.1	1.0	1.0	1,269	20.6	18.6	18.4	1,265
North Western	67.8	66.1	66.0	1.2	1.2	1.1	724	23.1	22.1	22.0	723
Southern	83.3	79.5	79.4	1.7	1.6	1.6	1,934	34.5	32.5	32.4	1,932
Western	89.6	76.5	76.5	1.9	1.6	1.6	1,057	45.8	39.2	39.2	1,053
<b>Wealth quintile</b>											
Lowest	68.4	63.6	63.5	1.1	1.0	1.0	3,514	27.3	24.8	24.8	3,506
Second	76.2	71.7	71.6	1.4	1.3	1.3	3,055	27.3	25.6	25.5	3,052
Middle	77.4	72.2	71.8	1.6	1.4	1.4	2,958	30.1	27.4	27.3	2,953
Fourth	69.2	63.5	63.2	1.4	1.3	1.3	3,252	29.1	26.4	26.2	3,249
Highest	74.4	68.4	67.8	1.6	1.5	1.5	3,141	36.2	32.9	32.5	3,139
<b>Total</b>	<b>72.9</b>	<b>67.7</b>	<b>67.4</b>	<b>1.4</b>	<b>1.3</b>	<b>1.3</b>	<b>15,920</b>	<b>29.9</b>	<b>27.4</b>	<b>27.2</b>	<b>15,899</b>

<sup>1</sup> De facto household members

<sup>2</sup> An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN), or (2) a pretreated net obtained within the past 12 months, or (3) a net that has been soaked with insecticide within the past 12 months.

Ownership of ITNs is higher in rural than in urban households (72 percent and 62 percent, respectively). Among the provinces, Southern has the highest percentage of households that own an ITN (80 percent), while Lusaka has the lowest percentage (49 percent). There is no clear pattern in the relationship between ITN ownership and wealth; households in the lowest and fourth wealth quintiles (64 percent each) are less likely than households in the other quintiles (68-72 percent) to own an ITN.

Although mosquito net ownership is a key indicator of the success of malaria control measures, it is also important to determine if a household has a sufficient number of nets for those sleeping within the home. Households in Zambia own, on average, 1.3 ITNs.

Universal net coverage within the population can be measured by assuming that each net is shared by two people in the household. Table 12.1 also shows the percentage of households with at least one mosquito net for every two persons who stayed in the household the night before the interview. Thirty percent of households in Zambia have at least one mosquito net of any type for every two persons; 27 percent have at least one ITN for every two persons.

## **12.2 INDOOR RESIDUAL SPRAYING**

Indoor residual spraying (IRS) is part of the integrated vector management strategy in Zambia, which is a key component of malaria prevention. IRS has a significant impact on the mosquito population and, therefore, can lead to rapid reductions in malaria transmission and subsequent mortality. IRS involves spraying of the interior walls with insecticide with the goal of killing mosquitoes when they rest on the sprayed wall. In addition to reducing the mosquito population and, in turn, human-vector contact, IRS decreases the population of other insects of public health importance, thus reducing overall morbidity and saving costs. One of the NMSP 2011-2015 strategies is to ensure IRS coverage of at least 85 percent of the targeted structures or households in low to high transmission epidemiological zones (MoH, 2011). The IRS programme is being implemented in all the 10 provinces in Zambia. The criteria for selecting household to target include the level of malaria incidence in the urban and rural areas. The Ministry of Health is responsible for indoor residual spraying in both rural and urban areas.

To obtain information on the prevalence of indoor residual spraying, all households interviewed in the 2013-14 ZDHS were asked whether the interior walls of their dwelling had been sprayed to protect against mosquitoes during the 12-month period before the survey and, if so, who had sprayed the dwelling. Table 12.2 shows that 28 percent of households had been sprayed in the past 12 months. Urban households are more likely than rural households to have been sprayed (34 percent versus 24 percent). At the provincial level, Copperbelt has the highest proportion of sprayed households (44 percent), while Lusaka has the lowest proportion (16 percent). The percentage of households sprayed in the past 12 months increases steadily with increasing wealth, from 23 percent of households in the lowest quintile to 35 percent of those in the highest quintile.

The combination of IRS and use of an ITN offers the greatest protection against malaria. Overall, 75 percent of households in Zambia own at least one ITN and/or received IRS in the past 12 months. However, ITNs must be available in sufficient quantities for use by household members. About half of all households (47 percent) have at least one ITN for every two persons and/or have been sprayed in the past 12 months. Differences by residence and wealth are similar to those observed for IRS.

Among households whose interior walls were sprayed to protect against mosquitoes during the 12-month period before the survey, 85 percent were sprayed by government workers or programmes; only 9 percent were sprayed by private sector companies (data not shown separately).

Table 12.2 Indoor residual spraying against mosquitoes

Percentage of households in which someone has come into the dwelling to spray the interior walls against mosquitoes (IRS) in the past 12 months, the percentage of households with at least one ITN and/or IRS in the past 12 months, and the percentage of households with at least one ITN for every two persons and/or IRS in the past 12 months, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of households with IRS <sup>1</sup> in the past 12 months	Percentage of households with at least one ITN <sup>2</sup> and/or IRS in the past 12 months	Percentage of households with at least one ITN <sup>2</sup> for every two persons and/or IRS in the past 12 months	Number of households
<b>Residence</b>				
Urban	34.2	70.8	50.5	6,640
Rural	24.3	77.6	44.4	9,280
<b>Province</b>				
Central	18.2	72.7	39.4	1,472
Copperbelt	43.9	82.0	60.8	2,455
Eastern	31.4	83.5	50.6	1,938
Luapula	27.3	71.8	44.3	1,265
Lusaka	15.8	55.6	32.4	2,925
Muchinga	32.8	80.3	50.9	881
Northern	39.6	75.0	49.8	1,269
North Western	33.2	76.0	48.7	724
Southern	28.2	83.2	49.9	1,934
Western	17.8	80.0	48.5	1,057
<b>Wealth quintile</b>				
Lowest	22.7	71.1	42.1	3,514
Second	25.7	78.4	44.2	3,055
Middle	29.4	78.6	47.6	2,958
Fourth	30.1	71.2	47.2	3,252
Highest	34.8	75.2	54.1	3,141
Total	28.4	74.7	46.9	15,920

<sup>1</sup> Indoor residual spraying (IRS) is limited to spraying conducted by a government, private, or nongovernmental organisation.

<sup>2</sup> An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN), or (2) a pretreated net obtained within the past 12 months, or (3) a net that has been soaked with insecticide within the past 12 months.

### 12.3 ACCESS TO AN INSECTICIDE-TREATED NET

The 2013-14 ZDHS gathered data on the proportion of the population that could sleep under an ITN if each ITN in the household were used by up to two people. This population is referred to as having access to an ITN. Coupled with mosquito net usage, ITN access can provide useful information on the magnitude of the gap between ITN ownership and use (in other words, the population with access to an ITN but not using it). If the difference between these indicators is substantial, the national malaria strategic plan may need to focus on behaviour change and how to identify the main drivers of and barriers to ITN use in order to design appropriate interventions. Such an analysis would help ITN programmes determine whether they need to achieve higher ITN coverage, promote ITN use, or both. Table 12.3 shows the percent distribution of the de facto household population by the number of ITNs owned by the household, according to the number of persons who stayed in the household the night before the survey.

Nationally, 47 percent of the population in Zambia has access to an ITN. Access to ITNs fluctuates somewhat with household size, ranging from a high of 55-58 percent among households with one to four persons to a low of 37 percent among households with eight or more persons.



Table 12.3 Access to an insecticide-treated net (ITN)

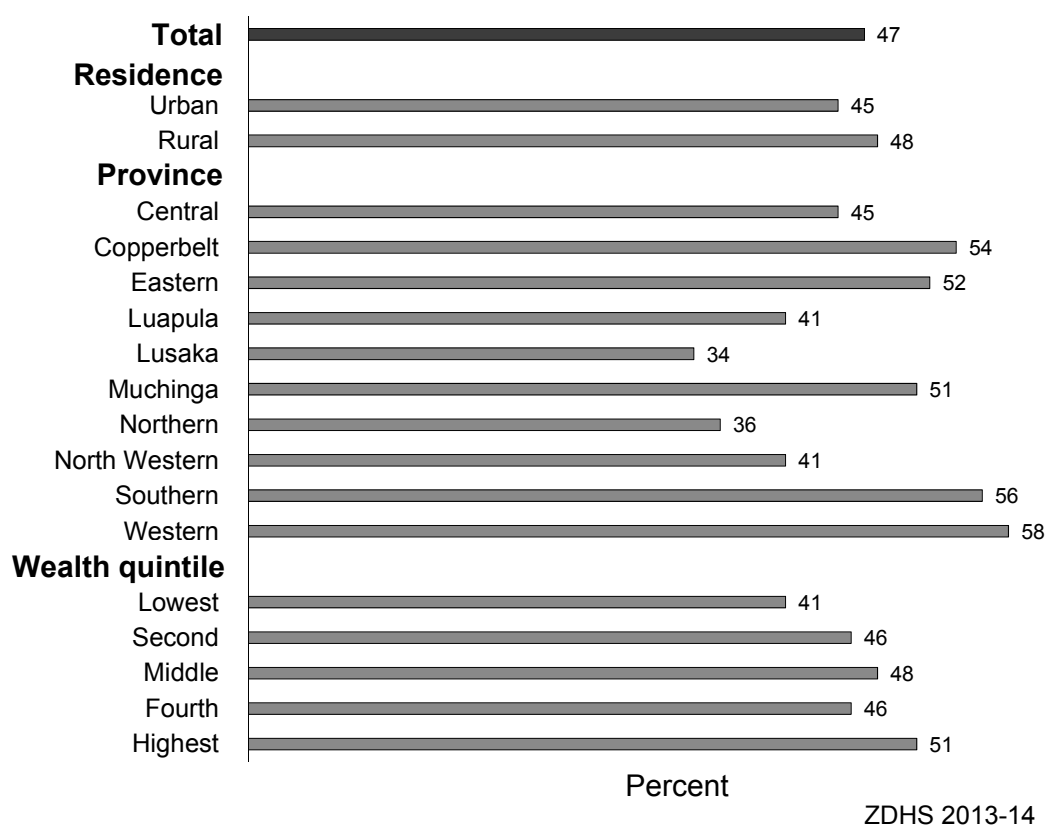
Percent distribution of the de facto household population by number of ITNs the household owns, according to number of persons who stayed in the household the night before the survey, Zambia 2013-14

Number of ITNs	Number of persons who stayed in the household the night before the survey								Total
	1	2	3	4	5	6	7	8+	
0	45.2	41.7	33.7	29.8	31.5	27.9	29.0	27.4	30.0
1	43.2	32.4	35.3	27.8	24.2	20.7	16.6	16.7	22.3
2	9.5	20.2	22.0	30.1	27.7	28.1	27.1	20.4	24.8
3	2.1	5.3	8.5	11.4	15.2	21.1	23.1	26.7	19.0
4	0.0	0.3	0.3	0.7	0.9	1.2	2.7	5.2	2.4
5	0.0	0.1	0.0	0.0	0.2	0.2	0.9	2.1	0.8
6	0.0	0.1	0.1	0.2	0.2	0.8	0.4	1.1	0.6
7+	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,389	3,090	6,206	9,478	11,735	12,525	11,240	23,141	78,803
Percent with access to an ITN <sup>1</sup>	54.8	58.3	54.5	56.3	48.4	48.9	44.2	37.3	46.6

<sup>1</sup> Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Figure 12.1 shows the percentage of the household population with access to an ITN, by selected background characteristics. A slightly lower percentage of urban than rural households have access to an ITN (45 percent versus 48 percent). By province, the percentage of the population with access to an ITN is highest in Western (58 percent) and lowest in Lusaka (34 percent). By wealth, the percentage with access to an ITN ranges from 41 percent in the lowest quintile to 51 percent in the highest quintile.

**Figure 12.1 Percentage of the de facto population with access to an ITN in the household**



## 12.4 USE OF MOSQUITO NETS

Community-level protection against malaria helps reduce the spread of the disease and offers an additional level of protection for those most vulnerable: children under age 5 and pregnant women. This

section describes use of mosquito nets among all persons in the household, among children under age 5, and among pregnant women.

### 12.4.1 Use of Mosquito Nets by Persons in the Household

Mosquito net coverage of the entire population is effective in the large reductions in the malaria burden. Although vulnerable groups (e.g., children under age 5 and pregnant women) should still be prioritised, the communal benefits of wide-scale ITN use by older children and adults should be promoted and evaluated by national malaria control programmes (Killeen et al., 2007).

Table 12.4 shows that, overall, 37 percent of the household population slept under a net the night before the survey; 35 percent slept under ITNs, nearly all of which were LLINs. Household members age 5-14 (27 percent) and those age 15-34 (35 percent) are less likely to have slept under an ITN the night before the survey than household members in other age groups (41-44 percent). By sex and residence, females are slightly more likely than males (36 percent versus 33 percent) to have slept under an ITN the night before the survey, and those in rural areas are more likely than those in urban areas (37 percent versus 32 percent) to have slept under an ITN.

**Table 12.4 Use of mosquito nets by persons in the household**

Percentage of the de facto household population who slept the night before the survey under a mosquito net (treated or untreated), under an insecticide-treated net (ITN), under a long-lasting insecticidal net (LLIN), and under an ITN or in a dwelling in which the interior walls have been sprayed against mosquitoes (IRS) in the past 12 months; and among the de facto household population in households with at least one ITN, the percentage who slept under an ITN the night before the survey, by background characteristics, Zambia 2013-14

Background characteristic	Household population					Household population in households with at least one ITN <sup>1</sup>	
	Percentage who slept under any net last night	Percentage who slept under an ITN <sup>1</sup> last night	Percentage who slept under an LLIN last night	Percentage who slept under an ITN <sup>1</sup> last night or in a dwelling sprayed with IRS <sup>2</sup> in the past 12 months	Number	Percentage who slept under an ITN <sup>1</sup> last night	Number
<b>Age</b>							
<5	43.3	40.6	40.4	55.9	13,551	57.2	9,609
5-14	28.8	26.7	26.6	47.2	25,813	37.7	18,284
15-34	36.9	34.6	34.5	53.1	23,044	50.3	15,844
35-39	47.7	44.4	44.2	59.5	9,313	62.6	6,609
50+	46.1	42.6	42.3	58.5	7,078	62.5	4,828
<b>Sex</b>							
Male	35.8	33.4	33.2	51.9	38,175	47.8	26,678
Female	39.0	36.4	36.2	53.9	40,628	51.8	28,498
<b>Residence</b>							
Urban	34.3	31.8	31.6	53.9	31,102	48.8	20,292
Rural	39.5	36.9	36.9	52.3	47,701	50.5	34,884
<b>Province</b>							
Central	34.0	31.2	31.1	42.1	7,532	44.8	5,251
Copperbelt	40.8	38.2	37.9	64.0	12,305	49.2	9,558
Eastern	40.4	38.5	38.4	57.1	9,984	48.8	7,874
Luapula	38.8	37.0	36.9	54.8	6,218	58.0	3,968
Lusaka	20.7	18.8	18.6	32.8	13,258	36.5	6,818
Muchinga	43.2	40.8	40.7	59.7	4,411	54.9	3,279
Northern	33.1	30.9	30.6	58.6	6,461	50.2	3,981
North Western	34.7	33.5	33.5	56.3	3,705	49.5	2,512
Southern	43.0	40.8	40.8	55.4	10,086	50.6	8,146
Western	63.2	55.2	55.1	63.5	4,843	70.5	3,790
<b>Wealth quintile</b>							
Lowest	37.5	34.7	34.7	49.0	15,622	53.4	10,159
Second	40.5	38.1	38.1	54.4	15,706	52.5	11,402
Middle	38.9	36.3	36.2	54.1	15,773	49.1	11,672
Fourth	33.6	31.1	30.8	51.2	15,841	45.9	10,721
Highest	36.9	34.4	34.1	55.8	15,861	48.6	11,223
<b>Total</b>	<b>37.4</b>	<b>34.9</b>	<b>34.8</b>	<b>52.9</b>	<b>78,803</b>	<b>49.9</b>	<b>55,176</b>

Note: Total includes 5 cases for whom information on age is missing.

<sup>1</sup> An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN), or (2) a pretreated net obtained within the past 12 months, or (3) a net that has been soaked with insecticide within the past 12 months.

<sup>2</sup> Indoor residual spraying (IRS) is limited to spraying conducted by a government, private, or nongovernmental organisation.

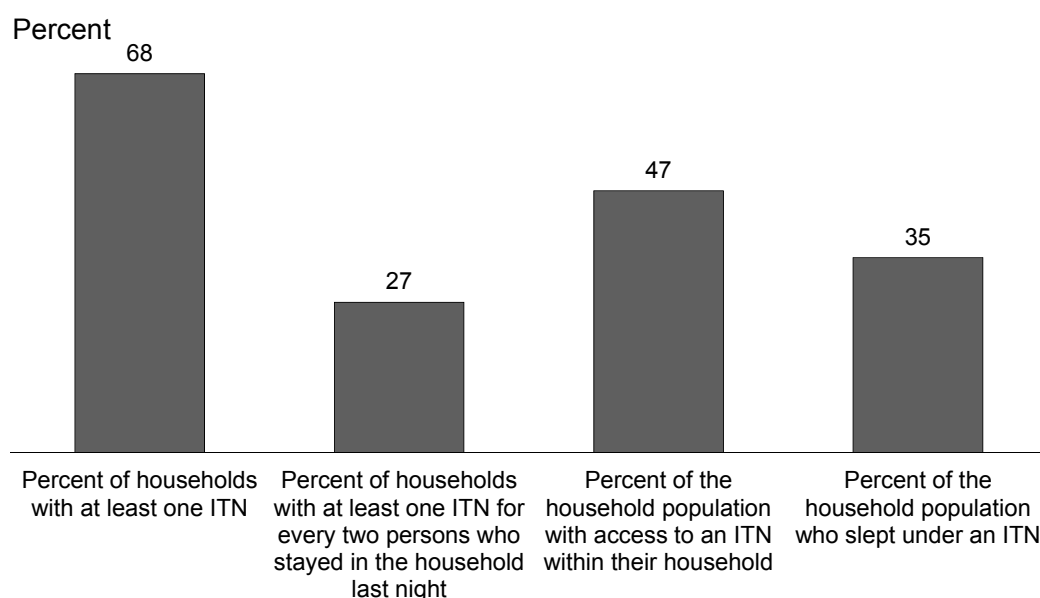
Substantial differences exist by province, with Western having the highest percentage of household members who slept under an ITN the night before the survey (55 percent) and Lusaka having the lowest percentage (19 percent). There is no clear pattern by wealth.

More than half of the household population (53 percent) slept under an ITN the night before the survey or in a dwelling that was sprayed during the 12 months preceding the survey. Differences in the percentage of the household population protected in this way by age and sex are similar to those observed for the percentage of household members who slept under an ITN the night before the survey. By province, this percentage is highest in Copperbelt and Western (64 percent each) and lowest in Lusaka (33 percent). Individuals in the highest wealth quintile are most likely to have slept under an ITN the night before the survey or in a dwelling that was sprayed during the 12 months preceding the survey (56 percent), and those in the lowest quintile are least likely to have done so (49 percent).

In households that own at least one ITN, 50 percent of household members slept under an ITN the night before the survey. Persons age 35 and above (63 percent), females (52 percent), those living in rural areas (51 percent), those living in Western (71 percent), and those in the lowest two wealth quintiles (53 percent each) are most likely to have slept under an ITN.

Figure 12.2 presents data on ownership and coverage of, access to, and use of ITNs in Zambia. About seven in ten households (68 percent) own at least one ITN. However, only 27 percent of households have enough ITNs to cover their entire household population (assuming that one ITN is used by two persons). Forty-seven percent of household members have access to an ITN, and 35 percent slept under an ITN the night before the survey. A comparison of the first two columns indicates that households in Zambia do not have a sufficient number of ITNs to cover the population sleeping in the household, and a comparison of the second two columns suggests that ITN use is much lower than ITN access.

**Figure 12.2 Ownership of, access to, and use of ITNs**



ZDHS 2013-14

## 12.4.2 Use of Existing Mosquito Nets

Table 12.5 presents data on use of existing ITNs. Overall, 64 percent of ITNs were used by someone in the household the night before the survey. Sixty-three percent of ITNs were used in urban areas, as compared with 64 percent in rural areas. Western has the highest level of ITN usage (81 percent), while Lusaka has the lowest (49 percent). Use of existing ITNs fluctuates by wealth; the poorest households are most likely to use nets (68 percent), while households in the fourth quintile are least likely to do so (59 percent).

## 12.4.3 Use of Mosquito Nets by Children under Age 5

Malaria is endemic in all of the provinces of Zambia. Those living in areas of high malaria transmission acquire immunity to the disease over time (Doolan et al., 2009). Acquired immunity is not the same as sterile immunity; that is, acquired immunity does not prevent infection but rather protects against severe disease and death. Malaria affects all age groups of the population, and as such age is an important factor in determining levels of acquired immunity. For about six months following birth, antibodies acquired from the mother during pregnancy protect children born in areas of endemic malaria. This immunity gradually disappears, and children start to develop their own immunity. The pace at which immunity develops depends on the level of exposure to malarial infection; in highly malaria-endemic areas, children are thought to attain a high level of immunity by their fifth birthday. Such children may experience episodes of illness but usually do not suffer from severe, life-threatening malaria. Immunity in areas of low malaria transmission is acquired more slowly.

Table 12.6 shows the use of mosquito nets by children under age 5. Forty-three percent of children slept under a mosquito net the night before the survey; 41 percent slept under an ITN, nearly all of which were LLINs. Additionally, 56 percent of children either slept under an ITN the night before the survey or slept within a dwelling that had been sprayed in the past 12 months. Among households with at least one ITN, 57 percent of children under age 5 slept under an ITN the night before the survey.

The percentage of children under age 5 who slept under an ITN the previous night decreases with increasing age, it is higher in rural than in urban areas, and it fluctuates with wealth. The largest variation is by province, with Western having the highest percentage of children under age 5 who slept under an ITN the night before the survey (58 percent) and Lusaka having the lowest (24 percent).

Table 12.5 Use of existing ITNs

Percentage of insecticide-treated nets (ITNs) that were used by anyone the night before the survey, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of existing ITNs <sup>1</sup> used last night	Number of ITNs <sup>1</sup>
<b>Residence</b>		
Urban	62.8	8,092
Rural	64.3	12,638
<b>Province</b>		
Central	58.4	1,914
Copperbelt	64.0	3,790
Eastern	62.6	2,843
Luapula	74.6	1,427
Lusaka	49.3	2,565
Muchinga	65.2	1,268
Northern	67.5	1,261
North Western	69.7	833
Southern	61.4	3,125
Western	81.0	1,704
<b>Wealth quintile</b>		
Lowest	67.7	3,639
Second	67.1	4,019
Middle	64.0	4,262
Fourth	58.9	4,146
Highest	61.7	4,664
Total	63.7	20,730

<sup>1</sup> An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN), or (2) a pretreated net obtained within the past 12 months, or (3) a net that has been soaked with insecticide within the past 12 months.

Table 12.6 Use of mosquito nets by children

Percentage of children under age 5 who, the night before the survey, slept under a mosquito net (treated or untreated), under an insecticide-treated net (ITN), under a long-lasting insecticidal net (LLIN), and under an ITN or in a dwelling in which the interior walls have been sprayed against mosquitoes (IRS) in the past 12 months; and among children under age 5 in households with at least one ITN, the percentage who slept under an ITN the night before the survey, by background characteristics, Zambia 2013-14

Background characteristic	Children under age 5 in all households				Children under age 5 in households with at least one ITN <sup>1</sup>	
	Percentage who slept under any net last night	Percentage who slept under an ITN <sup>1</sup> last night	Percentage who slept under an LLIN last night	Percentage who slept under an ITN <sup>1</sup> last night or in a dwelling sprayed with IRS <sup>2</sup> in the past 12 months	Number of children	Percentage who slept under an ITN <sup>1</sup> last night
<b>Age (in months)</b>						
<12	49.3	46.8	46.7	60.4	2,575	64.8
12-23	48.0	44.5	44.3	58.0	2,690	63.2
24-35	44.2	41.8	41.6	56.7	2,675	58.3
36-47	38.0	35.4	35.3	53.0	2,702	51.2
48-59	37.5	35.1	35.0	52.1	2,909	49.4
<b>Sex</b>						
Male	43.3	40.5	40.3	55.8	6,841	57.7
Female	43.2	40.6	40.5	56.2	6,709	56.7
<b>Residence</b>						
Urban	40.0	37.4	37.1	56.6	4,616	56.4
Rural	44.9	42.2	42.1	55.6	8,934	57.6
<b>Province</b>						
Central	41.5	39.0	38.8	45.8	1,324	53.8
Copperbelt	45.0	42.1	41.9	65.2	1,790	54.0
Eastern	47.1	44.9	44.8	61.9	1,702	56.7
Luapula	43.6	41.8	41.8	58.7	1,199	65.1
Lusaka	25.9	23.7	23.5	35.3	1,978	44.0
Muchinga	47.6	45.1	45.0	60.6	811	60.6
Northern	39.0	36.5	36.2	60.1	1,287	59.4
North Western	41.5	40.1	40.1	61.7	698	57.3
Southern	48.1	45.9	45.8	58.1	1,872	57.4
Western	66.6	58.2	58.2	64.2	889	74.8
<b>Wealth quintile</b>						
Lowest	44.1	41.1	41.1	53.1	3,222	61.7
Second	45.3	42.9	42.9	58.0	3,086	59.2
Middle	43.9	41.3	41.1	57.2	2,794	55.0
Fourth	37.6	35.2	35.0	51.7	2,364	52.0
Highest	44.3	41.4	41.1	60.5	2,086	56.3
<b>Total</b>	<b>43.3</b>	<b>40.6</b>	<b>40.4</b>	<b>55.9</b>	<b>13,551</b>	<b>57.2</b>

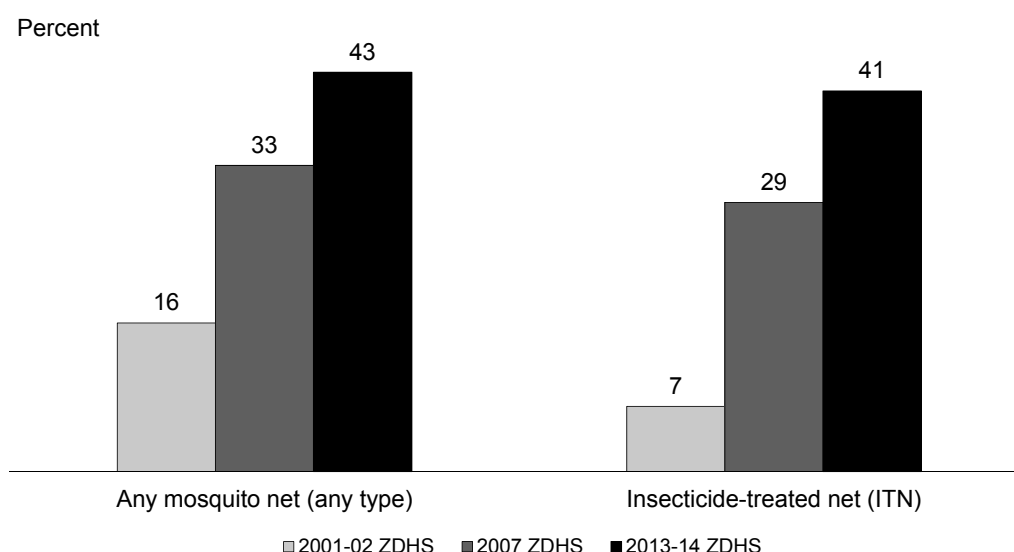
Note: Table is based on children who stayed in the household the night before the interview.

<sup>1</sup> An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN), or (2) a pretreated net obtained within the past 12 months, or (3) a net that has been soaked with insecticide within the past 12 months.

<sup>2</sup> Indoor residual spraying (IRS) is limited to spraying conducted by a government, private, or nongovernmental organisation.

Figure 12.3 shows trends over time in the percentage of children under age 5 who slept under a mosquito net the night before the survey by type of net. The results show a steady increase in the percentage of children under age 5 who slept under any mosquito net or under an ITN since the 2001-02 ZDHS survey. Use of any mosquito net by children under age 5 increased from 16 percent in 2001-02 to 43 percent in 2013-14, and use of ITNs increased from 7 percent to 41 percent during the same period.

**Figure 12.3 Trends in the percentage of children under age 5 who slept under a mosquito net on the night before the survey by type of net, Zambia 2001-2014**



#### 12.4.4 Use of Mosquito Nets by Pregnant Women

In malaria-endemic areas, adults usually have acquired some degree of immunity to severe, life-threatening malaria. However, pregnancy leads to suppression of the immune system; thus, pregnant women, especially those in their first pregnancy, have a higher risk of malarial infection. Moreover, malaria among pregnant women may be asymptomatic. Malaria during pregnancy is a major contributor to low birth weight, maternal anaemia, infant mortality, spontaneous abortion, and stillbirth. Pregnant women can reduce the risk of these adverse effects of malaria by sleeping under insecticide-treated mosquito nets.

Table 12.7 shows the use of mosquito nets by pregnant women, according to background characteristics. Overall, 44 percent of pregnant women age 15-49 slept under any net the night before the survey; 41 percent slept under an ITN, the majority of which were LLINs. More than half of pregnant women (54 percent) either slept under an ITN the night before the survey or slept in a dwelling that had been sprayed during the 12 months preceding the survey. Among households with at least one ITN, 62 percent of pregnant women slept under an ITN the night before the survey.

ITN use by pregnant women is higher in rural than urban areas (45 percent versus 35 percent) and highest among those in the middle wealth quintile (48 percent). Across provinces, Western has the highest percentage of pregnant women who slept under an ITN the night before the survey (55 percent) and Lusaka has the lowest (27 percent).

Table 12.7 Use of mosquito nets by pregnant women

Percentages of pregnant women age 15-49 who, the night before the survey, slept under a mosquito net (treated or untreated), under an insecticide-treated net (ITN), under a long-lasting insecticidal net (LLIN), and under an ITN or in a dwelling in which the interior walls have been sprayed against mosquitoes (IRS) in the past 12 months; and among pregnant women age 15-49 in households with at least one ITN, the percentage who slept under an ITN the night before the survey, by background characteristics, Zambia 2013-14

Background characteristic	Among pregnant women age 15-49 in all households				Among pregnant women age 15-49 in households with at least one ITN <sup>1</sup>		
	Percentage who slept under any net last night	Percentage who slept under an ITN <sup>1</sup> last night	Percentage who slept under an LLIN last night	Percentage who slept under an ITN <sup>1</sup> last night or in a dwelling sprayed with IRS <sup>2</sup> in the past 12 months	Number of women	Percentage who slept under an ITN <sup>1</sup> last night	Number of women
<b>Residence</b>							
Urban	36.3	34.7	34.0	50.9	548	55.5	343
Rural	48.3	44.9	44.9	55.1	883	64.9	611
<b>Province</b>							
Central	38.9	35.5	35.5	45.5	117	53.0	79
Copperbelt	39.7	38.6	37.8	58.5	214	51.2	161
Eastern	46.7	44.3	44.3	57.6	169	59.2	127
Luapula	56.1	54.2	54.2	65.2	133	87.4	82
Lusaka	28.0	26.7	25.7	35.6	256	50.0	136
Muchinga	55.0	51.9	51.9	59.6	87	71.3	63
Northern	49.1	47.1	47.1	61.0	125	75.8	78
North Western	38.0	37.5	37.5	57.2	67	66.2	38
Southern	43.9	41.0	41.0	53.3	185	55.0	138
Western	68.5	54.6	54.6	59.4	78	82.1	52
<b>Education</b>							
No education	44.7	40.0	40.0	52.0	164	65.0	101
Primary	43.6	41.8	41.8	54.4	716	63.9	468
Secondary	43.0	40.2	39.7	52.4	494	57.3	347
More than secondary	47.8	41.8	38.8	54.8	56	(62.3)	38
<b>Wealth quintile</b>							
Lowest	41.4	38.2	38.2	48.7	318	64.2	189
Second	48.1	45.1	45.1	55.7	297	68.8	195
Middle	50.3	48.2	48.2	63.4	267	64.7	199
Fourth	41.0	38.6	37.8	49.3	301	57.3	203
Highest	37.4	34.8	34.2	51.2	247	51.5	167
Total	43.7	41.0	40.7	53.5	1,431	61.5	954

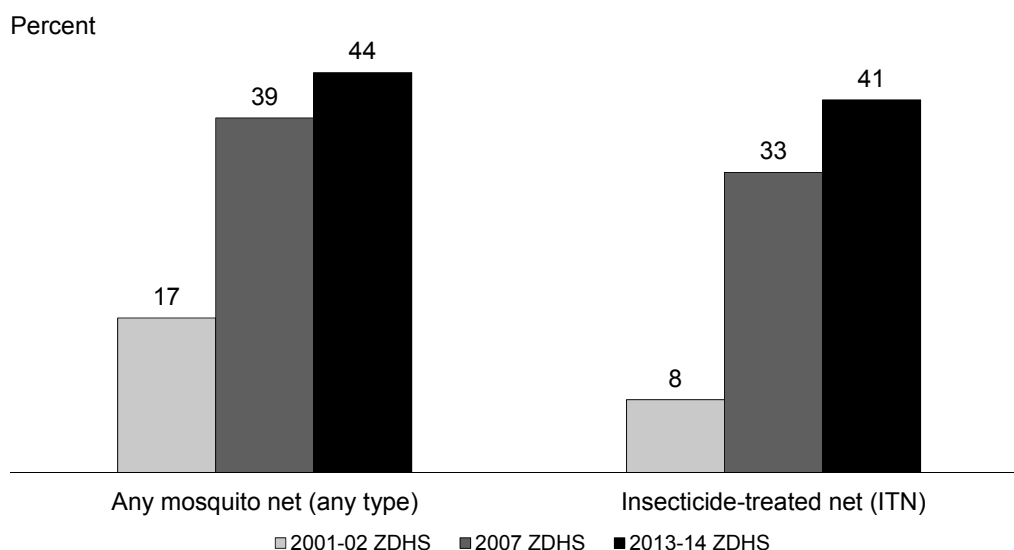
Note: Table is based on women who stayed in the household the night before the interview. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN), or (2) a pretreated net obtained within the past 12 months, or (3) a net that has been soaked with insecticide within the past 12 months.

<sup>2</sup> Indoor residual spraying (IRS) is limited to spraying conducted by a government, private, or nongovernmental organisation.

Figure 12.4 shows trends in the use of mosquito nets by pregnant women age 15-49 since the 2001-02 ZDHS survey. Use of any type of mosquito net increased from 17 percent in 2001-02 to 44 percent in 2013-14, while use of ITNs increased from 8 percent to 41 percent during the same period.

**Figure 12.4 Trends in use of mosquito nets among pregnant women age 15-49, Zambia 2001-2014**



## 12.5 USE OF INTERMITTENT PREVENTIVE TREATMENT OF MALARIA DURING PREGNANCY

In line with Zambia's national malaria control policy, intermittent preventive treatment of malaria is recommended during pregnancy. As a protective measure, it is recommended that women take three doses of sulfadoxine/pyrimethamine (SP)/Fansidar during pregnancy; the doses are supposed to be taken after the first trimester and at least one month apart (MoH, 2011).

During antenatal care (ANC) visits, pregnant women are given the required dose of SP/Fansidar and urged to consume it immediately. Women in the 2013-14 ZDHS who had a live birth in the two years preceding the survey were asked whether they took any antimalarial medications during the pregnancy leading to their most recent birth and, if so, which ones. Women were also asked whether the drugs they took were received during an antenatal care visit. It should be noted that obtaining information about drugs can be difficult because some respondents may not know or remember the name or the type of drug that they received.

Eighty-eight percent of pregnant women with a live birth in the two years preceding the survey reported taking at least one dose of SP/Fansidar during an ANC visit, and 73 percent reported taking two or more doses, at least one of which was received during an ANC visit (Table 12.8). Pregnant women in urban areas were much more likely than rural women to have taken two or more doses of SP/Fansidar and to have received at least one dose during an ANC visit (81 percent versus 69 percent). Pregnant women from Copperbelt (84 percent), those with more than a secondary education (85 percent), and those in the highest wealth quintile (83 percent) were most likely to have taken two or more doses of SP/Fansidar and to have received at least one dose during an ANC visit.



**Table 12.8 Use of intermittent preventive treatment (IPTp) by women during pregnancy**

Percentage of women age 15-49 with a live birth in the two years preceding the survey who, during the pregnancy preceding the last birth, received any SP/Fansidar during an ANC visit, and who took at least two doses of SP/Fansidar and received at least one dose during an ANC visit, by background characteristics, Zambia 2013-14

Background characteristic	Percentage who received any SP/Fansidar during an ANC visit	Percentage who took 2+ doses of SP/Fansidar and received at least one during ANC visit	Number of women with a live birth in the two years preceding the survey
<b>Residence</b>			
Urban	93.7	80.7	1,711
Rural	85.6	68.6	3,363
<b>Province</b>			
Central	88.5	73.6	512
Copperbelt	90.7	83.5	654
Eastern	86.9	72.1	641
Luapula	82.5	71.7	451
Lusaka	95.3	77.9	742
Muchinga	86.8	69.0	305
Northern	81.0	69.6	480
North Western	90.3	74.2	262
Southern	90.8	67.1	690
Western	84.4	59.7	338
<b>Education</b>			
No education	79.7	61.6	533
Primary	87.7	70.9	2,744
Secondary	91.8	78.0	1,606
More than secondary	93.1	85.1	191
<b>Wealth quintile</b>			
Lowest	81.9	65.7	1,247
Second	86.1	69.8	1,169
Middle	89.7	69.2	1,028
Fourth	95.1	81.8	899
Highest	92.6	83.1	730
Total	88.4	72.7	5,074

## 12.6 PREVALENCE, DIAGNOSIS, AND PROMPT TREATMENT OF CHILDREN WITH FEVER

The diagnosis of malaria in Zambia is based on detection of parasites in the blood using either a malaria rapid diagnostic test (RDT) or microscopy. The goal is to ensure that, by 2015, all suspected malaria cases are confirmed via either microscopy or RDT and that all confirmed cases are treated with artemisinin-based combination therapy (ACT) (MoH, 2011). Both malaria tests and antimalarial treatment are provided free of charge at all public health facilities and mission hospitals. Malaria case management, one of the most fundamental strategic areas of malaria control, is the identification, diagnosis, and prompt treatment of all malaria cases with appropriate and effective antimalarial drugs.

Prompt and effective malaria treatment is essential to prevent the disease from becoming severe. In malaria-endemic areas, it is important that young children experiencing fever receive prompt testing for malaria, either via a malaria RDT or microscopy, and that those who test positive for malaria receive prompt treatment with ACT. The first line of treatment in Zambia is artemether-lumefantrine, one of the ACTs recommended for the treatment of uncomplicated malaria in all age groups with the exception of children under age 2 months and pregnant women in their first trimester, who are treated with SP/Fansidar (MoH, 2014).

Fever is one of the most common symptoms of malaria. Although fever occurs year round, malaria is most prevalent during and shortly after the rainy season. Thus, presence of fever is not always an indication of malaria infection, and temporal factors must be taken into consideration when interpreting the occurrence of fever.

In the 2013-14 ZDHS, mothers were asked if their children under age 5 had experienced an episode of fever in the two weeks preceding the survey and, if so, whether treatment or advice were

sought. Information was also collected on the type and timing of the treatment given. Table 12.9 shows the percentage of children under age 5 who had a fever in the two weeks preceding the survey and, among those with a fever, the percentage for whom advice or treatment was sought from a health facility, provider, or pharmacy; the percentage who had a drop of blood taken from a finger or heel (presumably for a malaria test); the percentage who took ACT or any antimalarial drugs; and the percentage who took drugs on the same or next day.

**Table 12.9 Prevalence, diagnosis, and prompt treatment of children with fever**

Percentage of children under age 5 with fever in the two weeks preceding the survey; and among children under age 5 with fever, the percentage for whom advice or treatment was sought, the percentage who had blood taken from a finger or heel, the percentage who took any artemisinin-based combination therapy (ACT), the percentage who took ACT the same or next day following the onset of fever, the percentage who took antimalarial drugs, and the percentage who took the drugs the same or next day following the onset of fever, by background characteristics, Zambia 2013-14

Background characteristic	Among children under age 5:		Among children under age 5 with fever:						Number of children
	Percentage with fever in the two weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought <sup>1</sup>	Percentage who had blood taken from a finger or heel for testing	Percentage who took any ACT	Percentage who took any ACT same or next day	Percentage who took antimalarial drugs	Percentage who took antimalarial drugs same or next day	
<b>Age (in months)</b>									
<12	19.1	2,478	77.1	41.6	25.2	12.8	28.6	15.2	473
12-23	27.1	2,575	76.6	49.5	34.2	15.5	38.8	17.9	699
24-35	23.9	2,507	75.9	51.5	38.5	20.1	40.8	21.7	599
36-47	19.9	2,447	71.5	47.8	39.5	22.2	44.8	23.7	487
48-59	15.1	2,627	72.0	51.8	44.1	23.0	47.5	25.9	397
<b>Sex</b>									
Male	20.4	6,393	75.9	49.8	37.6	19.4	41.2	21.6	1,307
Female	21.6	6,240	73.9	47.4	34.5	17.5	38.5	19.5	1,348
<b>Residence</b>									
Urban	18.6	4,318	79.4	46.4	23.1	10.6	28.9	14.2	802
Rural	22.3	8,316	72.9	49.5	41.6	21.8	44.6	23.3	1,853
<b>Province</b>									
Central	18.6	1,241	68.3	39.3	30.6	12.3	33.4	14.8	230
Copperbelt	19.5	1,634	78.7	58.2	34.1	15.6	39.3	19.9	319
Eastern	22.6	1,603	75.6	51.2	40.4	23.9	42.9	24.4	362
Luapula	23.1	1,112	80.7	71.4	71.7	36.1	76.0	39.2	257
Lusaka	15.3	1,855	78.4	29.6	5.2	1.8	13.6	5.6	283
Muchinga	22.8	771	69.8	50.6	47.2	28.7	50.5	30.1	175
Northern	26.0	1,203	71.8	56.9	61.9	25.1	66.6	26.6	312
North Western	23.3	641	87.0	68.3	70.0	48.9	75.9	52.4	149
Southern	21.2	1,754	74.0	32.9	5.9	2.4	6.8	2.9	371
Western	23.8	821	64.2	36.3	15.2	8.2	16.1	9.0	195
<b>Mother's education</b>									
No education	24.2	1,387	67.6	47.8	36.8	18.3	39.1	19.7	335
Primary	21.1	7,098	74.6	49.7	40.8	20.8	44.4	22.9	1,500
Secondary	20.3	3,696	78.2	46.5	26.4	14.1	30.9	16.5	749
More than secondary	15.7	453	81.2	51.2	34.0	13.8	41.0	17.5	71
<b>Wealth quintile</b>									
Lowest	22.7	3,032	70.1	49.6	42.9	20.8	45.7	22.1	687
Second	23.6	2,905	75.7	53.9	46.7	25.6	50.2	27.5	684
Middle	20.9	2,604	75.0	47.5	35.9	18.7	39.5	21.0	544
Fourth	18.5	2,208	79.6	44.1	22.1	12.2	26.5	14.6	409
Highest	17.6	1,884	77.1	42.8	17.2	5.8	23.4	9.4	331
<b>Total</b>	<b>21.0</b>	<b>12,634</b>	<b>74.9</b>	<b>48.6</b>	<b>36.0</b>	<b>18.4</b>	<b>39.9</b>	<b>20.5</b>	<b>2,655</b>

<sup>1</sup> Excludes market and traditional practitioner

Twenty-one percent of children under age 5 had a fever during the two weeks preceding the survey. The prevalence of fever is highest among children age 12-23 months (27 percent). Fever prevalence ranges from a high of 26 percent in Northern to a low of 15 percent in Lusaka. Children whose mothers have more than a secondary education are least likely to have had a fever in the preceding two weeks (16 percent). Fever prevalence tends to decrease with increasing wealth, although the pattern is not linear.

Advice or treatment was sought for three-quarters (75 percent) of children with a fever, and 49 percent had blood taken from a finger or heel for testing. Thirty-six percent of children who had a fever took ACT, and 18 percent took ACT the same or the next day. Forty percent of children with a fever took antimalarial drugs, and 21 percent took antimalarial drugs the same or next day. These data should be interpreted with caution because the 2013-14 ZDHS survey did not collect data on diagnostic testing of malaria or on the test results. Therefore estimates of appropriate treatment cannot be calculated due to the lack of a necessary denominator.

Table 12.10 shows the sources of advice or treatment for children with fever in the two weeks preceding the survey. The public sector is the principal source for advice or treatment (68 percent), and government health centres or posts are the primary public sector source (59 percent), followed by government hospitals (5 percent). In 5 percent of cases, advice or treatment was sought from the private sector, primarily mission hospitals or clinics (3 percent) and private hospitals or clinics (2 percent).

Table 12.10 Source of advice or treatment for children with fever		
Percentage of children under age 5 with fever in the two weeks preceding the survey for whom advice or treatment was sought from specific sources; and among children under age 5 with fever in the two weeks preceding the survey for whom advice or treatment was sought, the percentage for whom advice or treatment was sought from specific sources, by background characteristics, Zambia 2013-14		
Background characteristic	Percentage for whom advice or treatment was sought from each source:	
	Among children with fever	Among children with fever for whom advice or treatment was sought
<b>Any public sector source</b>	67.7	89.5
Government hospital	4.6	6.1
Government health centre/post	59.3	78.4
Mobile clinic/hospital	1.1	1.4
Community-based agent/fieldworker	2.9	3.8
Other public sector	0.1	0.1
<b>Any private sector source</b>	5.4	7.1
Private hospital/clinic	1.5	2.0
Mission hospital/clinic	2.6	3.5
Pharmacy	0.9	1.2
Mobile hospital/clinic	0.1	0.1
Community-based agent/fieldworker	0.2	0.3
<b>Any other source</b>	4.0	5.3
Shop	2.7	3.6
Traditional practitioner	0.7	0.9
Market	0.1	0.1
Other	0.5	0.7
Number of children	2,655	2,009

Table 12.11 shows the percentage of children under age 5 with a fever in the two weeks preceding the survey who took specific antimalarial drugs. Among children with a fever who took antimalarials, 91 percent took ACT, 7 percent took SP/Fansidar, 2 percent took quinine, and less than 1 percent took other antimalarial drugs.

**Table 12.11 Type of antimalarial drugs used**

Among children under age 5 with fever in the two weeks preceding the survey who took any antimalarial medication, the percentage who took specific antimalarial drugs, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of children who took drug:						Number of children with fever who took any antimalarial drug
	Any ACT	Quinine	SP/Fansidar	Chloroquine	Amodiaquine	Other antimalarial	
<b>Age (in months)</b>							
<12	88.5	2.4	7.7	0.7	0.0	1.5	135
12-23	88.1	1.7	9.4	0.0	0.0	0.8	271
24-35	94.5	3.1	2.5	0.0	0.0	0.4	244
36-47	88.2	1.7	10.2	0.0	0.0	0.0	218
48-59	93.3	2.1	5.1	0.0	0.4	0.0	189
<b>Sex</b>							
Male	91.4	2.1	6.2	0.0	0.0	0.6	539
Female	89.7	2.2	7.8	0.2	0.1	0.4	519
<b>Residence</b>							
Urban	80.6	2.8	16.4	0.0	0.3	0.2	232
Rural	93.4	2.0	4.3	0.1	0.0	0.6	826
<b>Province</b>							
Central	91.5	0.0	5.8	0.0	0.0	2.7	77
Copperbelt	86.9	2.4	10.8	0.0	0.0	0.0	125
Eastern	94.2	3.1	3.3	0.0	0.0	0.0	155
Luapula	94.5	1.8	1.6	0.5	0.0	1.6	195
Lusaka	*	*	*	*	*	*	38
Muchinga	93.7	1.6	6.0	0.0	0.0	0.0	89
Northern	93.3	2.3	4.7	0.0	0.4	0.0	208
North Western	92.2	3.3	4.5	0.0	0.0	0.0	113
Southern	*	*	*	*	*	*	25
Western	(94.0)	(0.0)	(6.0)	(0.0)	(0.0)	(0.0)	31
<b>Mother's education</b>							
No education	94.1	2.0	3.0	0.0	0.0	1.0	131
Primary	91.8	2.2	5.6	0.1	0.1	0.5	666
Secondary	85.9	2.5	11.7	0.0	0.0	0.4	231
More than secondary	(83.0)	(0.0)	(17.0)	(0.0)	(0.0)	(0.0)	29
<b>Wealth quintile</b>							
Lowest	93.9	2.4	3.2	0.0	0.0	0.6	314
Second	93.2	1.9	4.2	0.3	0.1	1.0	344
Middle	90.9	2.6	6.6	0.0	0.2	0.0	215
Fourth	84.1	1.3	14.6	0.0	0.0	0.0	108
Highest	73.4	2.9	25.1	0.0	0.0	0.0	77
<b>Total</b>	90.6	2.2	7.0	0.1	0.1	0.5	1,058

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

ACT = Artemisinin-based combination therapy

## Key Findings

- Knowledge of HIV/AIDS in Zambia is universal; almost all women age 15-49 and men age 15-59 have heard of AIDS.
- Overall, 42 percent of women and 49 percent of men age 15-49 have comprehensive knowledge about HIV/AIDS.
- Women are more aware than men that HIV can be transmitted through breastfeeding and that this risk can be reduced by taking special drugs (78 percent versus 58 percent).
- Women age 15-49 are less likely to have multiple sexual partners than their male counterparts (2 percent versus 16 percent).
- Overall, 22 percent of men age 15-49 have been circumcised. This is an increase from 13 percent in 2007.
- Fifty-six percent of women and 50 percent of men age 18-24 reported having sexual intercourse before age 18.
- Among never-married youth age 15-24, 32 percent of young women and 41 percent of young men reported that they had sexual intercourse in the past 12 months.
- Only 40 percent of young women and 49 percent of young men age 15-24 who had sexual intercourse in the past 12 months reported using a condom during their last sexual encounter.

**A**cquired immune deficiency syndrome (AIDS) is caused by the Human Immunodeficiency Virus (HIV), which weakens the immune system and makes the body susceptible to and unable to recover from other opportunistic diseases. The predominant mode of HIV transmission is through heterosexual intercourse, followed by perinatal transmission, in which the mother passes the virus to her child during pregnancy, delivery, or breastfeeding. Other modes of transmission include infected blood and body products and unsafe injections.

The Zambian response to HIV and AIDS has been aggressive and persistent. Zambia is in the fourth year of its five-year strategy to address HIV and AIDS within the country. This strategy addresses a number of factors important with respect to the future course of Zambia's HIV epidemic, including efforts to increase levels of HIV- and AIDS-related knowledge among the general population, decrease social stigmatisation of people living with HIV and AIDS, and modify risk behaviours (National AIDS Council, 2010). Other goals are to improve access to high-quality services for treating sexually transmitted infections (STIs), increase the provision and uptake of HIV counselling and testing, and enhance access to care, support, and antiretroviral therapy (ART), including prevention, treatment, and management of opportunistic infections.

The HIV epidemic in Zambia is a generalised and mature epidemic within the population, indicative of the need for a continued and strengthened prevention-focused, decentralised multisectoral response that can effectively contain the spread of HIV and reduce the impact of AIDS (Ministry of Health, 2010). This is in line with the Millennium Development Goal 6 that aims at halting the spread of HIV infections and reversing the negative effects of the pandemic on social and economic development. To address the problems presented by the HIV and AIDS epidemic, substantial changes have taken place in Zambia over the past few years. These changes include increased funding; increased involvement among organisations in the public, private, and civil society sectors; expanded geographic coverage for services and programmes; and increased coverage of the needs and demands of beneficiaries. Furthermore,

the system through which HIV-related programmes in Zambia are monitored and evaluated has been strengthened and now provides critical information on programme quality and assists in identifying existing programmatic gaps.

The principal objective of this chapter is to examine levels of HIV- and AIDS-related knowledge and perceptions and the prevalence of risk behaviours related to HIV infection at the national, provincial, and rural and urban levels and in geographic and socioeconomic subgroups of the population. In this way, prevention and control programmes can target those individuals most in need of information and most at risk of HIV infection. In this chapter, indicators for HIV and AIDS knowledge, attitudes, and related behaviours are presented for the adult population (age 15-49 and age 50-59). The chapter also highlights HIV and AIDS knowledge and patterns of sexual behaviour among young people, because young adults are more likely than their older counterparts to be in the process of establishing patterns of sexual behaviours and hence are the primary target of many prevention strategies.

## **13.1 HIV AND AIDS KNOWLEDGE, TRANSMISSION, AND PREVENTION METHODS**

The 2013-14 ZDHS included a series of questions that addressed women's and men's awareness of HIV and AIDS. These questions sought information on respondents' overall knowledge, their knowledge of ways to avoid the disease, and their knowledge regarding use of condoms to prevent sexually transmitted infections, including HIV.

### **13.1.1 Knowledge of AIDS and Knowledge of HIV Prevention**

General awareness of AIDS among women and men is universal (99 percent and 100 percent, respectively), with no major variations by background characteristics (data not shown separately).

HIV among adults is mainly transmitted through heterosexual contact between an HIV-positive partner and an HIV-negative partner. Zambia's HIV prevention programme has sought to reduce sexual transmission of the virus by promoting three behaviour change strategies focusing on sexual abstinence, mutually faithful monogamy among uninfected couples, and consistent condom use among people not practicing abstinence. In the 2013-14 ZDHS, men and women were asked if it is possible to reduce the risk of acquiring HIV through consistently using condoms, limiting sexual intercourse to one uninfected partner who has no other sex partners, and abstaining from sexual intercourse.

Table 13.1 shows that 82 percent of women and 85 percent of men age 15-49 agree that using a condom every time a person has sexual intercourse can reduce the risk of contracting HIV. More than nine in ten women (92 percent) and men (95 percent) agree that limiting sexual intercourse to one uninfected partner is a way to reduce the risk of contracting HIV. About eight in ten women (79 percent) and more than eight in ten men (83 percent) know that using condoms consistently and limiting sexual intercourse to one uninfected partner who has no other partners can reduce HIV risk. The data further show that more than eight in ten women (84 percent) and men (89 percent) agree that abstaining from sexual intercourse is an effective way to reduce the risk of contracting HIV.

The proportion of women and men with knowledge of HIV prevention methods increases with age, with youth age 15-19 having the lowest level of knowledge. Never-married respondents who have not yet had sex are less likely to know about HIV prevention methods than those who are married or have had sexual intercourse. Urban women and men are slightly more likely than those living in rural areas to have knowledge of HIV prevention methods. Southern has the highest percentage of women (89 percent) who recognise that using condoms is a way to reduce the risk of contracting HIV, while Eastern and Northern have the lowest percentage (73 percent each). Knowledge of various prevention methods generally increases with increasing education and wealth.

Table 13.1 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse, and by having one sex partner who is not infected and has no other partners, by background characteristics, Zambia 2013-14

Background characteristic	Women					Men				
	Percentage who say HIV can be prevented by:					Percentage who say HIV can be prevented by:				
	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>1,2</sup>	Abstaining from sexual intercourse	Number of women	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>1,2</sup>	Abstaining from sexual intercourse	Number of men
<b>Age</b>										
15-24	79.7	90.3	75.8	82.3	6,631	82.9	93.6	80.0	87.6	5,672
15-19	77.0	88.7	72.6	81.1	3,625	81.1	92.2	77.9	85.9	3,337
20-24	82.9	92.1	79.6	83.7	3,006	85.6	95.6	83.2	90.1	2,335
25-29	83.9	93.5	80.5	83.8	2,813	86.8	96.0	84.7	90.6	1,944
30-39	85.2	93.3	81.9	85.5	4,484	87.9	96.3	85.9	90.6	3,591
40-49	82.9	94.2	80.8	86.2	2,482	86.2	96.3	84.5	91.0	2,354
<b>Marital status</b>										
Never married	79.4	89.7	75.2	82.5	4,572	83.3	93.3	80.4	87.8	5,985
Ever had sex	84.3	90.8	79.8	83.2	2,370	86.8	94.9	83.9	89.7	3,835
Never had sex	74.2	88.5	70.1	81.7	2,203	77.1	90.5	74.1	84.5	2,150
Married/living together	83.6	93.3	80.7	84.3	9,859	87.0	96.8	85.2	91.1	7,035
Divorced/separated/widowed	83.6	93.1	79.8	85.9	1,980	87.4	93.1	83.8	86.2	542
<b>Residence</b>										
Urban	84.8	93.5	81.6	84.5	7,585	86.0	95.4	83.9	90.1	6,326
Rural	80.4	91.2	76.8	83.6	8,826	84.8	94.9	82.3	88.8	7,235
<b>Province</b>										
Central	83.8	95.3	81.5	91.5	1,467	89.1	91.2	84.2	88.7	1,153
Copperbelt	87.5	93.9	83.8	80.2	2,836	88.1	96.5	86.2	92.5	2,395
Eastern	73.4	86.1	68.2	79.4	1,930	84.4	94.7	81.5	89.9	1,710
Luapula	85.2	90.2	81.0	85.1	1,143	87.6	97.1	86.3	86.8	855
Lusaka	80.3	91.3	77.0	85.2	3,266	83.4	93.4	80.9	87.0	2,844
Muchinga	78.7	94.6	76.9	86.7	868	73.0	92.4	70.0	87.5	680
Northern	73.0	93.5	70.4	72.9	1,200	80.8	96.2	78.6	91.8	929
North Western	87.1	92.2	81.9	89.3	713	87.3	94.5	83.5	93.1	557
Southern	88.7	94.6	86.4	86.7	2,007	89.1	98.9	88.6	87.7	1,771
Western	85.6	92.0	82.3	89.5	980	84.7	94.6	82.1	92.1	668
<b>Education</b>										
No education	74.9	85.9	70.1	79.0	1,375	85.1	93.3	81.4	88.0	500
Primary	81.4	91.8	77.8	83.2	7,685	83.4	94.4	80.9	88.4	5,365
Secondary	84.3	93.5	81.2	85.2	6,521	86.5	95.8	84.3	90.2	6,638
More than secondary	89.9	96.4	87.9	90.3	830	88.4	95.5	86.4	90.8	1,058
<b>Wealth quintile</b>										
Lowest	79.2	90.2	75.6	82.8	2,859	82.2	93.9	79.6	89.1	2,038
Second	79.8	91.0	76.2	83.2	2,861	84.2	94.8	81.6	88.2	2,448
Middle	83.3	92.8	79.8	83.9	3,077	86.8	95.7	84.4	89.9	2,547
Fourth	83.5	92.9	79.9	84.1	3,510	85.5	95.3	83.0	89.6	3,124
Highest	84.9	93.6	82.1	85.4	4,103	86.9	95.5	85.1	90.0	3,405
Total 15-49	82.4	92.3	79.0	84.0	16,411	85.4	95.1	83.0	89.4	13,561
Men 50-59	na	na	na	na	na	84.9	96.5	82.8	93.2	1,212
Total men 15-59	na	na	na	na	na	85.3	95.2	83.0	89.7	14,773

na = Not applicable

<sup>1</sup> Using condoms every time they have sexual intercourse

<sup>2</sup> Partner who has no other partners

### 13.1.2 Comprehensive Knowledge about HIV and AIDS

The questions asked in the 2013-14 ZDHS allow an assessment of comprehensive knowledge of HIV and AIDS among respondents. Comprehensive knowledge is defined as knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about HIV transmission (that the AIDS virus can be transmitted by mosquito bites and that a person can become infected by sharing food with someone who has the AIDS virus). The findings are presented in Tables 13.2.1 and 13.2.2 for women and men, respectively.

Table 13.2.1 Comprehensive knowledge about AIDS: Women

Percentage of women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of the AIDS virus, and the percentage with comprehensive knowledge about AIDS, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of women who say that:				Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions <sup>1</sup>	Percentage with a comprehensive knowledge about AIDS <sup>2</sup>	Number of women
	A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
<b>Age</b>							
15-24	79.5	70.6	80.1	82.8	50.9	41.5	6,631
15-19	76.9	70.1	78.4	80.9	48.6	38.9	3,625
20-24	82.7	71.2	82.2	85.2	53.7	44.7	3,006
25-29	82.4	66.4	78.2	81.5	48.5	41.3	2,813
30-39	83.8	68.6	79.0	84.2	51.8	45.0	4,484
40-49	82.9	65.5	76.8	82.8	48.5	41.0	2,482
<b>Marital status</b>							
Never married	80.1	74.3	80.8	83.9	54.1	44.0	4,572
Ever had sex	82.7	73.8	81.8	84.4	54.7	46.1	2,370
Never had sex	77.3	74.8	79.6	83.4	53.5	41.7	2,203
Married/living together	82.3	65.9	78.3	82.4	48.9	41.7	9,859
Divorced/separated/widowed	82.3	68.5	78.3	83.6	49.1	41.8	1,980
<b>Residence</b>							
Urban	87.8	78.5	81.1	88.8	61.1	52.1	7,585
Rural	76.5	60.1	77.2	78.0	41.2	34.0	8,826
<b>Province</b>							
Central	79.4	59.1	77.2	76.3	41.1	35.5	1,467
Copperbelt	85.9	76.7	76.9	86.0	58.0	51.3	2,836
Eastern	85.0	56.5	79.7	81.9	44.0	32.9	1,930
Luapula	66.4	53.0	76.5	67.7	33.2	29.8	1,143
Lusaka	88.3	80.1	80.6	90.7	61.6	49.7	3,266
Muchinga	72.1	65.6	82.9	82.0	44.6	37.1	868
Northern	74.8	66.8	80.7	80.8	44.2	33.1	1,200
North Western	78.7	58.6	65.8	79.8	35.2	30.8	713
Southern	91.7	76.2	87.3	89.3	65.7	58.6	2,007
Western	61.0	59.3	70.7	71.5	29.7	26.7	980
<b>Education</b>							
No education	70.5	51.2	66.9	67.5	29.5	23.2	1,375
Primary	77.8	60.8	74.7	78.1	41.2	34.0	7,685
Secondary	86.9	78.5	84.8	90.4	61.5	52.1	6,521
More than secondary	96.2	91.4	92.9	95.5	82.8	74.5	830
<b>Wealth quintile</b>							
Lowest	71.3	55.4	72.8	72.1	34.8	28.9	2,859
Second	75.1	56.4	75.9	76.0	37.1	30.0	2,861
Middle	80.0	65.6	79.4	82.9	46.5	39.0	3,077
Fourth	86.9	73.2	78.4	86.4	55.1	46.3	3,510
Highest	90.4	84.4	85.6	92.6	69.5	59.5	4,103
Total 15-49	81.7	68.6	79.0	83.0	50.4	42.4	16,411

<sup>1</sup> Two most common local misconceptions: HIV can be transmitted by (1) mosquito bites and (2) supernatural means.

<sup>2</sup> Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus.

Eighty-two percent of women and 88 percent of men age 15-49 agreed that a healthy-looking person can have HIV. In terms of different misconceptions about HIV transmission, 69 percent of women and 70 percent of men said that HIV cannot be transmitted by mosquito bites, 79 percent of women and 84 percent of men knew that HIV cannot be transmitted by supernatural means, and 83 percent of women and 85 percent of men said that a person cannot become infected by sharing food with someone who has AIDS.

Table 13.2.1 shows that 42 percent of women age 15-49 have comprehensive knowledge about HIV/AIDS. Women age 15-19 (39 percent); those who have never had sex, who are currently married, or who are divorced, separated, or widowed (42 percent each); and those living in rural areas (34 percent) are less likely than their counterparts to have comprehensive knowledge of HIV/AIDS. By province, comprehensive knowledge is highest among women in Southern (59 percent) and lowest among women in Western (27 percent). Comprehensive knowledge of HIV/AIDS increases steadily with increasing



education and wealth. Women with more than a secondary education are more than three times as likely to have comprehensive knowledge than those with no education (75 percent versus 23 percent).

**Table 13.2.2 Comprehensive knowledge about AIDS: Men**

Percentage of men age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of the AIDS virus, and the percentage with comprehensive knowledge about AIDS, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of men who say that:				Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions <sup>1</sup>	Percentage with a comprehensive knowledge about AIDS <sup>2</sup>	Number of men
	A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
<b>Age</b>							
15-24	85.1	70.4	83.6	84.3	55.2	46.7	5,672
15-19	81.9	67.7	81.2	82.6	50.8	42.3	3,337
20-24	89.7	74.2	86.9	86.8	61.5	53.0	2,335
25-29	90.0	67.9	85.0	86.0	56.0	48.6	1,944
30-39	90.2	70.4	83.2	85.3	58.2	51.3	3,591
40-49	89.8	72.0	84.1	86.1	59.9	51.1	2,354
<b>Marital status</b>							
Never married	85.6	72.4	84.0	85.3	57.6	48.9	5,985
Ever had sex	87.3	72.2	85.8	85.9	58.8	51.1	3,835
Never had sex	82.7	72.7	80.7	84.2	55.4	45.0	2,150
Married/living together	89.9	68.5	83.8	84.9	56.2	48.8	7,035
Divorced/separated/widowed	88.3	71.3	81.1	85.8	59.4	50.8	542
<b>Residence</b>							
Urban	92.6	81.5	86.0	90.0	68.5	59.1	6,326
Rural	83.9	60.5	81.8	80.9	46.8	40.1	7,235
<b>Province</b>							
Central	89.3	62.2	76.6	77.8	49.4	43.3	1,153
Copperbelt	92.0	83.3	86.8	88.0	70.2	61.9	2,395
Eastern	88.6	59.1	84.0	85.3	50.0	42.4	1,710
Luapula	75.0	60.5	84.3	80.4	42.6	39.3	855
Lusaka	93.2	83.1	83.7	90.4	69.2	57.7	2,844
Muchinga	83.2	61.6	83.7	84.5	45.6	34.3	680
Northern	80.7	62.8	83.2	75.9	47.5	37.5	929
North Western	89.0	70.7	74.4	89.6	53.2	46.6	557
Southern	92.1	65.8	89.0	86.8	56.7	51.5	1,771
Western	66.8	55.7	78.7	75.8	34.8	29.8	668
<b>Education</b>							
No education	77.4	42.4	69.8	68.4	27.9	23.2	500
Primary	82.8	57.8	78.7	79.0	42.4	35.6	5,365
Secondary	91.4	78.9	87.4	89.9	66.1	57.3	6,638
More than secondary	97.6	93.5	93.6	93.6	86.9	76.3	1,058
<b>Wealth quintile</b>							
Lowest	78.8	53.0	76.9	76.5	38.4	31.9	2,038
Second	82.8	58.9	81.4	80.3	44.0	37.4	2,448
Middle	85.5	62.9	83.8	83.4	48.4	42.4	2,547
Fourth	92.2	77.8	84.9	88.0	64.8	54.9	3,124
Highest	95.2	87.6	88.5	92.4	76.5	66.9	3,405
Total 15-49	88.0	70.3	83.8	85.1	56.9	48.9	13,561
50-59	90.3	70.3	82.2	86.0	57.9	49.6	1,212
Total 15-59	88.2	70.3	83.6	85.2	57.0	49.0	14,773

<sup>1</sup> Two most common local misconceptions: HIV can be transmitted by (1) mosquito bites and (2) supernatural means.

<sup>2</sup> Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus.

About half (49 percent) of men age 15-49 have comprehensive knowledge about HIV/AIDS (Table 13.2.2). Young men age 15-19 (42 percent), men who have never had sex (45 percent), and men living in rural areas (40 percent) are least likely to have comprehensive knowledge of HIV/AIDS. Comprehensive knowledge among men ranges from a high of 62 percent in Copperbelt to a low of 30 percent in Western. Similar to women, more educated and wealthier men have a higher level of comprehensive knowledge of HIV/AIDS than men with no or less education and those in the lower wealth quintiles.

## 13.2 KNOWLEDGE ABOUT MOTHER-TO-CHILD TRANSMISSION

Increasing the level of knowledge about HIV transmission from mother to child and reducing the risk of transmission by using antiretrovirals before delivery are critical in reducing mother-to-child transmission (MTCT) of HIV. To assess MTCT knowledge, respondents were asked whether HIV can be transmitted from a mother to a child through breastfeeding and whether a mother with HIV can reduce the risk of transmission to her baby by taking certain drugs during pregnancy.

Table 13.3 shows that, among respondents age 15-49, women are more aware than men that HIV can be transmitted through breastfeeding (89 percent versus 82 percent) and that the risk of MTCT can be reduced by taking special drugs (82 percent versus 66 percent). Overall, 78 percent of women and 58 percent of men know that HIV can be transmitted through breastfeeding and that this risk can be reduced by taking special drugs during pregnancy, an increase from the figures reported in the 2007 ZDHS survey (63 percent of women and 46 percent of men).

Table 13.3 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs during pregnancy, by background characteristics, Zambia 2013-14

Background characteristic	Women				Men			
	Percentage who know that:				Percentage who know that:			
	HIV can be transmitted by breast-feeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of women	HIV can be transmitted by breast-feeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of men
<b>Age</b>								
15-24	86.2	74.3	70.3	6,631	78.7	56.1	49.2	5,672
15-19	82.0	66.1	62.0	3,625	75.5	50.2	43.9	3,337
20-24	91.3	84.2	80.4	3,006	83.2	64.6	56.8	2,335
25-29	91.5	88.0	83.8	2,813	85.8	69.2	62.4	1,944
30-39	91.1	88.7	84.3	4,484	84.5	73.9	65.4	3,591
40-49	88.4	83.8	78.4	2,482	83.8	73.9	65.6	2,354
<b>Marital status</b>								
Never married	83.7	70.9	66.5	4,572	78.8	55.8	48.7	5,985
Ever had sex	88.9	78.6	73.8	2,370	82.4	60.2	53.0	3,835
Never had sex	78.1	62.5	58.6	2,203	72.2	47.8	41.0	2,150
Married/living together	90.8	86.4	82.1	9,859	84.8	74.4	66.3	7,035
Divorced/separated/widowed	90.7	86.0	81.8	1,980	84.6	65.1	58.1	542
<b>Currently pregnant</b>								
Pregnant	90.7	82.3	78.7	1,427	na	na	na	na
Not pregnant or not sure	88.6	82.0	77.6	14,984	na	na	na	na
<b>Residence</b>								
Urban	90.2	85.2	81.0	7,585	85.4	68.0	61.3	6,326
Rural	87.5	79.2	74.9	8,826	79.3	63.9	55.6	7,235
<b>Province</b>								
Central	88.4	79.2	73.5	1,467	66.6	51.7	42.8	1,153
Copperbelt	89.0	81.5	77.0	2,836	89.3	64.2	59.6	2,395
Eastern	89.2	80.6	77.3	1,930	86.6	65.6	59.6	1,710
Luapula	82.2	74.9	69.7	1,143	73.8	66.3	54.6	855
Lusaka	89.7	87.8	83.3	3,266	84.0	69.2	61.5	2,844
Muchinga	88.3	71.7	68.6	868	73.2	53.0	44.7	680
Northern	86.0	71.1	67.4	1,200	73.7	49.1	42.8	929
North Western	84.7	83.0	76.8	713	83.4	75.1	68.6	557
Southern	93.5	90.5	86.2	2,007	86.6	80.5	70.9	1,771
Western	89.8	84.1	81.2	980	82.0	70.7	60.5	668

Continued...

Table 13.3—Continued

Background characteristic	Women				Men			
	Percentage who know that:			Number of women	Percentage who know that:			Number of men
	HIV can be transmitted by breast-feeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy		HIV can be transmitted by breast-feeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	
<b>Education</b>								
No education	82.8	74.4	69.5	1,375	78.9	58.8	51.3	500
Primary	88.0	81.2	77.0	7,685	79.1	61.3	54.6	5,365
Secondary	90.2	83.0	78.7	6,521	83.6	67.2	59.1	6,638
More than secondary	94.6	94.6	89.9	830	89.5	83.0	75.0	1,058
<b>Wealth quintile</b>								
Lowest	85.8	74.6	70.7	2,859	79.1	60.7	53.8	2,038
Second	87.4	79.8	75.2	2,861	76.9	63.8	54.4	2,448
Middle	89.6	82.9	78.4	3,077	80.6	65.0	57.3	2,547
Fourth	89.1	83.4	79.4	3,510	84.5	65.0	58.4	3,124
Highest	91.0	86.9	82.3	4,103	86.6	71.6	64.2	3,405
Total 15-49	88.8	82.0	77.7	16,411	82.1	65.8	58.2	13,561
Men 50-59	na	na	na	na	82.4	74.2	64.7	1,212
Total men 15-59	na	na	na	na	82.1	66.5	58.8	14,773

na = Not applicable

MTCT knowledge is lowest among the youngest respondents (age 15-19) (62 percent of women and 44 percent of men) and those who have never been married and have never had sex (59 percent of women and 41 percent of men). There is little difference in level of MTCT knowledge by women's current pregnancy status. MTCT knowledge is higher among women and men who live in urban areas (81 percent and 61 percent, respectively) than among those who live in rural areas (75 percent and 56 percent, respectively). By province, MTCT knowledge is lowest among women in Northern (67 percent) and men in Northern and Central (43 percent each) and highest among women and men in Southern (86 percent and 71 percent, respectively).

Among both women and men, awareness that HIV can be transmitted through breastfeeding and that this risk can be reduced by taking special drugs during pregnancy increases with increasing education and wealth.

### 13.3 PERCEIVED RISK OF HIV INFECTION

Individuals' knowledge of HIV transmission and accurate assessments of their own risk seem to be among the key factors in adoption of safer sexual practices. The 2013-14 ZDHS collected information on perceived risk of HIV infection among women and men age 15-49. This information is important to policymakers in designing effective policies to address the HIV and AIDS pandemic.

Table 13.4 shows the percent distribution of women and men age 15-49 by perceived risk of HIV infection, according to background characteristics. A higher percentage of men than women perceived themselves to be at no risk (30 percent versus 26 percent) or at low risk (35 percent versus 28 percent). By contrast, a slightly higher percentage of women than men considered themselves to be at high risk for HIV infection (17 percent versus 15 percent).

Women and men age 30-49 (22 percent and 18 percent, respectively) and those who are divorced, separated, or widowed (22 percent and 25 percent, respectively) are most likely to perceive themselves as being at high risk for HIV infection. By province, the percentage of women who consider themselves to be at high risk for HIV infection is lowest in Copperbelt (9 percent) and highest in Western (35 percent). Among men, the percentage is lowest in Southern and Central (10 percent each) and highest in Western

(42 percent). Women with more than a secondary education are most likely to perceive that they are high risk for HIV infection (19 percent), while men in the same category are least likely to perceive that they are at high risk (11 percent). There are no clear patterns by wealth, although men in the highest wealth quintile are less likely than other men to perceive themselves as being at high risk for HIV infection (12 percent).

**Table 13.4 Perceived risk of HIV infection**

Percent distribution of women and men age 15-49 by perceived risk of HIV infection, according to background characteristics, Zambia 2013-14

Background characteristic	Women							Men						
	Low	Medium	High	No risk	Other/ don't know	Total	Number of women	Low	Medium	High	No risk	Other/ don't know	Total	Number of men
<b>Age</b>														
15-24	30.3	11.8	11.9	35.2	10.8	100.0	6,631	33.7	10.2	11.5	39.3	5.3	100.0	5,672
15-19	31.1	8.1	8.7	41.9	10.2	100.0	3,625	31.4	7.6	9.3	45.0	6.6	100.0	3,337
20-24	29.4	16.2	15.7	27.2	11.4	100.0	3,006	37.0	13.8	14.7	31.0	3.5	100.0	2,335
25-29	28.5	21.9	17.0	19.4	13.1	100.0	2,813	38.9	15.5	15.1	25.4	5.0	100.0	1,944
30-39	25.7	21.1	22.2	18.6	12.3	100.0	4,484	36.1	18.1	17.6	22.3	5.9	100.0	3,591
40-49	25.1	18.9	20.1	21.9	13.9	100.0	2,482	35.3	17.0	18.1	22.9	6.7	100.0	2,354
<b>Marital status</b>														
Never married	31.9	9.0	10.8	38.7	9.6	100.0	4,572	34.3	10.8	11.9	37.8	5.2	100.0	5,985
Ever had sex	32.2	13.5	16.1	27.1	11.1	100.0	2,370	36.9	14.5	14.9	28.9	4.7	100.0	3,835
Never had sex	31.7	4.1	5.2	51.2	7.8	100.0	2,203	29.7	4.1	6.5	53.6	6.1	100.0	2,150
Married/living together	26.4	20.6	18.6	21.2	13.2	100.0	9,859	36.5	16.5	16.5	24.5	6.0	100.0	7,035
Divorced/separated/ widowed	26.6	18.8	22.1	20.2	12.3	100.0	1,980	32.2	22.6	25.0	13.5	6.6	100.0	542
<b>Residence</b>														
Urban	31.5	14.8	16.8	23.9	13.1	100.0	7,585	37.4	13.8	15.0	29.5	4.3	100.0	6,326
Rural	24.9	19.2	16.9	27.8	11.2	100.0	8,826	33.6	14.6	14.6	30.3	6.9	100.0	7,235
<b>Province</b>														
Central	25.2	10.0	12.6	29.9	22.3	100.0	1,467	21.0	13.7	9.9	45.4	10.1	100.0	1,153
Copperbelt	29.3	15.3	9.1	32.1	14.1	100.0	2,836	39.0	11.6	11.1	35.1	3.2	100.0	2,395
Eastern	13.9	26.1	14.9	34.5	10.6	100.0	1,930	33.2	15.6	14.5	30.5	6.1	100.0	1,710
Luapula	17.6	25.8	16.3	28.7	11.7	100.0	1,143	35.5	17.7	25.1	19.1	2.7	100.0	855
Lusaka	35.2	12.9	21.0	17.5	13.5	100.0	3,266	40.3	13.9	15.6	25.2	5.0	100.0	2,844
Muchinga	27.6	11.1	11.0	39.7	10.5	100.0	868	27.2	10.9	14.8	40.2	7.0	100.0	680
Northern	28.3	16.7	17.4	30.2	7.5	100.0	1,200	36.6	11.7	10.9	36.2	4.6	100.0	929
North Western	31.4	17.6	16.3	26.0	8.6	100.0	713	41.0	14.8	10.8	28.7	4.6	100.0	557
Southern	34.1	22.8	19.9	15.1	8.2	100.0	2,007	36.5	17.3	10.1	27.6	8.5	100.0	1,771
Western	29.3	13.7	34.7	15.5	6.9	100.0	980	30.7	15.9	41.5	5.8	6.2	100.0	668
<b>Education</b>														
No education	24.1	19.2	16.3	24.8	15.6	100.0	1,375	30.3	17.4	15.1	28.7	8.5	100.0	500
Primary	25.6	19.1	17.4	24.9	13.0	100.0	7,685	32.2	14.4	13.9	31.4	8.0	100.0	5,365
Secondary	30.1	14.4	16.0	28.5	10.9	100.0	6,521	36.1	13.3	16.0	30.5	4.1	100.0	6,638
More than secondary	39.1	17.2	18.9	17.8	7.1	100.0	830	49.3	17.4	11.3	19.4	2.6	100.0	1,058
<b>Wealth quintile</b>														
Lowest	24.1	21.2	16.7	26.3	11.7	100.0	2,859	34.9	15.2	14.3	28.2	7.4	100.0	2,038
Second	24.9	18.5	16.0	29.5	11.1	100.0	2,861	30.8	15.1	16.5	30.5	7.0	100.0	2,448
Middle	26.4	18.2	18.2	25.7	11.5	100.0	3,077	32.3	14.9	15.3	31.2	6.2	100.0	2,547
Fourth	29.4	15.6	18.1	23.2	13.6	100.0	3,510	35.9	13.2	15.9	29.7	5.3	100.0	3,124
Highest	32.7	13.9	15.5	25.8	12.1	100.0	4,103	40.8	13.4	12.4	29.8	3.7	100.0	3,405
Total 15-49	28.0	17.2	16.8	26.0	12.1	100.0	16,411	35.4	14.2	14.8	29.9	5.7	100.0	13,561
Men 50-59	na	na	na	na	na	na	na	36.0	13.3	17.3	27.8	5.6	100.0	1,212
Total men 15-59	na	na	na	na	na	na	na	35.4	14.1	15.0	29.8	5.7	100.0	14,773

na = Not applicable

## 13.4 KNOWLEDGE OF ANTIRETROVIRAL DRUGS

Lack of information on antiretroviral drugs or misunderstanding of available information can lead to incorrect use of such drugs. This can result in non-adherence to prescribed regimens and, thus, a greater possibility of therapeutic failure. The 2013-14 ZDHS collected information on knowledge of antiretroviral drugs.

Table 13.5 shows the percentage of women and men age 15-49 who have heard of antiretroviral drugs and, among those who have heard of antiretroviral drugs, the percentage who know someone on antiretroviral therapy (ART). The results show that 96 percent of women and men have heard of antiretroviral drugs, with no major variations by background characteristics.

Among respondents who have heard of antiretroviral drugs, 75 percent of women and 69 percent of men know someone on ART. Respondents age 15-19 (66 percent of women and 55 percent of men) and those who have never been married and never had sex (61 percent of women and 50 percent of men) are less likely to know someone on ART than other respondents. Urban women are more likely than rural women to know someone on ART (77 percent versus 73 percent), while there is no difference by residence among men. The percentage of respondents who know someone on ART ranges from 66 percent of women and 59 percent of men in Northern to 81 percent of women in Southern and 75 percent of men in Eastern. Among both women and men, this percentage increases with increasing education. There are no clear patterns by wealth.

**Table 13.5 Knowledge of antiretroviral drugs**

Percentage of women and men age 15-49 who have heard of antiretroviral drugs, and, among those who have heard of antiretroviral drugs, the percentage who know someone on antiretroviral therapy (ART), by background characteristics, Zambia 2013-14

Background characteristic	Women				Men			
	Percentage who have heard of antiretroviral drugs	Number of women	Among women who have heard of antiretroviral drugs:		Percentage who have heard of antiretroviral drugs	Number of men	Among men who have heard of antiretroviral drugs:	
			Percentage who know someone on ART	Number of women			Percentage who know someone on ART	Number of men
<b>Age</b>								
15-24	94.8	6,631	68.3	6,288	94.1	5,672	59.8	5,339
15-19	92.7	3,625	65.5	3,359	92.5	3,337	54.9	3,087
20-24	97.5	3,006	71.6	2,930	96.5	2,335	66.5	2,253
25-29	97.0	2,813	76.9	2,729	97.6	1,944	71.3	1,897
30-39	97.8	4,484	80.4	4,386	98.0	3,591	74.7	3,518
40-49	97.1	2,482	78.4	2,409	97.8	2,354	78.3	2,303
<b>Marital status</b>								
Never married	94.2	4,572	68.2	4,308	94.2	5,985	60.6	5,640
Ever had sex	96.7	2,370	74.3	2,291	96.2	3,835	66.2	3,688
Never had sex	91.5	2,203	61.3	2,016	90.8	2,150	50.0	1,951
Married/living together	97.1	9,859	76.2	9,571	97.9	7,035	75.2	6,888
Divorced/separated/widowed	97.7	1,980	81.4	1,935	97.7	542	71.5	530
<b>Residence</b>								
Urban	97.4	7,585	77.0	7,391	96.8	6,326	68.2	6,123
Rural	95.4	8,826	72.6	8,422	95.8	7,235	69.3	6,934
<b>Province</b>								
Central	96.7	1,467	72.4	1,418	91.8	1,153	68.0	1,058
Copperbelt	97.9	2,836	77.8	2,777	97.8	2,395	74.0	2,343
Eastern	94.2	1,930	80.3	1,818	96.9	1,710	75.3	1,657
Luapula	93.9	1,143	69.7	1,072	96.5	855	73.1	825
Lusaka	96.8	3,266	75.4	3,160	95.4	2,844	62.8	2,713
Muchinga	96.0	868	68.8	834	95.3	680	63.0	648
Northern	95.2	1,200	65.7	1,143	95.6	929	58.7	888
North Western	96.1	713	66.5	686	94.7	557	60.4	528
Southern	99.0	2,007	80.6	1,987	98.9	1,771	72.2	1,752
Western	93.5	980	70.9	917	96.8	668	70.9	647
<b>Education</b>								
No education	90.8	1,375	68.4	1,249	94.6	500	65.8	473
Primary	95.8	7,685	73.9	7,366	95.1	5,365	68.1	5,101
Secondary	97.7	6,521	75.4	6,373	97.0	6,638	68.5	6,442
More than secondary	99.5	830	85.9	825	98.4	1,058	74.7	1,041
<b>Wealth quintile</b>								
Lowest	93.0	2,859	67.6	2,660	95.1	2,038	68.3	1,938
Second	96.0	2,861	74.1	2,748	95.6	2,448	68.4	2,339
Middle	96.6	3,077	76.3	2,973	96.0	2,547	72.1	2,445
Fourth	97.0	3,510	74.2	3,405	96.4	3,124	68.1	3,010
Highest	98.1	4,103	79.0	4,027	97.6	3,405	67.4	3,325
Total 15-49	96.4	16,411	74.7	15,813	96.3	13,561	68.8	13,057
Men 50-59	na	na	na	na	96.5	1,212	76.8	1,169
Total men 15-59	na	na	na	na	96.3	14,773	69.4	14,226

na = Not applicable

## 13.5 ATTITUDES TOWARD PEOPLE LIVING WITH HIV AND AIDS

Stigma and discrimination against those living with HIV and AIDS can adversely affect both people's willingness to be tested for HIV and their adherence to antiretroviral therapy. Indeed, HIV- and AIDS-related stigma and discrimination undermine HIV prevention and control efforts by making people afraid to seek out information about how to reduce their risk of exposure to HIV and adopt safer behaviours, given the possibility that such inquiries will raise suspicion about their HIV status. Reductions in stigma and discrimination are an important indicator of the success of programmes targeting HIV and AIDS prevention and control.

In the 2013-14 ZDHS, respondents who had heard of AIDS were asked a number of questions to assess the level of stigma associated with HIV and AIDS. Respondents were asked about their willingness or unwillingness to buy vegetables from an infected shopkeeper or vendor, to let others know the HIV status of family members, and to take care of a member of their family with AIDS in their own household. They were also asked whether an HIV-positive female teacher who is not sick should be allowed to continue teaching. Tables 13.6.1 and 13.6.2 present the results for women and men, respectively.

**Table 13.6.1 Accepting attitudes toward those living with HIV/AIDS: Women**

Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of women who:					Number of women who have heard of AIDS
	Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing accepting attitudes on all four indicators	
<b>Age</b>						
15-24	92.7	76.5	83.4	28.2	17.3	6,566
15-19	91.4	72.0	81.1	29.8	16.2	3,574
20-24	94.3	81.8	86.2	26.2	18.5	2,992
25-29	94.9	80.7	84.7	28.9	19.8	2,803
30-39	96.1	81.0	85.7	27.6	18.7	4,474
40-49	96.4	81.0	85.6	30.3	21.1	2,473
<b>Marital status</b>						
Never married	92.7	78.4	85.4	28.6	18.3	4,522
Ever had sex	94.1	81.3	86.7	25.6	17.1	2,364
Never had sex	91.3	75.1	84.0	31.8	19.7	2,158
Married/living together	95.2	78.8	83.9	28.8	18.9	9,820
Divorced/separated/widowed	95.6	82.8	86.4	26.3	18.7	1,974
<b>Residence</b>						
Urban	96.0	87.3	91.8	28.1	22.3	7,571
Rural	93.3	72.1	78.3	28.7	15.6	8,745
<b>Province</b>						
Central	94.2	73.3	80.1	22.2	13.2	1,461
Copperbelt	94.3	84.0	88.9	25.4	19.0	2,826
Eastern	96.1	78.7	80.1	38.2	26.1	1,919
Luapula	89.8	57.7	66.7	28.0	9.4	1,104
Lusaka	96.3	91.6	94.8	33.2	27.8	3,261
Muchinga	93.0	73.5	79.5	24.7	13.2	861
Northern	88.7	62.5	70.2	28.5	9.3	1,194
North Western	95.0	70.2	85.7	28.6	15.5	710
Southern	97.9	85.3	90.1	27.8	18.8	2,003
Western	93.7	76.2	84.3	16.9	10.0	976
<b>Education</b>						
No education	93.2	66.2	72.3	26.8	11.2	1,348
Primary	93.5	73.1	80.2	28.6	16.3	7,624
Secondary	95.8	86.6	90.5	28.0	21.5	6,514
More than secondary	97.5	97.1	98.1	33.1	30.8	830
<b>Wealth quintile</b>						
Lowest	90.8	65.7	72.1	31.1	13.7	2,818
Second	93.4	69.0	75.8	27.6	13.9	2,834
Middle	94.9	77.1	84.3	25.8	15.9	3,060
Fourth	96.5	85.3	90.4	27.7	21.0	3,502
Highest	96.1	91.5	94.5	29.9	25.5	4,103
Total 15-49	94.6	79.1	84.6	28.5	18.7	16,316

Table 13.6.2 Accepting attitudes toward those living with HIV/AIDS: Men

Among men age 15-49 who have heard of HIV/AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of men who:				Percentage expressing attitudes on all four indicators	Number of men who have heard of AIDS
	Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus		
<b>Age</b>						
15-24	93.1	79.6	83.0	35.8	23.0	5,627
15-19	91.8	76.3	80.1	35.6	21.1	3,296
20-24	95.1	84.4	87.2	36.1	25.7	2,331
25-29	96.7	86.5	87.9	38.0	28.6	1,939
30-39	97.4	87.0	88.2	40.1	32.2	3,587
40-49	97.4	85.0	88.2	37.7	28.3	2,353
<b>Marital status</b>						
Never married	93.6	81.1	84.1	37.4	25.2	5,939
Ever had sex	94.8	82.6	84.9	36.1	25.5	3,826
Never had sex	91.6	78.4	82.6	39.7	24.5	2,113
Married/living together	97.1	85.2	87.5	37.4	28.4	7,028
Divorced/separated/widowed	96.1	88.5	86.9	42.8	33.2	540
<b>Residence</b>						
Urban	96.5	89.7	92.0	40.4	32.9	6,309
Rural	94.7	78.1	80.7	35.2	22.2	7,197
<b>Province</b>						
Central	97.1	81.4	92.0	32.0	23.5	1,135
Copperbelt	96.3	90.5	88.5	35.4	27.5	2,392
Eastern	97.7	80.4	78.4	42.0	28.1	1,704
Luapula	91.3	76.0	81.3	32.3	18.9	851
Lusaka	96.1	89.9	94.3	45.3	37.9	2,831
Muchinga	95.3	80.1	75.4	35.5	19.5	677
Northern	93.6	81.7	81.0	35.8	25.2	926
North Western	94.1	82.9	86.6	32.3	22.9	556
Southern	93.1	77.0	80.8	35.7	21.6	1,768
Western	97.9	76.4	87.5	32.1	23.9	667
<b>Education</b>						
No education	93.3	68.7	66.7	40.3	18.3	498
Primary	94.3	75.4	78.7	36.7	21.9	5,322
Secondary	96.2	88.9	91.4	37.4	30.0	6,628
More than secondary	98.6	97.4	98.3	42.3	40.2	1,058
<b>Wealth quintile</b>						
Lowest	94.7	74.7	75.4	35.9	20.2	2,023
Second	94.8	77.1	80.7	35.8	22.5	2,432
Middle	94.5	80.4	83.3	33.3	21.6	2,538
Fourth	96.1	87.7	89.6	37.2	29.2	3,114
Highest	96.8	91.8	94.8	43.4	37.0	3,399
Total 15-49	95.5	83.5	86.0	37.6	27.2	13,506
50-59	97.5	84.2	86.3	41.4	31.4	1,208
Total 15-59	95.7	83.6	86.0	37.9	27.5	14,715

Ninety-five percent of women and 96 percent of men age 15-49 said that they would be willing to care for a relative with AIDS in their home, 79 percent of women and 84 percent of men indicated that they would buy vegetables from a shopkeeper with HIV, and 85 percent of women and 86 percent of men agreed that a female teacher infected with HIV should be allowed to continue teaching. Only 29 percent of women and 38 percent of men said that they would not want to keep secret that a family member was infected with HIV.

Overall, only 19 percent of women and 27 percent of men age 15-49 expressed accepting attitudes with regard to all four indicators (i.e., they would care for a family member with AIDS in their own home, they would buy fresh vegetables from a shopkeeper with HIV, they would allow an HIV-positive female teacher to continue teaching, and they would not want to keep the HIV-positive status of a family member a secret). This represents a decrease since 2007, when 26 percent of women and 33 percent of men expressed accepting attitudes. This lower level of acceptance is of concern because stigma prevents or

delays people from getting tested for HIV, and, among those living with HIV, stigma prevents them from seeking care and treatment services.

Accepting attitudes toward those living with HIV/AIDS are lowest among respondents age 15-19 (16 percent of women and 21 percent of men) and are more common among respondents in urban areas (22 percent of women and 33 percent of men) than those living in rural areas (16 percent of women and 22 percent of men). Women in Luapula and Northern (9 percent each) and men in Luapula (19 percent) are least likely to express accepting attitudes on all four indicators, and women and men in Lusaka (28 percent and 38 percent, respectively) are most likely to do so. The percentage of both women and men who express accepting attitudes on all four indicators increases with increasing education and, generally, increasing wealth. For example, women and men with more than a secondary education (31 percent and 40 percent, respectively) are much more likely to express accepting attitudes than women and men with no education (11 percent and 18 percent, respectively).

### **13.6 ATTITUDES TOWARD NEGOTIATING SAFER SEXUAL RELATIONS WITH HUSBANDS**

Knowledge about HIV transmission and ways to prevent it is of little use if people feel powerless to negotiate safer sex practices with their partners. The high levels of sexual transmission of HIV make negotiating for safer sex indispensable, especially in marital unions in which women's status is compromised by societal expectations, thereby increasing their vulnerability to HIV transmission. In the 2013-14 ZDHS, women and men were asked if they thought that a wife is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women or in asking that he use condoms if she knows that he has a sexually transmitted infection.

Table 13.7 shows that 65 percent of women and 72 percent of men age 15-49 believe that a wife is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women. In addition, 82 percent of women and 88 percent of men believe that a woman has a right to ask her husband to use a condom if she knows that he has an STI. Almost nine in ten women (88 percent) and more than nine in ten men (92 percent) agree with both statements regarding safer sexual relations with husbands.

Women and men in the 15-19 age group (82 percent and 87 percent, respectively), those who have never been married and never had sex (79 percent and 85 percent, respectively), and those living in rural areas (86 percent and 89 percent, respectively) are least likely to agree with both statements regarding safer sexual relations. The percentage of respondents who agree with both statements ranges from 77 percent of women in Luapula and 82 percent of men in Central to 96 percent of women in Southern and 97 percent of men in Copperbelt and Western. Women and men with more than a secondary education (96 percent and 98 percent, respectively) and those in the highest wealth quintile (90 percent and 96 percent, respectively) are most likely to agree with both statements.

Programme planners and implementers focusing on HIV/AIDS and sexually transmitted infections should take advantage of the relatively high level of acceptance among all respondents of women as negotiators of safer sex with their husbands. This high degree of acceptance affords an opportunity to expand and further strengthen messages and interventions that promote preventive practices (e.g., use of male and female condoms) and empower women to take ownership of their sexual health.



Table 13.7 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), by background characteristics, Zambia 2013-14

Background characteristic	Women				Men			
	Woman is justified in:			Number of women	Woman is justified in:			Number of men
	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Refusing sexual intercourse or asking that they use a condom		Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Refusing sexual intercourse or asking that they use a condom	
<b>Age</b>								
15-24	64.3	78.5	85.0	6,631	69.1	85.2	89.2	5,672
15-19	62.7	74.2	81.5	3,625	65.8	82.2	86.5	3,337
20-24	66.3	83.7	89.2	3,006	73.8	89.4	93.2	2,335
25-29	67.6	83.9	90.7	2,813	71.2	90.0	92.9	1,944
30-39	64.8	84.0	89.3	4,484	73.8	90.5	93.9	3,591
40-49	63.9	83.4	89.2	2,482	74.9	90.7	93.5	2,354
<b>Marital status</b>								
Never married	66.5	77.2	83.9	4,572	70.3	86.1	89.8	5,985
Ever had sex	68.6	83.4	88.7	2,370	72.4	88.7	92.3	3,835
Never had sex	64.2	70.4	78.7	2,203	66.6	81.4	85.3	2,150
Married/living together	64.4	83.2	89.2	9,859	72.8	90.0	93.4	7,035
Divorced/separated/widowed	64.3	84.9	89.3	1,980	71.7	88.9	91.8	542
<b>Residence</b>								
Urban	67.1	84.3	89.3	7,585	78.6	92.2	94.4	6,326
Rural	63.1	79.5	86.4	8,826	65.6	84.8	89.4	7,235
<b>Province</b>								
Central	55.2	82.4	87.6	1,467	62.2	78.5	82.4	1,153
Copperbelt	56.4	76.5	83.7	2,836	83.2	94.1	96.9	2,395
Eastern	66.2	76.2	86.7	1,930	69.2	82.8	88.6	1,710
Luapula	52.9	71.7	76.9	1,143	66.5	79.2	86.5	855
Lusaka	73.2	86.0	90.3	3,266	80.2	91.2	93.0	2,844
Muchinga	72.1	76.8	87.0	868	68.5	81.1	86.1	680
Northern	65.3	75.9	83.0	1,200	67.9	85.0	89.4	929
North Western	72.3	88.2	91.3	713	74.3	90.9	93.9	557
Southern	64.1	92.6	95.5	2,007	55.4	92.6	94.9	1,771
Western	77.8	88.4	94.0	980	72.2	94.4	97.3	668
<b>Education</b>								
No education	60.4	74.3	82.6	1,375	64.7	79.7	87.8	500
Primary	61.7	79.7	86.4	7,685	65.0	84.2	88.6	5,365
Secondary	68.0	84.3	89.4	6,521	75.1	90.7	93.6	6,638
More than secondary	79.1	92.4	96.1	830	86.9	96.8	98.1	1,058
<b>Wealth quintile</b>								
Lowest	61.7	75.1	83.3	2,859	65.4	82.6	87.6	2,038
Second	63.1	79.2	85.4	2,861	65.9	84.3	89.2	2,448
Middle	62.8	83.6	89.5	3,077	66.0	85.9	90.2	2,547
Fourth	65.5	83.8	89.3	3,510	73.8	90.8	93.2	3,124
Highest	69.6	84.8	89.9	4,103	81.8	93.8	95.8	3,405
Total 15-49	64.9	81.7	87.8	16,411	71.6	88.2	91.7	13,561
Men 50-59	na	na	na	na	78.0	91.5	94.3	1,212
Total men 15-59	na	na	na	na	72.2	88.5	91.9	14,773

na = Not applicable

## 13.7 ATTITUDES TOWARD CONDOM EDUCATION FOR YOUNG PEOPLE

Condom use is one of the main strategies for combating the spread of HIV. However, educating people about condoms is sometimes controversial, with some believing that it promotes extramarital relations among married people and early sexual experimentation among those who are not married. To gauge attitudes toward condom education, respondents were asked whether they thought that children age 12-14 should be taught about using a condom to avoid getting AIDS. Results are tabulated for respondents age 18-49 given that the focus is on adults' opinions.

Table 13.8 shows that 51 percent of women and 65 percent of men age 18-49 support teaching children age 12-14 about condoms. Support for educating children about condom use is lowest among

respondents age 30-49 (50 percent of women and 63-64 percent of men). Among men, support is lower in rural than urban areas (64 percent versus 67 percent). Women in North Western (74 percent) and men in Southern (82 percent) are most likely to support education of children on condom use, while support is lowest among women in Central (44 percent) and men in Luapula (48 percent). Support for education about condom use among youth increases with increasing education among both women and men, and support generally increases with increasing wealth among men.

**Table 13.8 Adult support of education about condom use to prevent AIDS**

Percentage of women and men age 18-49 who agree that children age 12-14 should be taught about using a condom to avoid AIDS, by background characteristics, Zambia 2013-14

Background characteristic	Women		Men	
	Percentage who agree	Number	Percentage who agree	Number
<b>Age</b>				
18-24	52.7	4,484	68.0	3,682
18-19	52.0	1,477	66.3	1,348
20-24	53.0	3,006	69.0	2,335
25-29	51.5	2,813	66.3	1,944
30-39	49.7	4,484	63.9	3,591
40-49	49.9	2,482	62.8	2,354
<b>Marital status</b>				
Never married	54.9	2,585	68.3	3,999
Married/living together	49.7	9,715	63.8	7,030
Divorced/separated/widowed	52.8	1,964	64.9	542
<b>Residence</b>				
Urban	51.2	6,569	67.1	5,464
Rural	50.9	7,694	63.9	6,108
<b>Province</b>				
Central	44.2	1,259	62.7	959
Copperbelt	46.3	2,416	68.1	2,016
Eastern	46.3	1,681	59.4	1,472
Luapula	53.5	1,022	48.4	746
Lusaka	53.4	2,860	66.3	2,500
Muchinga	44.8	750	61.3	574
Northern	49.4	1,054	50.5	800
North Western	74.4	621	60.7	462
Southern	50.2	1,745	81.7	1,459
Western	65.3	855	80.8	583
<b>Education</b>				
No education	47.5	1,335	58.0	469
Primary	49.7	6,762	63.4	4,373
Secondary	52.6	5,337	66.3	5,672
More than secondary	58.1	829	72.2	1,058
<b>Wealth quintile</b>				
Lowest	51.4	2,552	61.4	1,795
Second	49.9	2,497	61.0	2,084
Middle	52.0	2,662	68.0	2,100
Fourth	50.8	3,052	66.1	2,664
Highest	51.1	3,500	68.4	2,928
Total 18-49	51.0	14,263	65.4	11,572
Men 50-59	na	na	59.8	1,212
Total men 18-59	na	na	64.9	12,783

na = Not applicable

## 13.8 HIGHER-RISK SEX

### 13.8.1 Multiple Sexual Partners

Given that most HIV infections in Zambia are contracted through heterosexual contact, information on sexual behaviour is important in designing and monitoring intervention programmes to control the spread of the pandemic. The 2013-14 ZDHS included questions on respondents' sexual partners during their lifetimes and over the 12 months preceding the survey. Men were also asked whether they paid for sex during the 12 months preceding the interview. In addition, information was collected on women's and men's use of condoms during their most recent sexual intercourse. These questions are sensitive, and it is recognised that some respondents may have been reluctant to provide information on

recent sexual behaviour. Potentially risky sexual activities relate to men and women having multiple sexual partners and failing to use condoms, particularly if they have more than one sexual partner.

Tables 13.9.1 and 13.9.2 present information collected from women and men who had ever had intercourse on the number of sexual partners they had during the 12 months before the survey and over their lifetime and, among those reporting more than one sexual partner in the past 12 months, whether they used a condom during their most recent intercourse. Women age 15-49 are much less likely than their male counterparts to have multiple sexual partners (2 percent versus 16 percent).

**Table 13.9.1 Multiple sexual partners: Women**

Among all women age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during their lifetime for women who ever had sexual intercourse, by background characteristics, Zambia 2013-14

Background characteristic	All women		Among women who had 2+ partners in the past 12 months:		Among women who ever had sexual intercourse <sup>1</sup> :	
	Percentage who had 2+ partners in the past 12 months	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Mean number of sexual partners in lifetime	Number of women
<b>Age</b>						
15-24	1.7	6,631	34.0	109	1.8	4,489
15-19	1.5	3,625	33.0	56	1.6	1,779
20-24	1.8	3,006	35.0	54	1.9	2,710
25-29	1.8	2,813	(33.2)	52	2.0	2,755
30-39	1.9	4,484	27.3	86	2.2	4,450
40-49	1.2	2,482	*	29	2.2	2,463
<b>Marital status</b>						
Never married	2.3	4,572	43.2	104	1.9	2,360
Married/living together	1.2	9,859	6.5	114	1.9	9,834
Divorced/separated/widowed	2.9	1,980	51.5	57	2.7	1,962
<b>Residence</b>						
Urban	2.2	7,585	34.7	170	2.2	6,212
Rural	1.2	8,826	21.8	106	1.9	7,945
<b>Province</b>						
Central	1.7	1,467	*	25	2.0	1,272
Copperbelt	3.0	2,836	(28.4)	86	2.0	2,251
Eastern	0.9	1,930	(22.9)	18	1.7	1,721
Luapula	1.9	1,143	(16.4)	21	2.0	1,026
Lusaka	1.4	3,266	*	46	2.1	2,695
Muchinga	0.9	868	*	7	1.6	737
Northern	1.1	1,200	*	13	1.6	1,056
North Western	1.1	713	*	8	2.4	653
Southern	2.0	2,007	(26.2)	40	2.2	1,819
Western	1.2	980	*	12	2.6	925
<b>Education</b>						
No education	0.8	1,375	*	10	1.9	1,340
Primary	1.7	7,685	30.1	134	2.0	7,007
Secondary	1.8	6,521	33.7	115	2.1	5,076
More than secondary	1.9	830	*	16	2.2	734
<b>Wealth quintile</b>						
Lowest	1.0	2,859	(14.8)	30	2.0	2,634
Second	1.5	2,861	(21.8)	42	2.0	2,610
Middle	1.9	3,077	30.1	60	2.0	2,765
Fourth	2.1	3,510	38.5	75	2.2	3,031
Highest	1.7	4,103	31.0	69	2.0	3,117
Total 15-49	1.7	16,411	29.7	276	2.0	14,157

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Means are calculated excluding respondents who gave non-numeric responses.

Table 13.9.2 Multiple sexual partners: Men

Among all men age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during their lifetime for men who ever had sexual intercourse, by background characteristics, Zambia 2013-14

Background characteristic	All men		Among men who had 2+ partners in the past 12 months:		Among men who ever had sexual intercourse <sup>1</sup> :	
	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Mean number of sexual partners in lifetime	Number of men
<b>Age</b>						
15-24	10.6	5,672	40.2	602	3.8	3,583
15-19	7.5	3,337	37.7	250	3.1	1,583
20-24	15.1	2,335	41.9	353	4.3	2,000
25-29	20.6	1,944	33.7	400	5.9	1,881
30-39	20.0	3,591	25.6	719	6.7	3,531
40-49	17.1	2,354	13.6	402	7.8	2,325
<b>Marital status</b>						
Never married	10.7	5,985	47.8	642	4.1	3,807
Married/living together	19.7	7,035	19.6	1,389	6.6	6,986
Divorced/separated/widowed	17.1	542	38.1	93	9.6	526
<b>Type of union</b>						
In polygynous union	96.0	488	10.4	469	9.8	487
In non-polygynous union	14.1	6,547	24.4	920	6.3	6,499
Not currently in union	11.3	6,527	46.6	735	4.8	4,334
<b>Residence</b>						
Urban	12.2	6,326	38.4	775	5.7	5,058
Rural	18.6	7,235	23.6	1,349	6.0	6,262
<b>Province</b>						
Central	14.1	1,153	28.8	163	6.8	963
Copperbelt	10.1	2,395	31.8	242	4.9	1,874
Eastern	21.0	1,710	28.7	359	5.1	1,513
Luapula	11.7	855	15.2	100	8.2	782
Lusaka	11.7	2,844	43.0	333	5.9	2,238
Muchinga	13.5	680	20.4	92	4.2	526
Northern	15.4	929	15.2	143	4.8	802
North Western	12.3	557	22.2	69	6.4	493
Southern	25.0	1,771	23.2	443	6.6	1,510
Western	26.8	668	39.8	179	7.3	619
<b>Education</b>						
No education	18.7	500	21.0	93	5.6	465
Primary	17.0	5,365	25.3	914	6.2	4,535
Secondary	14.5	6,638	30.1	962	5.7	5,338
More than secondary	14.5	1,058	48.5	153	5.4	983
<b>Wealth quintile</b>						
Lowest	17.1	2,038	25.0	349	5.8	1,819
Second	18.4	2,448	23.9	449	6.4	2,143
Middle	17.6	2,547	21.8	448	6.0	2,183
Fourth	15.9	3,124	32.9	496	6.0	2,565
Highest	11.2	3,405	42.0	381	5.3	2,610
Total 15-49	15.7	13,561	29.0	2,123	5.9	11,320
50-59	15.5	1,212	9.1	188	8.6	1,187
Total 15-59	15.6	14,773	27.4	2,311	6.1	12,507

<sup>1</sup> Means are calculated excluding respondents who gave non-numeric responses.

There are no major variations by background characteristics among women. The percentage of men with two or more partners is highest among those age 25-29 (21 percent), those who are married (20 percent), those in polygynous unions (96 percent), those in rural areas (19 percent), and those living in Western (27 percent). Men with no education (19 percent) and those in the lowest three wealth quintiles (17-18 percent) are most likely to report that they had multiple sexual partners in the past 12 months.

Thirty percent of women and 29 percent of men age 15-49 who had multiple partners in the past 12 months used a condom during their last sexual intercourse. Among women, condom use at last intercourse is most common among those who are divorced, separated, or widowed (52 percent) and least common among those who are married or living together with a partner (7 percent). Urban women with

multiple partners are much more likely to use a condom than their rural counterparts (35 percent versus 22 percent).

Among men reporting multiple partners in the past 12 months, use of condoms is most common in the 20-24 age group (42 percent) and least common in the oldest age group (age 40-49) (14 percent). Never-married men (48 percent), men in urban areas (38 percent), and men living in Lusaka (43 percent) are more likely than men in other groups to report using a condom during their last sexual intercourse. Condom use increases substantially with increasing education and wealth. For example, 49 percent of men with more than a secondary education reported condom use during their last sexual intercourse, compared with 21 percent of men with no education.

Women age 15-49 reported an average of 2.0 lifetime sexual partners, compared with 5.9 lifetime partners among their male counterparts. Among men, there are pronounced differences in mean number of lifetime partners by background characteristics. The mean number of lifetime sexual partners is highest among men age 40-49 (7.8); those who are divorced, separated, or widowed (9.6); those living in Luapula (8.2); those with a primary education (6.2); and those in the second wealth quintile (6.4).

### **13.8.2 Point Prevalence and Cumulative Prevalence of Concurrent Sexual Partners**

The point prevalence and cumulative prevalence of concurrent sexual partners are new concepts that were incorporated for the first time in the 2013-14 ZDHS. The point prevalence of concurrent sexual partners is defined as the percentage of respondents who had two (or more) sexual partners concurrently at the point in time six months before the survey. The cumulative prevalence of concurrent sexual partners is defined as the percentage of respondents who had two (or more) sexual partners concurrently at any time during the 12 months preceding the survey.

Table 13.10 shows the point prevalence and cumulative prevalence of concurrent sexual partners among all respondents during the 12 months before the survey. It also shows the percentage of respondents who had concurrent sexual partners among those who had multiple sexual partners during the 12 months before the survey.

Among women age 15-49, both the point prevalence and the cumulative prevalence are 1 percent or less. Among men in the same age group, the point prevalence is 7 percent and the cumulative prevalence is 13 percent.

Among female respondents, point prevalence and cumulative prevalence vary only marginally by background characteristics. Among men, there are notable variations in both the point and the cumulative prevalence. Point prevalence is highest among men age 40-49 (12 percent), men who are currently married or living together with a partner (12 percent), men in polygynous unions (88 percent), and men living in rural areas (9 percent). Similar patterns are observed for cumulative prevalence.

Table 13.10 also shows that, among respondents age 15-49 who had multiple partners during the 12 months preceding the survey, 60 percent of women and 82 percent of men had concurrent sexual partners.

Table 13.10 Point prevalence and cumulative prevalence of concurrent sexual partners

Percentage of all women and men age 15-49 who had concurrent sexual partners six months before the survey (point prevalence<sup>1</sup>), and percentage of all women and all men age 15-49 who had any concurrent sexual partners during the 12 months before the survey (cumulative prevalence<sup>2</sup>), and among women and men age 15-49 who had multiple sexual partners during the 12 months before the survey, percentage who had concurrent sexual partners, by background characteristics, Zambia 2013-14

Background characteristic	Among all respondents:			Among all respondents who had multiple partners during the 12 months before the survey:	
	Point prevalence of concurrent sexual partners <sup>1</sup>	Cumulative prevalence of concurrent sexual partners <sup>2</sup>	Number of respondents	Percentage who had concurrent sexual partners <sup>2</sup>	Number of respondents
WOMEN					
<b>Age</b>					
15-24	0.3	0.8	6,631	46.2	109
15-19	0.3	0.7	3,625	44.4	56
20-24	0.3	0.9	3,006	48.0	54
25-29	0.4	1.3	2,813	(69.1)	52
30-39	0.6	1.4	4,484	72.6	86
40-49	0.3	0.7	2,482	*	29
<b>Marital status</b>					
Never married	0.5	1.1	4,572	49.3	104
Married/living together	0.4	0.9	9,859	77.3	114
Divorced/separated/widowed	0.4	1.3	1,980	45.6	57
<b>Residence</b>					
Urban	0.6	1.4	7,585	63.3	170
Rural	0.2	0.7	8,826	55.0	106
Total 15-49	0.4	1.0	16,411	60.1	276
MEN					
<b>Age</b>					
15-24	2.1	6.3	5,672	59.3	602
15-19	0.9	3.6	3,337	48.5	250
20-24	3.9	10.1	2,335	67.0	353
25-29	7.8	16.3	1,944	79.4	400
30-39	11.3	18.7	3,591	93.5	719
40-49	12.4	16.5	2,354	96.5	402
<b>Marital status</b>					
Never married	1.9	5.9	5,985	55.3	642
Married/living together	11.7	18.8	7,035	95.1	1,389
Divorced/separated/widowed	5.3	10.9	542	63.8	93
<b>Type of union</b>					
In polygynous union	88.4	95.1	488	99.1	469
In non-polygynous union	6.0	13.1	6,547	93.1	920
Not currently in union	2.2	6.3	6,527	56.3	735
<b>Residence</b>					
Urban	4.8	9.6	6,326	78.1	775
Rural	9.2	15.6	7,235	83.8	1,349
Total 15-49	7.1	12.8	13,561	81.7	2,123
50-59	13.0	15.0	1,212	96.5	188
Total 15-59	7.6	13.0	14,773	82.9	2,311

Note: Two sexual partners are considered to be concurrent if the date of the most recent sexual intercourse with the earlier partner is after the date of the first sexual intercourse with the later partner. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> The percentage of respondents who had two (or more) sexual partners that were concurrent at the point in time six months before the survey

<sup>2</sup> The percentage of respondents who had two (or more) sexual partners that were concurrent any time during the 12 months preceding the survey

## 13.9 PAID SEX

The act of paying for sex introduces an uneven negotiating ground for safer sexual intercourse. Condom use is an important indicator in efforts to ascertain the level of risk associated with sexual intercourse involving payments. Table 13.11 shows the percentage of men age 15-49 who paid for sexual intercourse ever and in the past 12 months by background characteristics.

Table 13.11 Payment for sexual intercourse and condom use at last paid sexual intercourse

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, and among them, the percentage reporting that a condom was used the last time they paid for sexual intercourse, by background characteristics, Zambia 2013-14

Background characteristic	Among all men:			Among men who paid for sex in the past 12 months:	
	Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men	Percentage reporting condom use at last paid sexual intercourse	Number of men
<b>Age</b>					
15-24	8.2	4.6	5,672	53.9	261
15-19	4.8	3.0	3,337	47.6	101
20-24	12.9	6.9	2,335	57.9	160
25-29	16.2	6.1	1,944	64.9	118
30-39	16.9	5.0	3,591	65.3	178
40-49	15.2	2.9	2,354	64.8	68
<b>Marital status</b>					
Never married	8.6	4.7	5,985	55.0	278
Married/living together	15.2	3.8	7,035	65.3	270
Divorced/separated/widowed	28.4	14.2	542	62.7	77
<b>Residence</b>					
Urban	13.8	4.5	6,326	67.7	288
Rural	12.0	4.7	7,235	54.1	337
<b>Province</b>					
Central	13.9	7.4	1,153	60.7	85
Copperbelt	12.9	3.7	2,395	54.4	88
Eastern	11.6	3.2	1,710	65.8	56
Luapula	18.5	6.3	855	35.5	54
Lusaka	14.8	4.6	2,844	73.5	131
Muchinga	6.6	2.8	680	(52.3)	19
Northern	7.2	2.6	929	(61.0)	25
North Western	17.3	7.7	557	51.0	43
Southern	10.7	4.0	1,771	75.5	71
Western	14.4	8.0	668	47.5	53
<b>Education</b>					
No education	12.6	3.3	500	*	16
Primary	13.8	5.0	5,365	55.2	269
Secondary	12.2	4.7	6,638	64.8	313
More than secondary	12.2	2.6	1,058	(58.3)	27
<b>Wealth quintile</b>					
Lowest	10.9	4.1	2,038	45.8	83
Second	12.8	5.4	2,448	55.0	133
Middle	13.6	5.7	2,547	59.1	146
Fourth	15.2	4.7	3,124	68.8	148
Highest	11.3	3.4	3,405	68.0	115
Total 15-49	12.8	4.6	13,561	60.4	625
Men 50-59	14.2	2.4	1,212	(39.5)	30
Total men 15-59	12.9	4.4	14,773	59.5	655

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

Thirteen percent of men age 15-49 and 14 percent of those age 50-59 reported ever paying for sex; 5 percent and 2 percent, respectively, reported paying for sex during the 12 months preceding the survey. Men who are divorced, separated, or widowed (28 percent); those in urban areas (14 percent); and those living in Luapula (19 percent) are more likely than other men to have ever paid for sexual intercourse.

Among men who paid for sex in the past 12 months, 60 percent reported using a condom during their last paid sexual intercourse. This percentage is lowest among young men age 15-19 (48 percent), never-married men (55 percent), men living in rural areas (54 percent), men residing in Luapula (36 percent), and men in the lowest wealth quintile (46 percent).

### 13.10 COVERAGE OF HIV TESTING SERVICES

Knowledge of HIV status is important for helping individuals decide to adopt safer sex practices to reduce their risk of becoming infected or transmitting HIV. For those who are HIV positive, knowledge of their HIV status allows them to take measures to protect their sexual partners and to access treatment

services. To assess awareness and coverage of HIV testing services, respondents were asked whether they knew where to get an HIV test and whether they had ever been tested for HIV. If they said they had been tested for HIV, respondents were asked whether they had received the results of their last test. Tables 13.12.1 and 13.12.2 present information on prior testing among women and men, respectively.

**Table 13.12.1 Coverage of prior HIV testing: Women**

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women age 15-49 by testing status and by whether they received the results of the last test, the percentage of women ever tested, and the percentage of women age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Zambia 2013-14

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
		Ever tested and received results	Ever tested, did not receive results	Never tested <sup>1</sup>				
<b>Age</b>								
15-24	93.7	65.2	1.7	33.1	100.0	66.9	42.7	6,631
15-19	89.8	47.5	1.5	51.1	100.0	48.9	32.6	3,625
20-24	98.4	86.7	1.9	11.4	100.0	88.6	54.8	3,006
25-29	98.7	90.8	2.5	6.7	100.0	93.3	57.1	2,813
30-39	98.6	89.1	2.0	8.9	100.0	91.1	49.5	4,484
40-49	97.6	79.9	1.5	18.6	100.0	81.4	37.5	2,482
<b>Marital status</b>								
Never married	91.8	52.9	1.5	45.6	100.0	54.4	33.9	4,572
Ever had sex	96.7	73.2	2.2	24.6	100.0	75.4	47.6	2,370
Never had sex	86.4	31.2	0.6	68.2	100.0	31.8	19.3	2,203
Married/living together	98.4	88.6	2.0	9.4	100.0	90.6	52.0	9,859
Divorced/separated/widowed	98.0	86.1	2.1	11.8	100.0	88.2	45.9	1,980
<b>Residence</b>								
Urban	97.2	80.1	1.2	18.7	100.0	81.3	47.9	7,585
Rural	95.8	76.8	2.4	20.7	100.0	79.3	44.8	8,826
<b>Province</b>								
Central	96.0	74.4	2.1	23.6	100.0	76.4	42.9	1,467
Copperbelt	96.8	76.5	2.0	21.5	100.0	78.5	46.8	2,836
Eastern	96.1	80.0	2.3	17.7	100.0	82.3	45.7	1,930
Luapula	91.6	76.7	1.7	21.6	100.0	78.4	38.1	1,143
Lusaka	96.8	81.3	0.8	17.9	100.0	82.1	46.8	3,266
Muchinga	94.0	71.8	2.6	25.6	100.0	74.4	42.0	868
Northern	97.0	70.1	2.9	27.0	100.0	73.0	41.2	1,200
North Western	95.9	79.1	1.1	19.7	100.0	80.3	49.3	713
Southern	98.9	83.2	1.8	15.0	100.0	85.0	52.0	2,007
Western	98.1	83.7	3.1	13.2	100.0	86.8	54.4	980
<b>Education</b>								
No education	93.1	74.6	1.9	23.5	100.0	76.5	41.2	1,375
Primary	95.9	78.6	2.6	18.8	100.0	81.2	44.8	7,685
Secondary	97.5	77.2	1.2	21.6	100.0	78.4	47.9	6,521
More than secondary	99.9	90.7	0.9	8.4	100.0	91.6	54.5	830
<b>Wealth quintile</b>								
Lowest	94.5	74.3	3.1	22.6	100.0	77.4	41.4	2,859
Second	95.7	78.6	1.9	19.5	100.0	80.5	47.6	2,861
Middle	97.2	80.1	2.3	17.6	100.0	82.4	46.9	3,077
Fourth	96.6	81.0	1.6	17.4	100.0	82.6	49.9	3,510
Highest	97.7	77.4	1.0	21.6	100.0	78.4	44.9	4,103
Total 15-49	96.5	78.3	1.9	19.8	100.0	80.2	46.2	16,411

<sup>1</sup> Includes "don't know/missing"

Almost all women and men age 15-49 (97 percent and 96 percent, respectively) know a place where they can get an HIV test. Respondents age 15-19 (90 percent of women and 89 percent of men), those who have not yet initiated sexual activity (86 percent of women and 87 percent of men), and women in Luapula and men in Central (92 percent each) are less likely than other subgroups to know where to get an HIV test. Awareness of a place to obtain an HIV test increases linearly with increasing education among women, from 93 percent of those with no education to 100 percent of those with more than a secondary education. The same pattern is observed for men, although the relationship is not linear. Respondents in the highest wealth quintile are more likely than those in the lowest quintiles to know where to get an HIV test.



Table 13.12.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men age 15-49 by testing status and by whether they received the results of the last test, the percentage of men ever tested, and the percentage of men age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Zambia 2013-14

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
		Ever tested and received results	Ever tested, did not receive results	Never tested <sup>1</sup>				
<b>Age</b>								
15-24	92.3	42.3	3.4	54.3	100.0	45.7	28.6	5,672
15-19	89.1	28.5	3.2	68.3	100.0	31.7	19.4	3,337
20-24	96.9	61.9	3.8	34.3	100.0	65.7	41.7	2,335
25-29	98.0	71.4	5.0	23.5	100.0	76.5	46.6	1,944
30-39	98.8	73.8	4.8	21.4	100.0	78.6	44.9	3,591
40-49	98.4	69.6	4.2	26.2	100.0	73.8	37.9	2,354
<b>Marital status</b>								
Never married	92.7	41.7	3.4	54.9	100.0	45.1	27.4	5,985
Ever had sex	95.7	51.1	3.8	45.1	100.0	54.9	33.8	3,835
Never had sex	87.3	25.0	2.5	72.4	100.0	27.6	16.2	2,150
Married/living together	98.6	74.3	4.7	21.0	100.0	79.0	45.3	7,035
Divorced/separated/widowed	96.3	64.9	5.3	29.8	100.0	70.2	37.7	542
<b>Residence</b>								
Urban	96.7	61.0	3.9	35.1	100.0	64.9	38.4	6,326
Rural	95.1	58.2	4.4	37.4	100.0	62.6	35.9	7,235
<b>Province</b>								
Central	92.2	51.2	4.5	44.3	100.0	55.7	30.1	1,153
Copperbelt	95.7	60.8	3.5	35.7	100.0	64.3	40.5	2,395
Eastern	96.0	62.6	6.2	31.2	100.0	68.8	36.7	1,710
Luapula	96.3	62.2	3.6	34.2	100.0	65.8	33.0	855
Lusaka	97.4	56.2	4.5	39.3	100.0	60.7	33.0	2,844
Muchinga	94.3	55.0	5.0	40.0	100.0	60.0	35.3	680
Northern	93.2	50.7	4.1	45.2	100.0	54.8	32.9	929
North Western	94.8	62.5	4.5	33.0	100.0	67.0	42.6	557
Southern	97.2	66.1	1.5	32.5	100.0	67.5	43.5	1,771
Western	98.4	69.6	5.9	24.4	100.0	75.6	46.8	668
<b>Education</b>								
No education	94.2	54.8	6.7	38.5	100.0	61.5	30.6	500
Primary	93.3	53.0	4.6	42.4	100.0	57.6	32.8	5,365
Secondary	97.4	61.8	3.9	34.3	100.0	65.7	39.1	6,638
More than secondary	99.9	80.5	2.6	16.9	100.0	83.1	49.4	1,058
<b>Wealth quintile</b>								
Lowest	94.0	57.3	5.5	37.2	100.0	62.8	34.8	2,038
Second	95.5	59.7	4.4	35.8	100.0	64.2	36.4	2,448
Middle	94.9	56.9	4.2	38.9	100.0	61.1	35.9	2,547
Fourth	96.0	58.5	3.9	37.6	100.0	62.4	38.1	3,124
Highest	97.9	63.7	3.4	32.9	100.0	67.1	38.9	3,405
Total 15-49	95.9	59.5	4.2	36.3	100.0	63.7	37.1	13,561
50-59	97.9	63.7	3.8	32.5	100.0	67.5	30.3	1,212
Total 15-59	96.0	59.9	4.1	36.0	100.0	64.0	36.5	14,773

<sup>1</sup> Includes "don't know/missing"

Table 13.12.1 shows that 80 percent of women age 15-49 have been tested for HIV. Only 2 percent of women who had been tested for HIV did not receive the test results. The percentage of women who have been tested for HIV is lowest among those age 15-19 (49 percent), those who have never been married and never had sex (32 percent), those with no education (77 percent), and those in the lowest wealth quintile (77 percent). By province, this percentage ranges from 73 percent in Northern to 87 percent in Western.

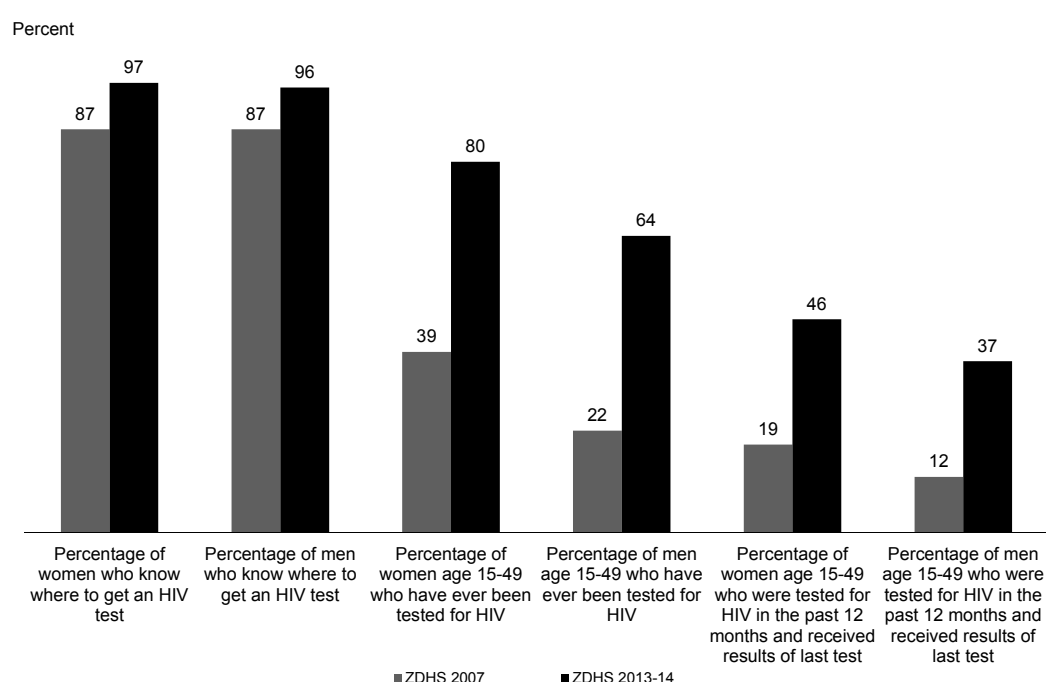
Sixty-four percent of men age 15-49 have been tested for HIV as shown in Table 13.12.2. A small proportion of men who had been tested for HIV did not receive the results (4 percent). Similar to women, the youngest men (age 15-19) (32 percent) and those who have never been married and never had sex (28 percent) are less likely than their counterparts to have been tested for HIV. By province, the percentage of men who have been tested for HIV ranges from 55 percent in Northern to 76 percent in Western. This

percentage is highest among men with more than a secondary education (83 percent) and those in the highest wealth quintile (67 percent).

Forty-six percent of women and 37 percent of men age 15-49 had been tested in the past 12 months and received the results of their last test.

Knowledge of a place to get tested for HIV and coverage of HIV testing have shown remarkable increases in the last six years (Figure 13.1). The 2007 ZDHS reported that only 39 percent of women and 22 percent of men age 15-49 had ever been tested for HIV, compared with 80 percent and 64 percent, respectively, in the 2013-14 ZDHS. Similarly, 19 percent of women and 12 percent of men in 2007 had been tested in the past 12 months and received the test results, compared with 46 percent of women and 37 percent of men in 2013-14.

**Figure 13.1 Trends in coverage of prior HIV testing**



### 13.11 HIV COUNSELLING AND TESTING DURING PREGNANCY

Table 13.13 presents information on HIV screening during pregnancy among women who gave birth in the two years preceding the survey. Prevention of mother-to-child transmission of HIV is one of the key interventions being implemented by the Ministry of Health and the Ministry of Community Development, Mother and Child Health. The findings show that 88 percent of women who gave birth in the two years preceding the survey received HIV counselling during antenatal care (ANC) visits (i.e., someone talked with them about all three of the following topics: babies getting the AIDS virus from their mother, preventing the virus, and getting tested for the virus). Almost all women (88 percent) who were tested for HIV received the test results and post-test counselling, and 3 percent received test results but did not receive counselling. Only 1 percent of women were tested for HIV during an antenatal care visit but did not receive their test results.

Table 13.13 Pregnant women counselled and tested for HIV

Among all women age 15-49 who gave birth in the two years preceding the survey, the percentage who received HIV pretest counselling, the percentage who received an HIV test during antenatal care for their most recent birth by whether they received their results and post-test counselling, and percentage who received an HIV test during ANC or labour for their most recent birth by whether they received their test results, according to background characteristics, Zambia 2013-14

Background characteristic	Percentage who received counselling on HIV during antenatal care <sup>1</sup>	Percentage who were tested for HIV during antenatal care and who:			Percentage who received counselling on HIV and an HIV test during ANC, and the results	Percentage who had an HIV test during ANC or labour and who: <sup>2</sup>		Number of women who gave birth in the past two years <sup>3</sup>
		Received results and:		Did not receive results		Received results	Did not receive results	
		Received post-test counselling	Did not receive post-test counselling					
<b>Age</b>								
15-24	87.5	87.7	3.2	1.7	83.9	91.6	1.8	1,981
15-19	85.3	85.3	4.5	1.8	81.1	90.6	2.1	675
20-24	88.6	88.9	2.5	1.6	85.3	92.2	1.6	1,307
25-29	89.5	88.5	2.4	1.0	85.8	91.8	1.2	1,257
30-39	89.2	87.9	2.4	1.3	85.9	90.6	1.4	1,548
40-49	85.0	82.5	2.9	1.4	79.6	85.4	1.4	288
<b>Marital status</b>								
Never married	87.0	86.9	4.9	2.6	83.2	92.7	2.6	534
Married/living together	88.6	88.2	2.5	1.1	85.2	91.3	1.3	4,121
Divorced/separated/widowed	88.1	83.5	2.5	2.3	82.4	86.1	2.5	419
<b>Residence</b>								
Urban	92.4	92.9	3.0	0.3	91.1	96.8	0.4	1,711
Rural	86.3	85.0	2.6	1.9	81.5	88.1	2.1	3,363
<b>Province</b>								
Central	82.1	80.5	2.4	1.9	76.3	83.7	2.1	512
Copperbelt	91.4	91.5	4.0	0.9	90.4	95.7	0.9	654
Eastern	89.2	89.7	4.4	0.6	87.3	94.8	0.9	641
Luapula	89.6	87.9	0.9	0.7	87.1	89.0	0.9	451
Lusaka	91.5	92.2	3.2	0.2	89.6	96.7	0.2	742
Muchinga	81.4	82.4	1.3	3.2	72.9	84.5	3.5	305
Northern	82.8	75.9	1.2	3.2	73.4	78.2	3.6	480
North Western	89.6	85.2	2.5	2.0	84.8	88.1	2.0	262
Southern	92.8	93.6	3.1	0.8	90.9	96.7	0.8	690
Western	86.3	88.2	2.0	2.5	82.2	90.5	2.7	338
<b>Education</b>								
No education	77.3	76.3	2.9	2.2	72.0	79.4	2.4	533
Primary	88.6	87.0	2.4	1.7	84.2	89.9	1.9	2,744
Secondary	91.3	92.0	3.0	0.7	89.3	95.7	0.7	1,606
More than secondary	90.9	92.1	5.2	0.0	89.3	98.7	0.0	191
<b>Wealth quintile</b>								
Lowest	83.1	82.2	1.9	2.7	77.4	84.6	2.9	1,247
Second	87.3	85.9	2.5	1.3	83.2	88.9	1.3	1,169
Middle	90.3	88.2	3.2	1.3	86.3	91.6	1.5	1,028
Fourth	92.0	91.4	3.4	0.6	89.9	96.0	0.8	899
Highest	91.9	94.5	3.1	0.2	91.2	98.2	0.2	730
Total 15-49	88.4	87.7	2.7	1.4	84.7	91.0	1.5	5,074

<sup>1</sup> In this context, "pretest counselling" means that someone talked with the respondent about all three of the following topics: (1) babies getting the AIDS virus from their mother, (2) preventing the virus, and (3) getting tested for the virus.

<sup>2</sup> Women are asked whether they received an HIV test during labour only if they were not tested for HIV during ANC.

<sup>3</sup> Denominator for percentages includes women who did not receive antenatal care for their last birth in the past two years.

Eighty-five percent of women who gave birth in the two years preceding the survey received pre- and post-test counselling on HIV, an HIV test during ANC, and the test results. The percentage of women who have been counselled and tested and have received the test results is higher in urban than rural areas (91 percent versus 82 percent). By province, this percentage is lowest in Muchinga and Northern (73 percent each) and highest in Southern (91 percent). In general, the percentage of women who have been counselled and tested and have received the test results increases with increasing education and wealth.

Ninety-one percent of women had an HIV test either during antenatal care or during labour for their most recent birth and received the test results. The percentage of women who were tested during ANC or labour and received the results is lowest among those who are divorced, separated, or widowed (86 percent); those living in rural areas (88 percent) and Northern (78 percent); those with no education (79 percent); and those in the lowest wealth quintile (85 percent).

## 13.12 DISCLOSURE OF HIV TEST RESULTS FROM ANC VISIT

Disclosure of HIV test results, particularly to partners, is encouraged and helps sexual partners decide to adopt safer sex practices. Individuals who know and disclose their HIV-positive status to family members, religious leaders, and friends can increase their chances of accessing treatment services and having a stronger support system.

Women who had a birth in the two years preceding the survey, were tested for HIV during ANC, and received their test results were asked whether they shared their results with anyone and, if so, with whom. Results are shown in Table 13.14. Ninety-seven percent of women who were tested during ANC and knew their test results disclosed them to someone: 69 percent to their husband or partner, 47 percent to a family member, 28 percent to a religious leader, and 33 percent to a friend.

There are no major variations by background characteristics.

Table 13.14 Disclosure of HIV test results from ANC HIV test

Among all women age 15-49 who gave birth in the two years preceding the survey, were tested for HIV during ANC, and received their results, the percentage who disclosed their HIV results to various individuals, and the percentage disclosing their results to anyone, by background characteristics, Zambia 2013-14

Background characteristic	Percentage disclosing results to:					Percentage disclosing HIV test results from ANC HIV test to anyone	Number of women receiving ANC HIV test result
	Husband/partner	Family member	Religious leader	Friend	Other		
<b>Age</b>							
15-24	64.6	51.7	32.1	37.7	22.2	97.2	1,800
15-19	59.7	52.6	35.6	40.6	25.5	96.8	606
20-24	67.0	51.3	30.3	36.2	20.5	97.4	1,194
25-29	71.2	46.5	27.4	31.4	21.3	98.4	1,144
30-39	72.9	41.5	24.5	29.5	19.0	96.6	1,398
40-49	72.0	38.1	24.2	28.2	17.6	94.7	246
<b>Marital status</b>							
Never married	55.3	61.4	32.1	40.4	23.0	93.7	490
Married/living together	71.9	43.6	27.8	32.3	20.5	98.1	3,737
Divorced/separated/widowed	60.0	57.9	27.2	31.6	20.2	92.6	361
<b>Residence</b>							
Urban	71.5	50.7	25.1	32.7	16.1	97.7	1,641
Rural	67.9	44.3	29.9	33.4	23.4	96.9	2,946
<b>Province</b>							
Central	84.2	45.7	11.1	25.0	7.8	97.0	424
Copperbelt	88.8	42.5	2.2	9.9	0.9	97.2	625
Eastern	13.8	54.8	84.0	73.3	65.7	97.4	603
Luapula	94.6	27.0	0.9	3.2	0.6	96.8	400
Lusaka	52.9	55.5	47.6	53.0	31.3	98.3	709
Muchinga	76.4	41.1	19.9	30.4	15.6	95.7	255
Northern	94.4	36.5	1.5	8.6	0.2	97.3	370
North Western	53.0	53.8	47.1	48.0	37.9	97.7	229
Southern	94.2	45.7	2.8	14.4	0.1	96.7	667
Western	42.7	58.3	65.8	67.5	53.9	96.4	305
<b>Education</b>							
No education	55.3	46.0	41.0	38.4	31.4	95.7	423
Primary	68.7	43.3	28.8	32.8	20.7	97.0	2,453
Secondary	71.3	52.0	25.9	33.2	19.5	97.5	1,526
More than secondary	89.6	46.8	9.4	24.9	7.1	99.5	186
<b>Wealth quintile</b>							
Lowest	61.4	47.7	37.9	39.2	31.3	96.6	1,049
Second	72.2	40.5	26.4	30.6	18.9	96.7	1,034
Middle	70.4	46.6	24.5	29.7	18.2	97.5	941
Fourth	66.0	50.5	29.2	35.8	19.9	97.4	852
Highest	78.4	49.1	20.2	29.1	12.3	98.1	713
Total 15-49	69.2	46.6	28.2	33.1	20.8	97.2	4,587

### 13.13 MALE CIRCUMCISION

Circumcision is a common practice in many parts of sub-Saharan Africa for traditional, health, and other reasons. Male circumcision has been associated with a lower risk of HIV transmission from women to men (Williams et al., 2006; WHO and UNAIDS, 2007).

To examine the practice of circumcision at the national level, men interviewed in the 2013-14 ZDHS were asked whether they had been circumcised and when they were circumcised. The results are presented in Table 13.15.

The data show that 22 percent of men age 15-49 and 18 percent of men age 50-59 are circumcised. There are some marked differences across background characteristics. The percentage of circumcised men is lowest in the 40-49 age group (17 percent) and highest in the 20-24 age group (28 percent). Men living in urban areas are more likely to be circumcised than those living in rural areas (29 percent versus 16 percent). By province, the percentage of men who are circumcised ranges from 6 percent in Eastern to 79 percent in North Western. With respect to religion, the percentage of circumcised men is 71 percent among Muslims, 23 percent among Protestants, and 18 percent among Catholics.

A comparison with the 2007 ZDHS findings shows that circumcision among men age 15-49 has increased over the last six years, from 13 percent to 22 percent. This remarkable increase might be attributable to the roll-out of the Voluntary Medical Male Circumcision initiative by the Ministry of Health and other partners.

**Table 13.15 Male circumcision**

Percentage of men age 15-49 who report having been circumcised, by background characteristics, Zambia 2013-14

Background characteristic	Percentage circumcised	Number of men
<b>Age</b>		
15-24	24.7	5,672
15-19	22.7	3,337
20-24	27.6	2,335
25-29	22.6	1,944
30-39	20.2	3,591
40-49	17.4	2,354
<b>Residence</b>		
Urban	29.1	6,326
Rural	15.7	7,235
<b>Province</b>		
Central	13.0	1,153
Copperbelt	32.3	2,395
Eastern	6.4	1,710
Luapula	21.9	855
Lusaka	23.3	2,844
Muchinga	8.9	680
Northern	8.5	929
North Western	78.6	557
Southern	11.1	1,771
Western	47.9	668
<b>Religion</b>		
Catholic	17.6	2,671
Protestant	22.5	10,599
Muslim	70.8	105
Other	25.2	136
Total 15-49	21.9	13,561
50-59	17.7	1,212
Total 15-59	21.6	14,773

Note: Total includes 50 men for whom information on religion is missing.

### 13.14 SELF-REPORTING OF SEXUALLY TRANSMITTED INFECTIONS

In the 2013-14 ZDHS, respondents who had ever had sex were asked whether they had a sexually transmitted infection or symptoms of an STI (a bad-smelling, abnormal discharge from the vagina/penis or a genital sore or ulcer) in the 12 months preceding the survey.

Table 13.16 shows the self-reported prevalence of STIs and/or STI symptoms among women and men age 15-49, by background characteristics. Men are slightly more likely than women to report having had an STI or STI symptoms in the past 12 months (6 percent versus 4 percent). Among women, there are only slight variations in the prevalence of STIs or STI symptoms by background characteristics. Among men, STI prevalence is highest among those who are divorced, separated, or widowed (12 percent) and those living in Western (13 percent).

Figure 13.2 shows that the majority of women and men who had an STI or STI symptoms sought advice or treatment from a clinic, hospital, private doctor, or other health professional (64 percent and 66 percent, respectively). Twenty-six percent of women and 17 percent of men did not seek any treatment when they had an STI or STI symptoms.

Table 13.16 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

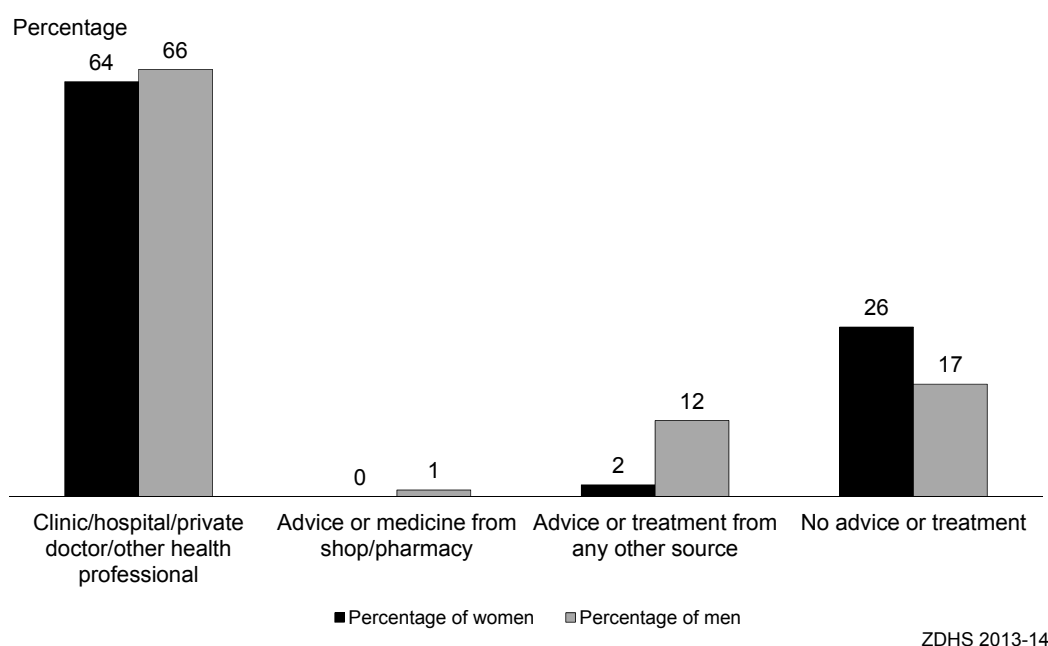
Among women and men age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Zambia 2013-14

Background characteristic	Women					Men				
	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
	STI	Bad-smelling/abnormal genital discharge	Genital sore or ulcer	STI/genital discharge/sore or ulcer	Number of women who ever had sexual intercourse	STI	Bad-smelling/abnormal discharge from penis	Genital sore or ulcer	STI/abnormal discharge from penis/sore or ulcer	Number of men who ever had sexual intercourse
<b>Age</b>										
15-24	2.0	2.1	3.0	4.5	4,489	4.0	3.1	3.3	5.8	3,593
15-19	1.4	2.3	2.5	4.1	1,776	1.9	1.7	2.4	3.8	1,588
20-24	2.4	2.0	3.3	4.8	2,713	5.6	4.1	4.0	7.3	2,005
25-29	2.4	2.3	3.1	4.5	2,760	5.2	3.7	4.7	7.0	1,897
30-39	2.2	2.4	2.7	4.4	4,464	4.1	3.6	3.9	6.3	3,569
40-49	1.6	1.8	2.4	3.4	2,477	2.4	2.0	2.2	3.9	2,351
<b>Marital status</b>										
Never married	1.7	2.6	2.9	4.3	2,370	3.8	3.1	3.3	5.5	3,835
Ever had sex	1.7	2.6	2.9	4.3	2,370	3.8	3.1	3.3	5.5	3,835
Married/living together	2.1	2.0	2.7	4.0	9,845	3.6	2.8	3.3	5.4	7,033
Divorced/separated/widowed	2.3	2.9	3.6	5.4	1,976	8.9	7.8	7.7	12.4	542
<b>Circumcised</b>										
Yes	na	na	na	na	na	3.8	3.4	2.2	5.4	2,508
No	na	na	na	na	na	3.9	3.1	3.9	5.9	8,893
<b>Residence</b>										
Urban	2.3	2.7	3.1	4.7	6,251	4.4	3.5	3.7	6.2	5,119
Rural	1.9	1.8	2.7	3.9	7,939	3.5	2.8	3.4	5.4	6,291
<b>Province</b>										
Central	1.4	2.4	3.0	4.4	1,273	4.8	4.1	4.7	6.3	969
Copperbelt	2.1	3.4	3.9	5.8	2,271	3.4	3.7	3.5	5.9	1,896
Eastern	2.6	2.0	3.2	4.5	1,715	3.6	3.6	3.9	5.7	1,519
Luapula	1.9	2.0	3.9	4.8	1,028	2.4	2.1	1.6	2.9	783
Lusaka	1.9	1.7	2.0	3.0	2,708	4.8	2.9	3.8	5.9	2,273
Muchinga	2.2	2.4	2.6	4.4	737	3.8	3.0	3.5	6.3	527
Northern	1.5	1.7	3.4	4.0	1,055	2.3	1.3	2.1	3.0	808
North Western	1.3	1.2	1.4	2.5	652	3.4	2.9	1.8	5.0	497
Southern	3.1	2.3	2.2	4.6	1,820	3.7	1.7	2.8	5.0	1,510
Western	1.8	1.6	2.4	3.3	931	6.7	6.7	7.3	13.1	628
<b>Education</b>										
No education	2.0	1.6	3.0	3.9	1,338	2.7	2.2	2.7	4.7	468
Primary	2.3	2.4	3.1	4.5	7,026	4.2	3.5	4.3	6.6	4,563
Secondary	1.9	2.2	2.6	4.2	5,089	4.0	3.1	3.3	5.6	5,380
More than secondary	1.2	1.3	1.0	2.3	737	2.4	1.9	1.7	3.6	999
<b>Wealth quintile</b>										
Lowest	2.4	1.9	2.5	3.9	2,636	3.6	3.2	3.5	5.8	1,827
Second	1.7	2.0	3.3	4.1	2,604	3.4	2.6	3.3	5.0	2,153
Middle	2.5	2.1	2.8	4.6	2,764	3.9	3.7	3.7	6.1	2,194
Fourth	2.1	2.7	2.8	4.9	3,041	5.4	3.8	4.9	7.4	2,598
Highest	1.7	2.2	2.7	3.8	3,145	3.0	2.4	2.1	4.4	2,637
Total 15-49	2.1	2.2	2.8	4.3	14,190	3.9	3.1	3.5	5.8	11,410
Men 50-59	na	na	na	na	na	2.6	1.9	2.8	3.8	1,203
Total men 15-59	na	na	na	na	na	3.8	3.0	3.4	5.6	12,613

Note: Total includes 8 men for whom information on circumcision is missing.

na = Not applicable

**Figure 13.2 Women and men seeking advice or treatment for STIs**



### 13.15 INJECTIONS

Injection overuse in a health care setting can contribute to the transmission of blood-borne pathogens because it amplifies the effect of unsafe practices such as reuse of injection equipment. To measure the potential risk of transmission of HIV associated with medical injections, ZDHS respondents were asked whether they had received any injections from a health worker in the 12 months preceding the survey and, if so, whether their last injection was administered with a syringe from a new, unopened package. It should be noted that self-administered medical injections (e.g., insulin injections for diabetes) were not included in the calculations.

Table 13.17 shows the reported prevalence of injections and of safe injection practices. Thirty percent of women and 14 percent of men age 15-49 reported receiving an injection from a health worker during the 12 months preceding the survey. The percentage of women who received medical injections is highest among those age 25-29 (37 percent) and lowest among those age 40-49 (21 percent). This percentage varies by province, ranging from a high of 35 percent in Southern to a low of 24 percent in Northern. The proportion of women who received medical injections in the past 12 months increases with increasing education and is highest among those with more than a secondary education (34 percent). There is no clear association between prevalence of medical injections and wealth quintile.

Among men, the prevalence of medical injections in the last 12 months is slightly higher among urban than rural residents (16 percent versus 13 percent). By province, the prevalence is lowest among men in North Western (9 percent) and highest among those in Copperbelt (19 percent). The percentage of men who received medical injections in the past 12 months increases with increasing education and wealth and is highest among those with more than a secondary education (19 percent) and those in the highest wealth quintile (18 percent).

Table 13.17 further shows that, on average, respondents age 15-49 received about one medical injection in the preceding 12 months.

More than nine in ten women and men age 15-49 (98 percent of women and 97 percent of men) reported that their last injection was given with a syringe and needle taken from a new, unopened package. There are no major variations by background characteristics.

Table 13.17 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the last 12 months, the average number of medical injections per person in the last 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Zambia 2013-14

Background characteristic	Women					Men				
	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of women	For last injection, syringe and needle taken from a new, unopened package	Number of women receiving medical injections in the last 12 months	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of men	For last injection, syringe and needle taken from a new, unopened package	Number of men receiving medical injections in the last 12 months
<b>Age</b>										
15-24	29.9	0.7	6,631	96.9	1,985	15.5	0.4	5,672	96.2	879
15-19	26.4	0.6	3,625	96.7	957	17.0	0.4	3,337	95.6	569
20-24	34.2	0.9	3,006	97.1	1,028	13.3	0.5	2,335	97.4	310
25-29	36.6	1.2	2,813	97.7	1,029	13.9	0.6	1,944	96.4	270
30-39	29.4	1.1	4,484	97.7	1,318	13.9	0.5	3,591	97.1	500
40-49	20.8	0.8	2,482	98.5	516	12.4	0.8	2,354	97.0	293
<b>Marital status</b>										
Never married	24.8	0.6	4,572	97.0	1,133	15.5	0.4	5,985	96.4	928
Ever had sex	29.5	0.8	2,370	96.9	698	14.6	0.4	3,835	97.4	558
Never had sex	19.7	0.4	2,203	97.2	435	17.2	0.4	2,150	94.8	370
Married/living together	33.1	1.0	9,859	97.7	3,262	13.0	0.6	7,035	96.6	913
Divorced/separated/widowed	22.9	0.9	1,980	97.2	453	18.6	1.3	542	98.5	101
<b>Residence</b>										
Urban	30.2	1.0	7,585	97.5	2,292	16.1	0.6	6,326	96.5	1,019
Rural	29.0	0.8	8,826	97.4	2,556	12.8	0.5	7,235	96.7	923
<b>Province</b>										
Central	26.3	0.7	1,467	98.5	385	12.6	0.4	1,153	90.2	145
Copperbelt	32.8	1.0	2,836	96.7	930	18.8	0.7	2,395	95.7	451
Eastern	31.9	0.9	1,930	97.5	615	11.7	0.5	1,710	96.8	199
Luapula	32.1	1.0	1,143	97.1	367	9.8	0.5	855	99.3	84
Lusaka	24.8	1.0	3,266	97.3	809	13.4	0.5	2,844	98.1	382
Muchinga	25.8	0.7	868	98.3	224	13.5	0.4	680	98.8	92
Northern	24.3	0.6	1,200	96.1	291	12.0	0.5	929	91.8	112
North Western	27.3	0.9	713	95.2	195	9.2	0.3	557	96.6	51
Southern	35.0	0.9	2,007	99.2	702	17.5	0.6	1,771	98.4	310
Western	33.6	0.9	980	97.6	329	17.4	0.8	668	98.8	116
<b>Education</b>										
No education	22.5	0.6	1,375	94.8	309	10.6	0.5	500	(98.7)	53
Primary	29.1	0.9	7,685	98.0	2,239	13.5	0.5	5,365	96.2	727
Secondary	31.0	1.0	6,521	97.2	2,019	14.4	0.6	6,638	96.5	957
More than secondary	33.9	1.2	830	98.2	282	19.3	0.8	1,058	97.6	204
<b>Wealth quintile</b>										
Lowest	25.7	0.7	2,859	97.4	734	10.9	0.4	2,038	97.1	222
Second	31.5	0.8	2,861	96.4	901	13.0	0.6	2,448	95.9	319
Middle	31.8	0.9	3,077	97.9	978	13.5	0.5	2,547	96.7	344
Fourth	30.0	1.0	3,510	97.3	1,053	14.4	0.5	3,124	96.7	449
Highest	28.8	1.0	4,103	98.1	1,183	17.9	0.7	3,405	96.6	608
Total 15-49	29.5	0.9	16,411	97.5	4,848	14.3	0.5	13,561	96.6	1,942
Men 50-59	na	na	na	na	na	13.7	0.8	1,212	94.3	166
Total men 15-59	na	na	na	na	na	14.3	0.6	14,773	96.4	2,108

Note: Medical injections are those given by a doctor, nurse, dentist, or other health worker. Figures in parentheses are based on 25-49 unweighted cases.  
na = Not applicable

## 13.16 HIV- AND AIDS-RELATED KNOWLEDGE AND BEHAVIOUR AMONG YOUNG PEOPLE

This section addresses HIV- and AIDS-related knowledge among young Zambians age 15-24 and assesses the extent to which young people are engaged in behaviours that may place them at risk of contracting HIV.

### 13.16.1 Knowledge about HIV and AIDS and Source for Condoms

Knowledge of how HIV is transmitted is crucial to enabling people to avoid HIV infection, and this is especially true for young people, who are often at greater risk because they may have shorter relationships with more partners or engage in other risky behaviours. Table 13.18 shows the level of comprehensive knowledge of HIV/AIDS among young people and the percentage of young people who



know a source for condoms. As discussed earlier, comprehensive knowledge of HIV/AIDS is defined as knowing that condom use and limiting sexual intercourse to one uninfected partner are HIV prevention methods, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about HIV transmission.

**Table 13.18 Comprehensive knowledge about AIDS and of a source of condoms among youth**

Percentage of young women and young men age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Zambia 2013-14

Background characteristic	Women			Men		
	Percentage with comprehensive knowledge of AIDS <sup>1</sup>	Percentage who know a condom source <sup>2</sup>	Number of women	Percentage with comprehensive knowledge of AIDS <sup>1</sup>	Percentage who know a condom source <sup>2</sup>	Number of men
<b>Age</b>						
15-19	38.9	76.8	3,625	42.3	90.6	3,337
15-17	35.4	69.3	2,148	40.2	87.6	1,990
18-19	44.1	87.7	1,477	45.3	95.1	1,348
20-24	44.7	92.4	3,006	53.0	98.3	2,335
20-22	44.6	91.1	2,021	52.3	97.8	1,602
23-24	44.9	95.2	985	54.6	99.2	732
<b>Marital status</b>						
Never married	42.6	79.1	4,043	46.9	93.1	5,056
Ever had sex	43.8	89.6	1,903	48.1	97.0	2,977
Never had sex	41.5	69.8	2,140	45.0	87.5	2,079
Ever married	39.8	91.4	2,588	45.2	98.9	616
<b>Residence</b>						
Urban	49.9	86.0	3,246	56.5	96.3	2,759
Rural	33.5	81.9	3,385	37.4	91.3	2,913
<b>Education</b>						
No education	22.2	76.6	207	15.2	85.8	99
Primary	29.7	78.1	2,464	32.3	89.0	2,006
Secondary	48.9	87.4	3,795	54.4	96.5	3,382
More than secondary	71.5	98.7	165	77.7	100.0	185
Total 15-24	41.5	83.9	6,631	46.7	93.7	5,672

<sup>1</sup> Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention of the AIDS virus. The components of comprehensive knowledge are presented in Tables 13.2, 13.3.1, and 13.3.2.

<sup>2</sup> For this table, the following responses are not considered a source for condoms: friends, family members, and home.

Table 13.18 shows that 42 percent of young women and 47 percent of young men have comprehensive knowledge of HIV/AIDS. Comprehensive knowledge about HIV/AIDS is lowest among young women and men age 15-17 (35 percent and 40 percent, respectively). Among both women and men, comprehensive knowledge of HIV/AIDS is higher in urban areas (50 percent and 57 percent, respectively) than in rural areas (34 percent and 37 percent, respectively). The percentage of youth with comprehensive knowledge about HIV/AIDS increases steadily with increasing education, from 22 percent of young women and 15 percent of young men with no education to 72 percent of young women and 78 percent of young men with more than a secondary education.

Knowledge of a source for condoms is very high among Zambian youth. Eighty-four percent of young women and 94 percent of young men know a place where they can obtain a condom.

### 13.16.2 First Sex

Age at first sex is an important indicator of exposure to the risk of pregnancy and sexually transmitted infections. Young people who initiate sex at an early age are typically at higher risk of becoming pregnant or contracting an STI than young people who delay the onset of sexual activity.

Among respondents age 15-24, a higher percentage of young men (16 percent) than young women (12 percent) have had sex before age 15 (Table 13.19). The pattern is reversed among youth who had sex before age 18. A higher percentage of young women than young men age 18-19 had sexual intercourse before age 18 (56 percent versus 50 percent).

Among young men age 15-24, the percentage who initiated sexual intercourse by age 15 is lowest in the 23-24 age group (10 percent). Among young women, this percentage is more than twice as high among ever-married than never-married respondents (17 percent versus 8 percent); there are no notable differences by marital status among young men. Rural women and men age 15-24 (16 percent and 20 percent, respectively) are more likely than their urban counterparts (7 percent and 13 percent, respectively) to have initiated sex before age 15. Young women and men with no formal education (22 percent each) are more likely to have had sexual intercourse by age 15, while those with more than a secondary education are least likely to have done so (less than 1 percent of women and 6 percent of men).

In general, similar patterns are observed among young women and men age 18-24 who had sex for the first time before age 18.

**Table 13.19 Age at first sexual intercourse among young people**

Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, by background characteristics, Zambia 2013-14

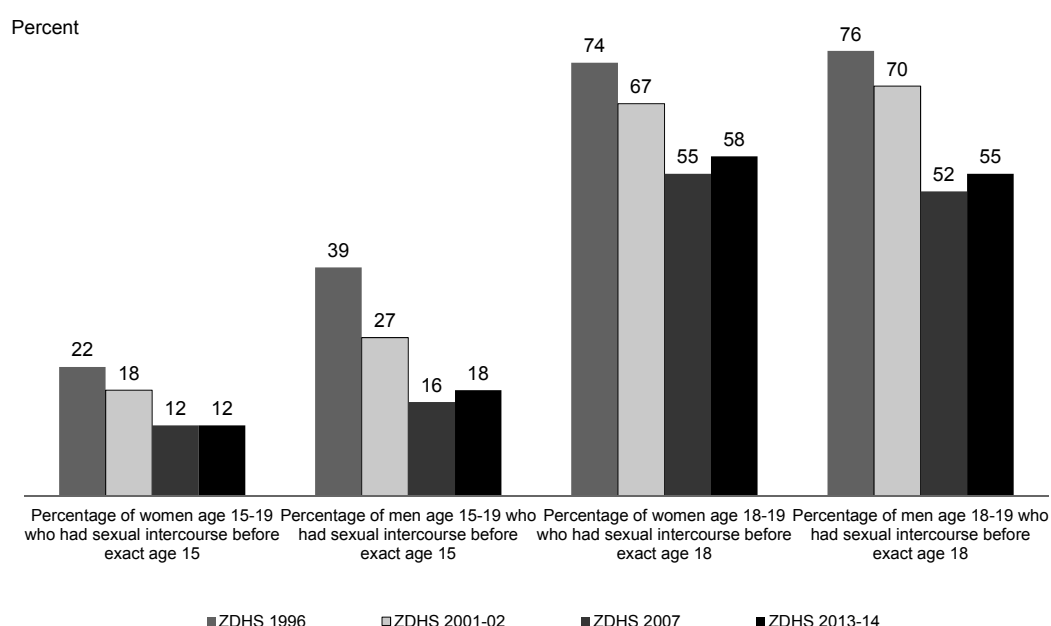
Background characteristic	Women age 15-24		Women age 18-24		Men age 15-24		Men age 18-24	
	Percentage who had sexual intercourse before age 15	Number of women	Percentage who had sexual intercourse before age 18	Number of women	Percentage who had sexual intercourse before age 15	Number of men	Percentage who had sexual intercourse before age 18	Number of men
<b>Age</b>								
15-19	11.7	3,625	na	na	18.3	3,337	na	na
15-17	12.4	2,148	na	na	18.9	1,990	na	na
18-19	10.8	1,477	58.0	1,477	17.5	1,348	54.8	1,348
20-24	11.7	3,006	54.4	3,006	13.2	2,335	47.6	2,335
20-22	11.4	2,021	54.4	2,021	14.6	1,602	49.8	1,602
23-24	12.2	985	54.6	985	10.2	732	43.0	732
<b>Marital status</b>								
Never married	8.4	4,043	38.1	2,056	16.3	5,056	49.3	3,071
Ever married	16.9	2,588	70.5	2,428	15.3	616	55.2	611
<b>Knows condom source<sup>1</sup></b>								
Yes	12.5	5,563	56.8	4,075	16.6	5,317	51.0	3,575
No	7.6	1,068	43.8	409	11.2	355	26.7	107
<b>Residence</b>								
Urban	7.4	3,246	46.0	2,230	12.8	2,759	42.4	1,897
Rural	15.9	3,385	65.1	2,254	19.5	2,913	58.6	1,785
<b>Education</b>								
No education	21.6	207	70.5	167	21.9	99	69.6	68
Primary	17.0	2,464	72.3	1,540	19.2	2,006	58.8	1,014
Secondary	8.2	3,795	47.6	2,612	14.8	3,382	48.1	2,416
More than secondary	0.3	165	12.0	165	6.0	185	24.9	185
<b>Total</b>	<b>11.7</b>	<b>6,631</b>	<b>55.6</b>	<b>4,484</b>	<b>16.2</b>	<b>5,672</b>	<b>50.3</b>	<b>3,682</b>

na = Not applicable

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members, and home.

Figure 13.3 shows trends in age at first sexual intercourse among young people since the 1996 ZDHS. There was a notable decline in the proportion of young women and young men who had had sex by age 15 and by age 18 between the 1996 and 2007 surveys. However, since 2007, the proportion of respondents age 15-19 who had sex before age 15 and the proportion of those age 18-19 who had sex before age 18 have either remained stable or increased slightly. For example, the percentage of young women age 18-19 who had sex before age 18 increased from 55 percent in 2007 to 58 percent in 2013-14, while the percentage of young men increased from 52 percent to 55 percent.

**Figure 13.3 Trends in age of first sexual intercourse**



### 13.16.3 Premarital Sex

Table 13.20 shows the percentage of never-married women and men age 15-24 who have never had sex, the percentage who engaged in sexual intercourse in the past 12 months, and, among those who had sexual intercourse within the past 12 months, the percentage who used a condom during their most recent sexual encounter.

Overall, 53 percent of women and 41 percent of men age 15-24 have never had sexual intercourse. Never-married young women and men age 15-19 have a relatively high level of abstinence (63 percent and 53 percent, respectively). Youth who do not know of a condom source, those who live in urban areas, and those with a primary education are more likely to have never had sex than youth in other subgroups.

Table 13.20 further shows that 32 percent of never-married young women and 41 percent of never-married young men age 15-24 had sexual intercourse in the past 12 months. This percentage increases with age, as expected, and it is higher among rural youth (38 percent of young women and 47 percent of young men) than among urban youth (27 percent of young women and 34 percent of young men).

Among youth who had sexual intercourse in the past 12 months, only 40 percent of young women and 49 percent of young men reported using a condom during their last sexual encounter. This percentage increases with age and is much higher among youth living in urban areas (47 percent of young women and 57 percent of young men) than those living in rural areas (33 percent and 43 percent, respectively).

Table 13.20 Premarital sexual intercourse and condom use during premarital sexual intercourse among young people

Among never-married women and men age 15-24, the percentage who have never had sexual intercourse, the percentage who had sexual intercourse in the past 12 months, and, among those who had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Zambia 2013-14

Background characteristic	Women					Men				
	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never-married women	Women who had sexual intercourse in the past 12 months		Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never-married men	Men who had sexual intercourse in the past 12 months	
				Percentage who used a condom at last sexual intercourse	Number of women				Percentage who used a condom at last sexual intercourse	Number of men
<b>Age</b>										
15-19	62.7	26.4	2,950	36.5	780	53.1	31.7	3,294	42.5	1,043
15-17	72.3	20.9	1,988	36.4	416	63.7	23.3	1,985	38.1	463
18-19	42.9	37.8	962	36.5	364	37.0	44.3	1,309	46.0	580
20-24	26.6	46.1	1,093	44.7	504	18.7	57.6	1,762	55.5	1,014
20-22	29.0	45.2	848	39.9	383	20.2	57.1	1,320	53.5	754
23-24	18.5	49.2	246	59.7	121	14.2	59.0	442	61.1	261
<b>Knows condom source<sup>1</sup></b>										
Yes	46.7	35.8	3,198	40.9	1,146	38.6	42.6	4,708	49.6	2,004
No	76.5	16.3	846	29.2	138	74.7	15.1	348	21.8	53
<b>Residence</b>										
Urban	56.5	27.1	2,265	46.7	614	44.9	34.4	2,562	56.5	881
Rural	48.3	37.7	1,779	33.3	670	37.2	47.1	2,494	43.2	1,176
<b>Education</b>										
No education	51.4	29.0	57	*	16	40.0	44.5	74	(39.1)	33
Primary	55.7	32.8	1,151	31.3	377	44.2	42.0	1,769	38.2	743
Secondary	52.0	31.2	2,693	42.0	839	40.3	39.6	3,040	54.4	1,204
More than secondary	48.3	36.0	143	68.9	51	24.9	44.6	172	70.0	77
Total 15-24	52.9	31.8	4,043	39.7	1,284	41.1	40.7	5,056	48.9	2,057

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members, and home.

### 13.16.4 Multiple Sexual Partners among Youth

The most common means of transmission of HIV in Zambia is through unprotected sex with an infected person. To prevent HIV transmission, it is important that young people practice safe sex. Tables 13.21.1 and 13.21.2 present data on the percentage of young women and men who engaged in sexual intercourse with more than one partner in the 12 months before the survey and the percentage who used a condom during their last sexual encounter.

Young men are much more likely than young women to report having multiple sexual partners in the 12 months preceding the survey (11 percent versus 2 percent). There are no major variations by background characteristics among young women (Table 13.21.1).

Among young men, the percentage who reported having sexual intercourse with more than one partner in the past 12 months generally increases with age (Table 13.21.2). In addition, this percentage is highest among ever-married men (19 percent), those who know of a condom source (11 percent), those living in rural areas (12 percent), and those with no formal education (19 percent).

Among young women and men who had multiple partners in the past 12 months, 34 percent and 40 percent, respectively, reported using a condom during their last sexual intercourse.

Table 13.21.1 Multiple sexual partners in the past 12 months among young people: Women

Among all young women age 15-24, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months, and among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse, by background characteristics, Zambia 2013-14

Background characteristic	Women age 15-24		Women age 15-24 who had 2+ partners in the past 12 months	
	Percentage who had 2+ partners in the past 12 months	Number of women	Percentage who reported using a condom at last intercourse	Number of women
<b>Age</b>				
15-19	1.5	3,625	33.0	56
15-17	1.5	2,148	(29.8)	31
18-19	1.7	1,477	(37.2)	25
20-24	1.8	3,006	35.0	54
20-22	1.7	2,021	(33.9)	34
23-24	2.0	985	*	19
<b>Marital status</b>				
Never married	1.8	4,043	42.7	73
Ever married	1.4	2,588	(16.3)	36
<b>Knows condom source<sup>1</sup></b>				
Yes	1.8	5,563	35.6	100
No	0.9	1,068	*	9
<b>Residence</b>				
Urban	1.8	3,246	46.8	58
Rural	1.5	3,385	19.4	51
<b>Education</b>				
No education	0.9	207	*	2
Primary	1.6	2,464	(29.6)	40
Secondary	1.7	3,795	37.2	64
More than secondary	2.2	165	*	4
Total 15-24	1.7	6,631	34.0	109

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members, and home.

Table 13.21.2 Multiple sexual partners in the past 12 months among young people: Men

Among all young men age 15-24, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months, and among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse, by background characteristics, Zambia 2013-14

Background characteristic	Men age 15-24		Men age 15-24 who had 2+ partners in the past 12 months	
	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom at last intercourse	Number of men
<b>Age</b>				
15-19	7.5	3,337	37.7	250
15-17	4.4	1,990	33.6	88
18-19	12.0	1,348	39.8	162
20-24	15.1	2,335	41.9	353
20-22	14.8	1,602	39.1	237
23-24	15.7	732	47.7	115
<b>Marital status</b>				
Never married	9.6	5,056	44.5	485
Ever married	19.0	616	22.3	117
<b>Knows condom source<sup>1</sup></b>				
Yes	11.1	5,317	40.7	592
No	2.9	355	*	10
<b>Residence</b>				
Urban	8.7	2,759	52.6	241
Rural	12.4	2,913	31.8	361
<b>Education</b>				
No education	19.2	99	*	19
Primary	10.8	2,006	36.2	217
Secondary	10.1	3,382	41.7	343
More than secondary	12.7	185	*	23
Total 15-24	10.6	5,672	40.2	602

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members, and home.

### 13.16.5 Age-Mixing in Sexual Relationships among Youth

Research shows that a substantial proportion of HIV/AIDS cases occur among young women age 15-19. In many societies, young women have sexual relationships with men who are considerably older than they are. This practice can contribute to the spread of HIV and other STIs because if a younger, uninfected partner has sex with an older, infected partner, this can introduce the virus into a younger, uninfected cohort. Also, large age differentials may pose challenges for the younger partner in negotiating safer sex (Leclerc-Madlala, 2008).

This section examines the prevalence of sexual intercourse between partners with large age differences. Women age 15-19 who had higher-risk sexual intercourse in the past 12 months were asked the age of all of their partners. In the event they did not know a partner's exact age, they were asked if the partner was older or younger than they were and, if older, whether the partner was 10 or more years older.

Table 13.22 shows that, in the year preceding the survey, 7 percent of young women age 15-19 who had sexual intercourse had sex with a man 10 or more years older. Young women age 18-19 (8 percent) and ever-married young women (13 percent) are most likely to report having higher-risk sexual intercourse with an older man.

### 13.16.6 Drunkenness during Sexual Intercourse among Youth

Sexual intercourse when one or both partners are under the influence of alcohol is more likely to be unplanned, and couples are therefore less likely to use condoms. Respondents who had sex during the preceding 12 months were asked if they or their partners drank alcohol the last time they had sex and, if so, whether they or their partners were drunk.

Table 13.23 shows the percentage of young people who reported engaging in sexual intercourse while drunk. Less than 1 percent of female youth and 4 percent of male youth reported that they themselves were drunk at least once when they had intercourse during the 12 months preceding the survey. Six percent of young women and 4 percent of young men reported that they or their partners were drunk when they had intercourse at some point during the 12 months preceding the survey.

**Table 13.22 Age-mixing in sexual relationships among women age 15-19**

Among women age 15-19 who had sexual intercourse in the past 12 months, percentage who had sexual intercourse with a man who was 10 or more years older than them, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of women who had sexual intercourse with a man 10+ years older	Number of women
<b>Age</b>		
15-17	6.1	569
18-19	8.0	860
<b>Marital status</b>		
Never married	2.1	780
Ever married	13.3	649
<b>Knows condom source<sup>1</sup></b>		
Yes	7.2	1,227
No	7.2	201
<b>Residence</b>		
Urban	7.8	494
Rural	6.9	935
<b>Education</b>		
No education	(18.2)	36
Primary	8.6	671
Secondary	5.4	721
More than secondary	*	2
Total 15-19	7.2	1,429

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members, and home.

Table 13.23 Drunkenness during sexual intercourse among youth

Among all young women and young men age 15-24, the percentage who had sexual intercourse in the past 12 months while being drunk and the percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk, by background characteristics, Zambia 2013-14

Background characteristic	Women			Men		
	Percentage who had sexual intercourse in the past 12 months when drunk	Percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk	Number of respondents	Percentage who had sexual intercourse in the past 12 months when drunk	Percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk	Number of respondents
<b>Age</b>						
15-19	0.5	3.4	3,625	1.5	1.7	3,337
15-17	0.1	1.7	2,148	0.4	0.6	1,990
18-19	1.1	6.0	1,477	3.2	3.5	1,348
20-24	1.0	8.3	3,006	7.9	8.2	2,335
20-22	1.0	8.0	2,021	6.5	6.8	1,602
23-24	0.9	8.9	985	10.7	11.3	732
<b>Marital status</b>						
Never married	0.7	3.4	4,043	3.4	3.7	5,056
Ever married	0.8	9.2	2,588	9.7	10.1	616
<b>Knows condom source<sup>1</sup></b>						
Yes	0.8	6.1	5,563	4.3	4.6	5,317
No	0.4	3.2	1,068	1.0	1.0	355
<b>Residence</b>						
Urban	1.0	6.4	3,246	6.1	6.5	2,759
Rural	0.5	4.9	3,385	2.3	2.5	2,913
<b>Education</b>						
No education	0.0	8.1	207	3.6	5.8	99
Primary	0.4	5.8	2,464	2.7	2.9	2,006
Secondary	1.0	5.4	3,795	4.7	5.0	3,382
More than secondary	1.5	5.5	165	9.5	10.3	185
Total 15-24	0.7	5.6	6,631	4.1	4.4	5,672

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members, and home.

### 13.16.7 HIV Testing among Youth

Seeking an HIV test can be more difficult for youth than for adults because many youth lack experience in accessing health services for themselves and because they often face barriers in trying to obtain services. Table 13.24 presents data on the percentage of sexually active youths who were tested for HIV and received the results in the 12 months preceding the survey.

Young women age 15-24 are more likely than young men in the same age group to have been tested for HIV and to have received the test results (56 percent and 39 percent, respectively). The percentage of youth who have been tested for HIV and received the results generally increases with age, especially among young women. Young women and men in urban areas (62 percent and 48 percent, respectively) are more likely to have been tested for HIV and to have received the results than their rural counterparts (52 percent and 33 percent, respectively).

The percentage of youth who were tested for HIV in the past 12 months and received the test results increases notably with increasing education, from 45 percent of young women and 25 percent of young men with no education to 69 percent and 53 percent, respectively, of young women and men with more than a secondary education.

Table 13.24 Recent HIV tests among young people

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, the percentage who were tested for HIV in the past 12 months and received the results of the last test, by background characteristics, Zambia 2013-14

Background characteristic	Women age 15-24 who have had sexual intercourse in the past 12 months:		Men age 15-24 who have had sexual intercourse in the past 12 months:	
	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
<b>Age</b>				
15-19	49.7	1,429	26.9	1,081
15-17	40.4	569	21.1	467
18-19	55.8	860	31.2	613
20-24	60.1	2,308	47.3	1,575
20-22	59.9	1,492	47.2	1,030
23-24	60.6	816	47.4	545
<b>Marital status</b>				
Never married	49.7	1,284	35.0	2,057
Ever married	59.5	2,453	52.7	599
<b>Knows condom source<sup>1</sup></b>				
Yes	57.7	3,390	39.4	2,597
No	41.3	347	20.1	59
<b>Residence</b>				
Urban	61.7	1,540	48.1	1,069
Rural	52.3	2,197	32.8	1,587
<b>Education</b>				
No education	44.6	161	25.4	57
Primary	51.9	1,609	27.9	971
Secondary	60.2	1,893	45.6	1,541
More than secondary	68.7	74	53.1	88
Total 15-24	56.2	3,737	39.0	2,656

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members, and home.



**Key Findings**

- In Zambia, 13 percent of adults age 15-49 are infected with HIV (15 percent of women and 11 percent of men).
- A comparison of the HIV prevalence estimates from the 2001-02, 2007, and 2013-14 ZDHS surveys indicates that HIV prevalence among adults in Zambia has decreased over time (from 16 percent in 2001-02 to 13 percent in 2013-14).
- The confidence intervals for the HIV prevalence estimates in the 2001-02 and 2013-14 ZDHS surveys do not overlap (14.3-16.8 and 12.5-14.1, respectively). This indicates that the decline in HIV prevalence observed between the two surveys is statistically significant.
- HIV prevalence increases with age, peaking at 23 percent in the 40-44 age group and declines thereafter.
- HIV prevalence is highest among respondents living in Copperbelt (18 percent) and lowest among those living in Muchinga (6 percent).
- The percentage of respondents who are HIV positive generally increases with increasing education and wealth.
- About half of widowed women (48 percent) are infected with HIV.
- Respondents with a sexually transmitted infection (STI) or STI symptoms in the past 12 months are much more likely to be HIV positive than those who did not have an STI or STI symptoms (25 percent versus 14 percent).
- In 81 percent of the 6,791 cohabiting couples who were tested for HIV in the 2013-14 ZDHS, both partners were HIV negative. In 8 percent of the couples, both partners were HIV positive, and 11 percent of the couples were discordant.

Information about the magnitude of and trends in national HIV prevalence in Zambia typically comes from sentinel surveillance of HIV among pregnant women attending antenatal care (ANC) clinics. These sentinel surveillance data do not, however, provide estimates of HIV prevalence among the general population. Therefore, to better understand the magnitude and patterns of HIV prevalence in the general reproductive-age population in Zambia, the 2013-14 ZDHS included HIV testing of a representative sample of women age 15-49 and men age 15-59.

The 2013-14 ZDHS is the third survey to provide direct estimates of HIV prevalence among the general female and male population in Zambia. As with the 2001-02 and 2007 ZDHS surveys, the results will be used to refine HIV prevalence estimates based on the sentinel surveillance system and allow better monitoring of the epidemic. As in the 2007 survey, the HIV test results were linked to the sociodemographic and other characteristics of the survey respondents.

The HIV specimen collection and testing methodologies used in the 2013-14 ZDHS are described in detail in Chapter 1. This chapter addresses the test results and provides information on HIV testing coverage rates among eligible survey respondents. Levels of and differentials in HIV prevalence among those who were tested are also presented.

## 14.1 COVERAGE RATES FOR HIV TESTING

Table 14.1 shows the distributions of women age 15-49 and men age 15-59 who were eligible for HIV testing, by testing outcome. Overall, 87 percent of the ZDHS respondents who were eligible for testing were both interviewed and tested. Testing coverage rates were higher among women than among men (90 percent and 84 percent, respectively). Among all respondents eligible for testing, 7 percent declined to give a blood specimen.

Table 14.1 Coverage of HIV testing by residence and province

Percent distribution of women age 15-49 and men age 15-59 eligible for HIV testing by testing status, according to residence and province (unweighted), Zambia 2013-14

Residence and province	Testing status						Total	Number
	DBS tested <sup>1</sup>		Refused to provide blood		Other/missing <sup>2</sup>			
	Interviewed	Not inter- viewed	Interviewed	Not inter- viewed	Interviewed	Not inter- viewed		
WOMEN 15-49								
<b>Residence</b>								
Urban	89.1	0.0	6.4	0.9	0.4	3.2	100.0	8,212
Rural	91.7	0.0	4.4	0.4	0.3	3.1	100.0	8,852
<b>Province</b>								
Central	89.0	0.0	6.3	0.5	0.2	4.1	100.0	1,468
Copperbelt	85.7	0.0	9.6	1.4	0.3	2.9	100.0	1,850
Eastern	91.6	0.0	4.8	0.1	0.5	3.0	100.0	2,101
Luapula	92.2	0.0	4.1	0.3	0.5	2.9	100.0	1,637
Lusaka	91.3	0.1	5.7	0.6	0.5	1.9	100.0	1,962
Muchinga	89.6	0.0	4.8	0.7	0.2	4.7	100.0	1,538
Northern	93.6	0.1	2.9	0.7	0.2	2.5	100.0	1,633
North Western	93.1	0.0	4.5	0.7	0.2	1.5	100.0	1,605
Southern	90.4	0.1	5.4	0.8	0.4	2.9	100.0	1,799
Western	87.5	0.0	5.3	1.0	0.3	5.8	100.0	1,471
Total 15-49	90.4	0.0	5.4	0.7	0.4	3.1	100.0	17,064
MEN 15-59								
<b>Residence</b>								
Urban	79.8	0.1	8.4	1.4	0.9	9.4	100.0	7,660
Rural	87.3	0.0	5.1	0.4	0.6	6.6	100.0	8,549
<b>Province</b>								
Central	83.9	0.1	3.7	0.5	0.7	11.0	100.0	1,349
Copperbelt	75.9	0.0	11.5	1.5	0.5	10.6	100.0	1,851
Eastern	85.9	0.0	5.4	0.5	1.2	7.0	100.0	2,128
Luapula	87.9	0.1	5.1	0.4	1.0	5.6	100.0	1,457
Lusaka	84.5	0.2	7.8	0.7	0.8	6.1	100.0	1,991
Muchinga	82.4	0.0	5.2	1.2	0.1	11.1	100.0	1,451
Northern	90.0	0.1	3.9	1.0	0.5	4.5	100.0	1,540
North Western	83.9	0.1	7.3	1.6	0.6	6.5	100.0	1,462
Southern	85.2	0.1	8.1	1.1	0.8	4.8	100.0	1,781
Western	76.7	0.0	7.3	0.5	0.8	14.7	100.0	1,199
Total 15-49	83.7	0.1	6.7	0.9	0.7	7.9	100.0	15,599
Total 15-59	83.7	0.1	6.7	0.9	0.7	7.9	100.0	16,209
TOTAL (WOMEN 15-49 and MEN 15-59)								
<b>Residence</b>								
Urban	84.6	0.1	7.4	1.2	0.6	6.2	100.0	15,872
Rural	89.5	0.0	4.7	0.4	0.5	4.8	100.0	17,401
<b>Province</b>								
Central	86.5	0.1	5.0	0.5	0.5	7.4	100.0	2,817
Copperbelt	80.8	0.0	10.5	1.5	0.4	6.8	100.0	3,701
Eastern	88.8	0.0	5.1	0.3	0.9	5.0	100.0	4,229
Luapula	90.2	0.1	4.6	0.4	0.7	4.1	100.0	3,094
Lusaka	87.9	0.1	6.8	0.6	0.7	4.0	100.0	3,953
Muchinga	86.1	0.0	5.0	0.9	0.2	7.8	100.0	2,989
Northern	91.9	0.1	3.4	0.8	0.4	3.5	100.0	3,173
North Western	88.7	0.0	5.8	1.1	0.4	3.9	100.0	3,067
Southern	87.8	0.1	6.8	0.9	0.6	3.8	100.0	3,580
Western	82.7	0.0	6.2	0.8	0.6	9.8	100.0	2,670
Total 15-49	87.2	0.0	6.0	0.8	0.5	5.5	100.0	33,273

<sup>1</sup> Includes all Dried Blood Spots (DBS) tested at the lab and for which there is a result, i.e., positive or negative, <sup>2</sup> Includes: 1) other results of blood collection (e.g., technical problem in the field), 2) lost specimens, 3) non-corresponding bar codes, and 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

By residence, coverage of HIV testing is slightly higher in rural areas (90 percent) than in urban areas (85 percent). Among provinces, coverage rates are highest in Northern (92 percent) and lowest in Copperbelt (81 percent).

Table 14.2 shows coverage of HIV testing by background characteristics. There are no notable variations in coverage by age among either women or men. Coverage of HIV testing is lowest among respondents with no education (85 percent of women and 75 percent of men), those with more than a secondary education (83 percent of women and 76 percent of men), and those in the highest wealth quintile (86 percent of women and 78 percent of men).

**Table 14.2 Coverage of HIV testing by selected background characteristics**

Percent distribution of women age 15-49 and men age 15-59 eligible for HIV testing by testing status, according to selected background characteristics (unweighted), Zambia 2013-14

Background characteristic	Testing status						Total	Number
	DBS tested <sup>1</sup>		Refused to provide blood		Other/missing <sup>2</sup>			
	Interviewed	Not inter-viewed	Interviewed	Not inter-viewed	Interviewed	Not inter-viewed		
WOMEN 15-49								
Age								
15-19	90.8	0.0	4.7	0.5	0.5	3.5	100.0	3,840
20-24	91.0	0.0	4.6	0.7	0.2	3.5	100.0	3,175
25-29	90.9	0.0	5.3	0.6	0.2	3.0	100.0	2,891
30-34	90.4	0.0	6.2	0.8	0.3	2.3	100.0	2,514
35-39	89.5	0.0	6.1	0.9	0.5	3.0	100.0	2,054
40-44	89.6	0.1	6.2	1.0	0.3	2.9	100.0	1,527
45-49	89.5	0.0	5.9	0.4	0.7	3.6	100.0	1,062
Education								
No education	85.4	0.1	6.5	0.9	0.5	6.6	100.0	1,474
Primary	92.7	0.0	4.2	0.5	0.3	2.3	100.0	7,870
Secondary	89.9	0.0	5.7	0.7	0.4	3.3	100.0	6,814
More than secondary	83.4	0.0	10.9	1.5	0.2	4.0	100.0	896
Missing	80.0	0.0	0.0	10.0	0.0	10.0	100.0	10
Wealth quintile								
Lowest	90.8	0.0	4.8	0.5	0.3	3.5	100.0	2,956
Second	92.3	0.0	4.1	0.5	0.3	3.0	100.0	3,106
Middle	92.3	0.0	4.2	0.5	0.3	2.7	100.0	3,607
Fourth	91.3	0.0	4.8	0.7	0.4	2.8	100.0	3,569
Highest	86.2	0.0	8.5	1.1	0.5	3.7	100.0	3,826
Total 15-49	90.4	0.0	5.4	0.7	0.4	3.1	100.0	17,064
MEN 15-59								
Age								
15-19	85.8	0.1	5.7	0.7	1.0	6.7	100.0	3,617
20-24	84.8	0.0	5.5	0.6	0.9	8.2	100.0	2,532
25-29	84.0	0.1	6.2	0.8	0.7	8.3	100.0	2,127
30-34	82.3	0.0	7.9	1.0	0.4	8.4	100.0	2,091
35-39	82.5	0.1	7.1	1.5	0.3	8.7	100.0	1,858
40-44	82.4	0.1	7.5	1.1	0.6	8.3	100.0	1,534
45-49	81.5	0.1	7.4	0.8	1.3	8.9	100.0	1,101
50-59	83.3	0.1	8.1	1.0	0.7	6.7	100.0	1,349
Education								
No education	74.6	0.0	7.6	1.3	0.7	15.7	100.0	668
Primary	86.7	0.1	5.4	0.5	0.7	6.7	100.0	6,449
Secondary	83.6	0.1	6.5	1.1	0.8	8.1	100.0	7,733
More than secondary	75.7	0.0	13.3	1.5	0.7	8.7	100.0	1,342
Missing	52.9	0.0	5.9	5.9	0.0	35.3	100.0	17
Wealth quintile								
Lowest	86.6	0.1	4.9	0.5	0.5	7.4	100.0	2,490
Second	88.3	0.0	4.6	0.4	0.5	6.3	100.0	3,083
Middle	85.5	0.0	5.1	0.8	0.5	7.9	100.0	3,401
Fourth	82.4	0.1	6.8	0.9	1.0	8.8	100.0	3,593
Highest	77.6	0.0	10.9	1.7	1.0	8.8	100.0	3,642
Total 15-59	83.7	0.1	6.7	0.9	0.7	7.9	100.0	16,209

<sup>1</sup> Includes all Dried Blood Spots (DBS) tested at the lab and for which there is a result, i.e., positive or negative

<sup>2</sup> Includes: 1) other results of blood collection (e.g., technical problem in the field), 2) lost specimens, 3) non-corresponding bar codes, and 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Additional tables describing the relationship between participation in HIV testing and characteristics related to HIV risk are presented in Appendix A (see Tables A.7-A.10). Overall, the results in Tables A.7-A.10 do not show a systematic relationship between participation in testing and variables associated with a higher risk of HIV infection.

## 14.2 HIV PREVALENCE

### 14.2.1 HIV Prevalence by Socioeconomic Characteristics

Table 14.3 shows HIV prevalence by various socioeconomic characteristics. These include age, religion, employment, residence, province, educational level, and wealth quintile. The overall HIV prevalence among all women and men age 15-49 tested in the 2013-14 ZDHS is 13 percent. The HIV prevalence among women age 15-49 is 15 percent, as compared with 11 percent among men age 15-49 and 12 percent among those age 15-59.

Table 14.3 HIV prevalence by socioeconomic characteristics

Percentage HIV positive among women and men age 15-49 who were tested, by socioeconomic characteristics, Zambia 2013-14

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Age</b>						
15-19	4.8	3,273	4.1	3,246	4.4	6,519
20-24	11.2	2,745	7.3	2,307	9.4	5,052
25-29	15.0	2,521	10.1	1,894	12.9	4,415
30-34	20.7	2,199	14.0	1,840	17.6	4,040
35-39	24.2	1,774	17.6	1,591	21.0	3,365
40-44	24.1	1,300	21.0	1,339	22.5	2,640
45-49	19.5	907	19.3	922	19.4	1,830
50-59	na	na	17.9	1,148	na	na
<b>Religion</b>						
Catholic	15.9	2,682	12.4	2,557	14.2	5,239
Protestant	14.9	11,840	10.9	10,318	13.0	22,157
Muslim	17.1	84	13.0	93	15.0	177
<b>Employment (last 12 months)</b>						
Not employed	12.6	7,103	6.4	2,682	10.9	9,785
Employed	17.3	7,616	12.6	10,457	14.6	18,073
<b>Residence</b>						
Urban	21.0	6,805	15.0	6,128	18.2	12,932
Rural	9.9	7,915	8.1	7,012	9.1	14,927
<b>Province</b>						
Central	14.8	1,316	9.8	1,115	12.5	2,431
Copperbelt	20.0	2,544	16.2	2,330	18.2	4,874
Eastern	10.9	1,732	7.7	1,660	9.3	3,392
Luapula	12.1	1,025	9.7	830	11.0	1,855
Lusaka	19.4	2,931	13.0	2,752	16.3	5,683
Muchinga	6.9	779	5.8	659	6.4	1,438
Northern	10.4	1,077	10.6	904	10.5	1,981
North Western	7.9	640	6.4	539	7.2	1,178
Southern	14.7	1,801	11.0	1,713	12.8	3,513
Western	17.5	876	12.5	639	15.4	1,514
<b>Education</b>						
No education	13.4	1,199	11.4	461	12.8	1,661
Primary	14.3	6,952	9.9	5,180	12.4	12,132
Secondary	16.2	5,846	12.0	6,504	14.0	12,350
More than secondary	16.7	712	14.3	985	15.3	1,697
<b>Wealth quintile</b>						
Lowest	9.0	2,548	6.6	1,972	8.0	4,519
Second	9.6	2,573	8.8	2,385	9.2	4,958
Middle	14.4	2,788	9.7	2,475	12.2	5,263
Fourth	20.9	3,201	15.0	3,058	18.0	6,260
Highest	18.6	3,610	13.8	3,249	16.3	6,859
Total 15-49	15.1	14,719	11.3	13,140	13.3	27,859
Men 50-59	na	na	17.9	1,148	na	na
Total men 15-59	na	na	11.9	14,288	11.9	14,288

Note: Total includes 31 women and 50 men for whom information on religion is missing, 1 man for whom information on employment is missing, and 11 women and 9 men for whom information on education is missing.  
na = Not applicable

HIV prevalence is lowest among respondents age 15-19 and 20-24 (4 percent and 9 percent, respectively); it peaks at 23 percent in the 40-44 age group and it declines thereafter. Respondents who were employed (15 percent) in the preceding 12 months are more likely than those who were not employed (11 percent) to be HIV positive. This pattern is more pronounced among men; 13 percent of employed men are HIV positive, as compared with 6 percent of unemployed men. Women and men living in urban areas are twice as likely to be HIV positive as those living in rural areas (18 percent and 9 percent, respectively). By province, HIV prevalence is lowest in Muchinga (6 percent) and highest in Copperbelt (18 percent).

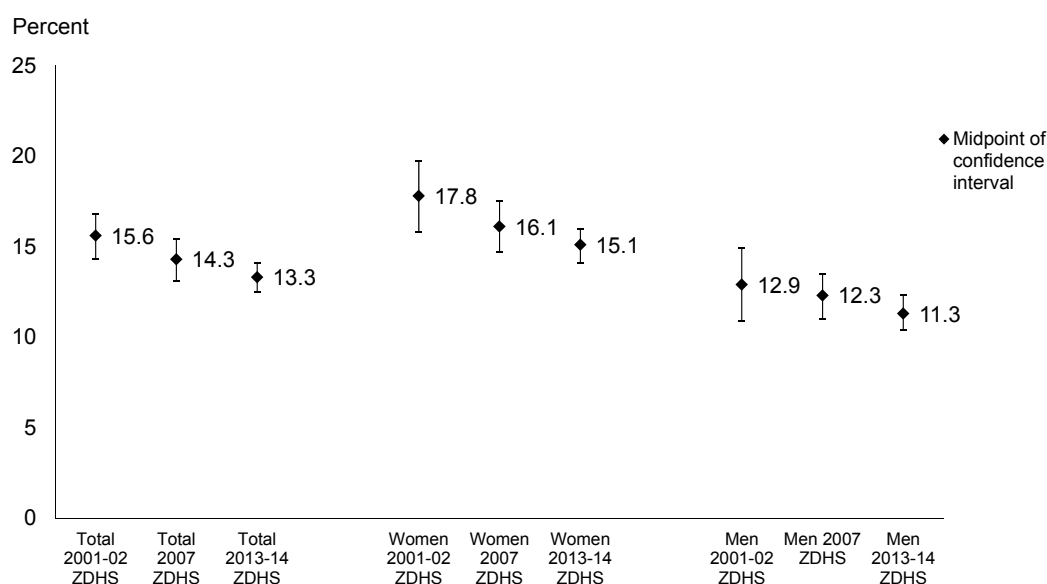
HIV prevalence generally increases slightly with increasing education, especially among women. Thirteen percent of women with no education are HIV positive, as compared with 17 percent of those with more than a secondary education. HIV prevalence is lowest among respondents in the lowest wealth quintile (8 percent) and highest among respondents in the fourth quintile (18 percent).

## 14.2.2 Trends in HIV Prevalence

A comparison of the 2001-02, 2007, and 2013-14 ZDHS surveys shows that HIV prevalence among adults age 15-49 in Zambia has decreased over time, from 16 percent in 2001-02 and 14 percent in 2007 to 13 percent in 2013-14 (Figure 14.1). HIV prevalence among women declined from 18 percent to 15 percent over the same period, while the prevalence among men decreased from 13 percent to 11 percent.

Figure 14.1 shows that the confidence intervals (CIs) for the 2001-02 and 2007 HIV prevalence estimates for all adults age 15-49 overlap (14.3-16.8 and 13.1-15.4, respectively). The CIs for the 2007 and 2013-14 adult HIV prevalence estimates also overlap (13.1-15.4 and 12.5-14.1, respectively). However, the CIs for the HIV prevalence estimates in the 2001-02 and 2013-14 ZDHS surveys do not overlap (14.3-16.8 and 12.5-14.1, respectively). This indicates that the decline in HIV prevalence among adults age 15-49 observed between the 2001-02 and 2013-14 ZDHS surveys is statistically significant.

**Figure 14.1 HIV prevalence among adults age 15-49, and by sex, Zambia 2001-02, 2007, and 2013-14**



Among women, the CIs are 15.8-19.7 in 2001-02, 14.7-17.5 in 2007, and 14.1-16.0 in 2013-14. The change in the HIV prevalence among women between 2001-02 and 2013-14 surveys is statistically significant. Among men, the corresponding CIs are 10.9-14.9, 11.0-13.5, and 10.4-12.3. The change in the HIV prevalence among men observed since the 2001-02 ZDHS survey is not statistically significant.

### 14.2.3 HIV Prevalence by Demographic Characteristics

Table 14.4 shows HIV prevalence among women and men by various demographic characteristics. These include marital status, type of union, number of times the respondent slept away from home in the 12 months before the survey, and amount of time spent away from home in the past 12 months, as well as by pregnancy status and use of antenatal care (ANC) among women and circumcision status among men. By marital status widowed and divorced respondents are more likely to be HIV positive (46 percent and 27 percent, respectively). Similarly, women not currently in a union (16 percent) and men in non-polygynous unions (15 percent) are more likely than those in other subgroups to be HIV positive. HIV prevalence increases with the number of times respondents slept away in the past year, from 13 percent among those who never slept away from home to 16 percent among those who slept away from home five or more times. In addition, HIV prevalence was slightly higher among respondents who had been away from home for any amount of time in the past 12 months (14-15 percent) than among respondents who had not been away (13 percent).

Table 14.4 HIV prevalence by demographic characteristics

Percentage HIV positive among women and men age 15-49 who were tested, by demographic characteristics, Zambia 2013-14

Demographic characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Marital status</b>						
Never married	8.6	4,101	6.2	5,820	7.2	9,921
Ever had sexual intercourse	12.8	2,145	6.7	3,752	9.0	5,897
Never had sexual intercourse	3.9	1,956	5.3	2,068	4.6	4,024
Married/living together	14.4	8,863	14.5	6,794	14.4	15,658
Divorced or separated	28.2	1,252	25.2	469	27.4	1,720
Widowed	47.7	504	(34.2)	57	46.3	561
<b>Type of union</b>						
In polygynous union	11.2	1,062	13.3	475	11.8	1,537
In non-polygynous union	14.8	7,702	14.6	6,319	14.7	14,021
Not currently in union	16.1	5,856	7.9	6,345	11.8	12,202
<b>Times slept away from home in past 12 months</b>						
None	14.1	8,747	10.7	7,745	12.5	16,493
1-2	16.0	3,983	10.9	2,718	13.9	6,701
3-4	17.3	1,216	11.7	1,254	14.4	2,470
5+	17.3	757	15.1	1,408	15.8	2,165
<b>Time away in past 12 months</b>						
Away for more than 1 month	15.5	2,527	12.4	2,015	14.1	4,541
Away for less than 1 month	17.1	3,421	12.1	3,354	14.6	6,775
Not away	14.1	8,757	10.7	7,745	12.5	16,502
<b>Currently pregnant</b>						
Pregnant	11.9	1,297	na	na	na	na
Not pregnant or not sure	15.4	13,422	na	na	na	na
<b>ANC for last birth in the last 3 years</b>						
ANC provided by the public sector	11.2	5,975	na	na	na	na
ANC provided by other than the public sector	13.1	303	na	na	na	na
No ANC/no birth in last 3 years	17.9	8,396	na	na	na	na
<b>Male circumcision</b>						
Circumcised	na	na	10.1	2,887	na	na
Not circumcised	na	na	11.7	10,239	na	na
<b>Total 15-49</b>	<b>15.1</b>	<b>14,719</b>	<b>11.3</b>	<b>13,140</b>	<b>13.3</b>	<b>27,859</b>
<b>Men 50-59</b>	<b>na</b>	<b>na</b>	<b>17.9</b>	<b>1,148</b>	<b>na</b>	<b>na</b>
<b>Total men 15-59</b>	<b>na</b>	<b>na</b>	<b>11.9</b>	<b>14,288</b>	<b>na</b>	<b>na</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 99 women for whom information on type of union is missing, 16 women and 14 men for whom information on times slept away from home in past 12 months is missing, 15 women and 26 men for whom information on time away in past 12 months is missing, 46 women for whom information on ANC for last birth in the last 3 years is missing, and 14 men for whom information on circumcision is missing.

na = Not applicable

Women who are not pregnant or not sure whether they are pregnant (15 percent) are more likely to be HIV positive than pregnant women (12 percent). Also, HIV prevalence is higher among women who did not receive any ANC for their most recent birth or did not have a birth in the last three years (18 percent) than among those who received ANC from a public sector or non-public sector provider in the three years preceding the survey (11 percent and 13 percent, respectively).

HIV prevalence is slightly higher among non-circumcised men (12 percent) than among those who have been circumcised (10 percent).

#### **14.2.4 HIV Prevalence by Sexual Behaviour**

Table 14.5 shows HIV prevalence rates among respondents who have ever had sexual intercourse by sexual behaviour indicators. In reviewing these results, it is important to note that responses to questions about sexual risk behaviour may be subject to reporting and social desirability biases. Sexual behaviour in the 12 months preceding the survey may also not adequately reflect lifetime sexual risk.

Among all respondents age 15-49 who had ever had sex and were tested for HIV, 15 percent are HIV positive (17 percent of women and 12 percent of men). Among women, there is no strong relationship between age at first sexual intercourse and HIV prevalence. Among men, HIV prevalence generally increases as age at first sexual intercourse increases. The lowest HIV prevalence is among men whose first sexual intercourse was before age 16, and the highest is among those whose first sexual intercourse was between age 18 and 19 (15 percent).

Among women, the HIV prevalence is highest among those who had two or more sexual partners in the past 12 months (35 percent) and lowest among those who had one sexual partner (15 percent). HIV prevalence is higher among women who had concurrent partners (40 percent) than among those who did not (34 percent).

Among men, HIV prevalence is lower among those with no sexual partners in the past 12 months (10 percent) than among those with one or more partners (13 percent). Among men with multiple partners, HIV prevalence is higher among those who had concurrent partners (15 percent) than among those who did not (11 percent).

Men and women who used a condom during their most recent intercourse in the past 12 months are much more likely to be HIV positive (32 percent and 18 percent, respectively) than those who did not use a condom (13 percent and 11 percent, respectively).

The percentage of respondents who are HIV positive increases steadily as number of lifetime partners increase, from 9 percent of women and 6 percent of men with one lifetime partner to 49 percent and 20 percent, respectively, of those with 10 or more partners.

Table 14.5 also shows that 15 percent of men who paid for sexual intercourse in the past 12 months are HIV positive, as compared with 12 percent of those who either did not pay for sex or did not have sexual intercourse in the past 12 months. Among men who paid for sex in the past 12 months, those who used a condom are much more likely to be HIV positive (17 percent) than those who did not use a condom (10 percent).

Table 14.5 HIV prevalence by sexual behaviour

Percentage HIV positive among women and men age 15-49 who ever had sex and were tested for HIV, by sexual behaviour characteristics, Zambia 2013-14

Sexual behaviour characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Age at first sexual intercourse</b>						
<16	16.5	4,114	10.9	3,567	13.9	7,681
16-17	16.4	3,929	11.7	2,431	14.6	6,360
18-19	16.1	2,216	14.7	2,407	15.4	4,623
20+	17.3	1,426	13.1	2,549	14.6	3,975
<b>Multiple sexual partners and partner concurrency in past 12 months</b>						
0	22.9	1,712	9.6	1,331	17.1	3,043
1	15.4	10,773	12.9	7,666	14.3	18,439
2+	35.2	257	12.6	2,070	15.1	2,326
Had concurrent partners <sup>1</sup>	39.8	63	15.1	943	16.6	1,005
None of the partners were concurrent	33.7	194	10.5	1,127	13.9	1,321
<b>Condom use at last sexual intercourse in past 12 months</b>						
Used condom	31.6	1,615	17.8	2,566	23.1	4,181
Did not use condom	13.1	9,407	11.0	7,167	12.2	16,574
No sexual intercourse in last 12 months	22.8	1,719	9.7	1,335	17.1	3,054
<b>Number of lifetime partners</b>						
1	9.0	5,775	5.7	1,549	8.3	7,324
2	17.5	3,899	9.1	1,884	14.8	5,783
3-4	28.2	2,514	12.6	3,307	19.3	5,821
5-9	38.9	441	14.2	2,790	17.6	3,231
10+	49.2	72	19.8	1,461	21.2	1,534
<b>Paid for sexual intercourse in past 12 months</b>						
Yes	na	na	14.6	566	na	na
Used condom	na	na	17.3	343	na	na
Did not use condom	na	na	10.3	223	na	na
No (no paid sexual intercourse/ no sexual intercourse in past 12 months)	na	na	12.3	10,505	na	na
Total 15-49	16.8	12,749	12.4	11,070	14.8	23,819
Men 50-59	na	na	18.0	1,141	na	na
Total men 15-59	na	na	13.0	12,211	na	na

Note: Total includes 1,064 women and 117 men for whom information on age at first intercourse is don't know or missing, 8 women and 3 men for whom information on multiple sexual partners and partner concurrency in past 12 months is missing, 7 women and 3 men for whom information on condom use at last sexual intercourse in past 12 months is missing, and 48 women and 78 men for whom information on number of lifetime partners is missing.

na = Not applicable

<sup>1</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey. (Respondents with concurrent partners include polygynous men who had overlapping sexual partnerships with two or more wives.)

## 14.3 HIV PREVALENCE AMONG YOUNG PEOPLE

Young people in the 15-24 age range are an important proxy group to monitor with respect to reductions in new HIV infections at the population level.

Table 14.6 shows that HIV prevalence among the youth age 15-24 is 7 percent (8 percent among young women and 5 percent among young men). HIV prevalence increases with age, from 4 percent among youth age 15-17 to 12 percent among youth age 23-24.



Table 14.6 HIV prevalence among young people by background characteristics

Percentage HIV positive among women and men age 15-24 who were tested for HIV, by background characteristics, Zambia 2013-14

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Age</b>						
15-19	4.8	3,273	4.1	3,246	4.4	6,519
15-17	3.5	1,903	3.7	1,901	3.6	3,804
18-19	6.6	1,370	4.5	1,345	5.6	2,715
20-24	11.2	2,745	7.3	2,307	9.4	5,052
20-22	9.8	1,855	6.5	1,580	8.3	3,435
23-24	14.2	890	9.2	727	11.9	1,617
<b>Marital status</b>						
Never married	6.5	3,638	5.2	4,947	5.8	8,585
Ever had sex	9.3	1,741	5.2	2,940	6.7	4,681
Never had sex	3.9	1,897	5.3	2,007	4.6	3,904
Married/living together	8.3	2,108	7.0	549	8.0	2,657
Divorced/separated/widowed	19.3	272	8.9	57	17.5	329
<b>Currently pregnant</b>						
Pregnant	8.2	540	na	na	na	na
Not pregnant or not sure	7.7	5,478	na	na	na	na
<b>Residence</b>						
Urban	10.7	2,957	7.3	2,717	9.1	5,674
Rural	4.8	3,060	3.6	2,836	4.2	5,897
<b>Province</b>						
Central	8.6	550	5.4	501	7.1	1,051
Copperbelt	9.9	1,101	10.6	1,115	10.3	2,216
Eastern	4.6	694	2.4	693	3.5	1,387
Luapula	8.8	355	5.5	315	7.3	670
Lusaka	8.4	1,252	4.0	1,132	6.3	2,383
Muchinga	3.1	319	3.4	266	3.2	585
Northern	5.6	408	6.5	338	6.0	745
North Western	5.0	277	3.4	230	4.3	507
Southern	8.5	734	3.3	736	5.9	1,469
Western	9.4	330	6.0	227	8.0	557
<b>Education</b>						
No education	9.2	185	7.2	93	8.5	279
Primary	6.8	2,244	4.5	1,937	5.7	4,181
Secondary	8.3	3,441	5.7	3,338	7.0	6,779
More than secondary	7.7	143	9.1	181	8.5	324
<b>Wealth quintile</b>						
Lowest	4.3	964	4.0	698	4.2	1,662
Second	5.2	994	3.4	904	4.3	1,898
Middle	8.6	1,097	4.3	1,098	6.4	2,195
Fourth	9.4	1,337	6.0	1,301	7.7	2,638
Highest	9.3	1,626	7.6	1,553	8.5	3,179
Total 15-24	7.7	6,018	5.4	5,553	6.6	11,571

Note: Total includes 4 women and 5 men for whom information on education is missing.  
na = Not applicable

Young people who are divorced, separated, or widowed are much more likely to be HIV positive (18 percent) than those who have never been married (6 percent) and those who are currently in a union (8 percent).

HIV prevalence is more than twice as high among urban youth than among rural youth (9 percent versus 4 percent). Youth residing in Muchinga are least likely to be HIV positive (3 percent), and those living in Copperbelt are most likely to be infected with HIV (10 percent).

HIV prevalence among the youth does not follow a clear pattern by education. It increases with increasing wealth, from 4 percent in the lowest two quintiles to 9 percent among those in the highest quintile.

Table 14.7 shows HIV prevalence among young people by sexual behaviour. The HIV prevalence among respondents age 15-24 who have had sex is 8 percent (10 percent among young women and 6 percent among young men). Young women whose first sexual partner was 10 or more years older than them are more likely to be HIV positive than those whose first partner was less than 10 years older, the

same age, or younger than them (14 percent versus 9 percent). Women with two or more sexual partners in the past 12 months are about twice as likely to be HIV positive as those with no partners or one partner over the same period (18 percent and 9-10 percent, respectively). Among young men, there is a small decrease in HIV prevalence with increasing number of partners in the past 12 months. There are too few young people age 15-24 with concurrent partners in the past 12 months to allow meaningful interpretations regarding relationships between HIV prevalence and concurrency.

**Table 14.7 HIV prevalence among young people by sexual behaviour**

Percentage HIV positive among women and men age 15-24 who have ever had sex and were tested for HIV, by sexual behaviour, Zambia 2013-14

Sexual behaviour characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Relative age of first sexual partner</b>						
10+ years older	14.1	310	na	na	na	na
<10 years older/same age/younger/don't know	9.2	3,481	na	na	na	na
<b>Multiple sexual partners and partner concurrency in past 12 months</b>						
0	9.9	682	6.4	918	7.9	1,600
1	9.1	3,334	5.6	2,026	7.8	5,359
2+	18.0	101	3.9	601	5.9	702
Had concurrent partners <sup>1</sup>	*	19	4.2	124	5.7	143
None of the partners were concurrent	18.7	82	3.8	477	6.0	559
<b>Condom use at first sexual intercourse</b>						
Used condom	11.9	1,319	5.9	1,012	9.3	2,331
Did not use condom	8.4	2,683	5.3	2,432	6.9	5,115
<b>Condom use at last sexual intercourse in past 12 months</b>						
Used condom	12.2	689	4.8	1,093	7.6	1,782
Did not use condom	8.7	2,744	5.5	1,532	7.5	4,276
No sexual intercourse in last 12 months	9.9	686	6.4	919	7.9	1,605
Total 15-24	9.5	4,120	5.5	3,546	7.6	7,666

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes 329 women for whom information on relative age of first sexual partner is missing, 3 women and 1 man for whom information on multiple sexual partners and partner concurrency in past 12 months is missing, 105 women and 102 men for whom information on condom use at first sexual intercourse is missing, and 1 woman and 2 men for whom information on condom use at last sexual intercourse in past 12 months is missing.

na = Not applicable

<sup>1</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey. (Respondents with concurrent partners include polygynous men who had overlapping sexual partnerships with two or more wives.)

Young women who used a condom during their first sexual intercourse or during their most recent sexual intercourse in the past 12 months have a higher prevalence (12 percent each) than those who did not use a condom (8 percent and 9 percent, respectively). Among young men, differences in HIV prevalence by condom use are not pronounced.

## 14.4 HIV PREVALENCE BY OTHER CHARACTERISTICS RELATED TO HIV RISK

A strong link exists between sexually transmitted infections (STIs) and sexual transmission of HIV. Many studies have demonstrated that STIs are a co-factor in HIV transmission. Management and treatment of STIs can play an important role in the reduction of HIV transmission. The 2013-14 ZDHS asked respondents who had ever had sex if they had contracted a disease through sexual contact in the past 12 months or if they had any symptoms associated with STIs (an abnormal discharge from the vagina or penis or a genital sore or ulcer).

Table 14.8 shows HIV prevalence among respondents age 15-49 who have ever had sex and were tested for HIV in the survey by whether they had an STI or STI symptoms in the past 12 months and by prior HIV testing. The data show that respondents who had an STI or STI symptoms in the past 12 months

(25 percent) are substantially more likely to be HIV positive than those who did not have an STI or STI symptoms (14 percent).

Table 14.8 further shows that respondents who were tested for HIV previously are more likely to be HIV positive than those who were never tested (16 percent versus 9 percent). Among respondents who had been tested previously for HIV, there are no differences in HIV prevalence by whether or not they received the results of their last test.

**Table 14.8 HIV prevalence by other characteristics**

Percentage HIV positive among women and men age 15-49 who ever had sex and were tested for HIV, by whether they had an STI in the past 12 months and by prior testing for HIV, Zambia 2013-14

Characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Sexually transmitted infection in past 12 months</b>						
Had STI or STI symptoms	30.5	556	21.1	667	25.4	1,223
No STI, no symptoms	16.2	12,069	11.9	10,307	14.2	22,376
<b>Prior HIV testing</b>						
Ever tested	17.5	11,209	14.1	7,839	16.1	19,048
Received results	17.4	11,033	14.1	7,348	16.1	18,381
Did not receive results	22.5	176	13.5	491	15.9	667
Never tested	11.1	1,498	8.4	3,231	9.3	4,729
Total 15-49	16.8	12,749	12.4	11,070	14.8	23,819

Note: Total includes 124 women and 97 men for whom information on sexually transmitted infection in past 12 months is don't know or missing and 42 women for whom information on prior HIV testing is missing.  
na = Not applicable

Table 14.9 provides further information about the relationship between prior HIV testing and the actual HIV status of respondents. The results show that about eight in ten individuals who are HIV positive (82 percent) have been tested previously and received the results of their last test (88 percent of women and 72 percent of men). Three percent of HIV-positive respondents have not received the results of their last test, and 15 percent have never been tested; therefore, these respondents pose a risk of transmitting HIV due to lack of knowledge of their status.

**Table 14.9 Prior HIV testing by current HIV status**

Percent distribution of women and men age 15-49 who tested HIV positive and who tested HIV negative by HIV testing status prior to the survey, Zambia 2013-14

HIV testing prior to the survey	Women		Men		Total	
	HIV positive	HIV negative	HIV positive	HIV negative	HIV positive	HIV negative
<b>Previously tested</b>						
Received result of last test	88.0	76.9	72.3	58.3	81.7	67.9
Did not receive result of last test	2.4	1.8	4.8	4.1	3.4	2.9
<b>Not previously tested</b>	9.2	21.1	22.9	37.6	14.7	29.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,216	12,503	1,487	11,652	3,704	24,155

Note: Total includes cases with missing information on previous testing.

Table 14.10 shows HIV prevalence among men age 15-49 by circumcision status, according to background characteristics. Overall, HIV prevalence is slightly lower among men who are circumcised (10 percent) than among uncircumcised men (12 percent), and this pattern is observed across most subgroups. However, the pattern is different in the 15-19, 25-29 and 45-49 age groups; among men living in Eastern and Southern provinces, and among men with no education

Table 14.10 HIV prevalence by male circumcision

Among men age 15-49 who were tested for HIV, the percentage HIV positive by whether circumcised, according to background characteristics, Zambia 2013-14

Background characteristic	Circumcised		Not circumcised	
	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Age</b>				
15-19	5.4	744	3.7	2,497
20-24	7.2	638	7.4	1,667
25-29	10.3	431	10.0	1,461
30-34	11.1	379	14.7	1,460
35-39	14.3	307	18.4	1,281
40-44	18.8	203	21.4	1,136
45-49	19.4	184	19.2	738
<b>Religion</b>				
Catholic	12.1	460	12.5	2,094
Protestant	9.7	2,323	11.3	7,985
Muslim	10.3	63	(18.9)	30
<b>Residence</b>				
Urban	12.2	1,790	16.1	4,332
Rural	6.5	1,097	8.4	5,907
<b>Province</b>				
Central	8.0	145	10.1	967
Copperbelt	14.3	757	17.1	1,571
Eastern	11.0	102	7.5	1,558
Luapula	9.4	179	9.8	650
Lusaka	8.2	642	14.5	2,104
Muchinga	5.6	58	5.9	598
Northern	7.4	77	10.8	827
North Western	5.6	427	9.4	111
Southern	14.7	195	10.5	1,518
Western	9.3	304	15.3	335
<b>Education</b>				
No education	15.1	73	10.7	387
Primary	9.3	819	10.0	4,358
Secondary	9.8	1,627	12.8	4,869
More than secondary	12.0	365	15.7	619
<b>Wealth quintile</b>				
Lowest	5.4	322	6.8	1,649
Second	5.6	413	9.5	1,969
Middle	9.3	378	9.8	2,093
Fourth	12.9	710	15.6	2,346
Highest	11.6	1,063	15.0	2,183
Total 15-49	10.1	2,887	11.7	10,239
50-59	16.6	209	18.3	937
Total 15-59	10.5	3,096	12.2	11,176

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 39 men with missing information on religion and 7 men with missing information on education.

## 14.5 HIV PREVALENCE AMONG COUPLES

A total of 6,791 cohabiting couples were tested for HIV in the 2013 ZDHS. The results are shown in Table 14.11.

Table 14.11 HIV prevalence among couples

Percent distribution of couples living in the same household, both of whom were tested for HIV, by HIV status, according to background characteristics, Zambia 2013-14

Background characteristic	Both HIV positive	Man HIV positive, woman HIV negative	Woman HIV positive, man HIV negative	Both HIV negative	Total	Number
<b>Woman's age</b>						
15-19	1.3	4.0	2.7	92.0	100.0	432
20-29	5.8	5.6	4.8	83.7	100.0	2,722
30-39	11.2	7.0	5.9	75.9	100.0	2,428
40-49	10.1	6.1	5.4	78.3	100.0	1,209
<b>Man's age</b>						
15-19	*	*	*	*	100.0	25
20-29	3.5	4.0	3.2	89.3	100.0	1,548
30-39	7.5	6.8	6.5	79.3	100.0	2,687
40-49	12.6	5.9	4.7	76.8	100.0	1,823
50-59	10.3	8.9	5.6	75.2	100.0	709
<b>Age difference between partners</b>						
Woman older	14.8	8.9	13.0	63.3	100.0	209
Same age/man older by 0-4 years	7.6	4.6	4.4	83.3	100.0	2,580
Man older by 5-9 years	6.2	6.4	5.0	82.4	100.0	2,865
Man older by 10-14 years	11.7	7.0	5.7	75.6	100.0	876
Man older by 15+ years	18.1	12.8	7.2	61.9	100.0	262
<b>Type of union</b>						
Non-polygynous	8.3	6.0	5.5	80.2	100.0	6,108
Polygynous	7.2	6.1	2.6	84.2	100.0	621
<b>Multiple partners in past 12 months<sup>1</sup></b>						
Both no	7.9	6.1	5.2	80.8	100.0	5,366
Man yes, woman no	9.0	6.3	4.6	80.1	100.0	1,362
Woman yes, man no	(19.4)	(0.0)	(19.1)	(61.5)	100.0	48
Both yes	*	*	*	*	100.0	11
<b>Concurrent sexual partners in past 12 months<sup>2</sup></b>						
Both no	8.0	6.0	5.3	80.6	100.0	5,898
Man yes, woman no	9.2	6.8	3.7	80.3	100.0	874
Woman yes, man no	*	*	*	*	100.0	15
Both yes	*	*	*	*	100.0	3
<b>Residence</b>						
Urban	13.5	7.8	8.0	70.7	100.0	2,615
Rural	4.9	5.1	3.5	86.6	100.0	4,176
<b>Province</b>						
Central	6.4	5.5	6.8	81.3	100.0	583
Copperbelt	12.4	8.0	7.0	72.5	100.0	927
Eastern	5.5	3.5	3.0	88.0	100.0	978
Luapula	4.8	6.1	3.5	85.6	100.0	497
Lusaka	12.5	7.8	8.6	71.1	100.0	1,258
Muchinga	3.9	3.5	2.8	89.7	100.0	394
Northern	4.4	7.1	4.0	84.5	100.0	584
North Western	2.7	4.3	2.7	90.3	100.0	292
Southern	9.6	5.5	3.3	81.6	100.0	934
Western	8.7	7.9	6.0	77.4	100.0	344
<b>Woman's education</b>						
No education	5.3	6.7	5.3	82.7	100.0	728
Primary	7.1	5.4	4.4	83.1	100.0	3,846
Secondary	11.3	7.0	6.2	75.5	100.0	1,950
More than secondary	8.7	8.8	9.5	73.1	100.0	261
<b>Man's education</b>						
No education	3.8	7.5	5.4	83.3	100.0	344
Primary	6.7	5.1	3.6	84.6	100.0	3,151
Secondary	9.8	6.6	6.5	77.0	100.0	2,772
More than secondary	11.6	8.4	7.8	72.3	100.0	521
<b>Wealth quintile</b>						
Lowest	2.9	3.7	3.4	89.9	100.0	1,267
Second	4.5	5.3	2.7	87.4	100.0	1,473
Middle	7.5	5.4	3.9	83.1	100.0	1,378
Fourth	13.1	8.1	9.1	69.8	100.0	1,469
Highest	13.0	8.0	6.8	72.1	100.0	1,205
Total couples	8.2	6.1	5.2	80.5	100.0	6,791

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. The table is based on couples for which a valid test result (positive or negative) is available for both partners. Total includes 62 couples with missing information on type of union and 4 couples with missing information on multiple partners in past 12 months.

<sup>1</sup> A respondent is considered to have had multiple sexual partners in the past 12 months if he or she had sexual intercourse with two or more people during this time period. (Respondents with multiple partners include polygynous men who had sexual intercourse with two or more wives.)

<sup>2</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey. (Respondents with concurrent partners include polygynous men who had overlapping sexual partnerships with two or more wives.)

Among cohabiting couples who tested for HIV, both partners tested negative for HIV in a high proportion of couples (81 percent). Both partners were HIV positive in 8 percent of cohabiting couples. Eleven percent of couples were discordant (i.e., one partner was infected and the other was not); in 6 percent of couples, the male partner was infected and the woman was not, while in 5 percent the woman was infected and the man was not.

There are differences by background characteristics. The rate of discordance is highest among couples where the woman is age 30-39 (13 percent) and the man is age 50-59 (15 percent) and couples where the woman is older than the man (22 percent). the rate is also highest in non-polygynous unions (12 percent), among urban couples (16 percent) and couples living in Lusaka (16 percent), among couples in which the woman or the man has more than a secondary education (18 percent and 16 percent, respectively), and among couples in the fourth wealth quintile (17 percent).

**Key Findings**

- Direct estimates of mortality show that the level of adult mortality is higher among men than among women (8.8 deaths and 8.0 deaths per 1,000 population, respectively).
- Twenty-nine percent of women and 33 percent of men are likely to die between exact ages 15 and 50.
- Maternal deaths account for 10 percent of all deaths among women age 15–49. The maternal mortality rate for the seven-year period preceding the survey was 0.74 maternal deaths per 1,000 woman-years of exposure.
- The maternal mortality ratio (MMR) was 398 maternal deaths per 100,000 live births during the seven years preceding the 2013–14 ZDHS. This ratio is significantly lower from the MMR reported in the previous ZDHS surveys (including the 2007 ZDHS), indicating that maternal mortality has decreased in the last nearly two decades as well as in the last seven years.

Following the launch of the Safe Motherhood Initiative in 1987, attention to reproductive health has increased worldwide, as has the need for reliable countrywide estimates of maternal deaths. The estimate of maternal mortality that is most commonly used in developing countries (*pregnancy-related mortality*) is based only on the timing of death relative to pregnancy. Pregnancy-related deaths are any deaths among women during pregnancy or within two months following the termination of a pregnancy, including deaths from accidental or incidental causes. Discussions of pregnancy-related deaths generally include four measures. The *pregnancy-related mortality ratio*, which is the most common measure, is defined as the number of pregnancy-related deaths during a given time period per 100,000 live births during the same time period. The *pregnancy-related mortality rate* refers to the number of pregnancy-related deaths in a given time period per 1,000 woman-years of exposure during the same period. The probability of dying from a pregnancy-related cause during a woman's reproductive life is the *adult lifetime risk of pregnancy-related death*. The final measure is the proportion of all deaths among women that are pregnancy related (*proportion of pregnancy-related deaths*).

The Maternal Mortality Estimation Inter-agency Group (WHO et al., 2014) estimated that, from 1990 to 2013, the global maternal mortality ratio (MMR) declined by 45 percent, from 380 deaths to 210 deaths per 100,000 live births. This translates to an average annual rate of reduction of 2.6 percent. While impressive, this is less than half of the 5.5 percent rate needed to achieve the three-quarters reduction in maternal mortality targeted for 2015 in Millennium Development Goal 5. The number of women and girls who died each year from complications of pregnancy and childbirth declined from 523,000 in 1990 to 289,000 in 2013. Almost all of these deaths (99 percent) occur in developing countries. The risks of dying during pregnancy and childbirth are increased by women's lack of empowerment, education, and access to economic resources, as well as poor nutrition and a heavy physical workload during pregnancy. Social factors include delayed decision making in accessing health services and low status of women in society. Most maternal deaths could be prevented by ensuring access to good-quality maternal health services, such as antenatal and postnatal care, and skilled attendance during childbirth, including emergency obstetric and neonatal care. Prevention of unwanted pregnancies and provision of safe abortion services, as allowed by law, could reduce maternal deaths and injuries caused by unsafe abortions. High-quality family planning services, counselling, and information could further reduce maternal deaths and injuries. Access to

adolescent-friendly reproductive health services greatly reduces teenage pregnancy, which contributes to maternal mortality.

This chapter includes results based on sibling history data collected in the sibling survival module (commonly referred to as the maternal mortality module) of the 2013-14 ZDHS Woman's Questionnaire. In addition to adult mortality rates for five-year age groups, a summary measure ( $_{35q15}$ ) is included that represents the probability of dying between exact ages 15 and 50. Also, data collected in the 1996, 2001-02, 2007, and 2013-14 ZDHS surveys are used to examine trends in adult mortality probabilities.

The term *maternal mortality* used in this chapter (and in previous ZDHS surveys) corresponds to the term *pregnancy-related mortality* as defined by WHO. In keeping with this definition, the sibling survival module used in the DHS surveys measures only the timing of deaths and not the cause. The data collected in the ZDHS questionnaire are based on information about deaths during the two months following a birth.

## 15.1 ASSESSMENT OF DATA QUALITY

To obtain a sibling history, the 2013-14 ZDHS first asked each female respondent to list all children born to her biological mother, starting with the firstborn. The respondent was then asked whether each of these siblings was still alive. For living siblings, the interviewer asked the current age of each sibling. For deceased siblings, the age at death and the number of years since death were recorded. When a respondent could not provide precise information on age at death or years since death, approximate but quantitative answers were accepted. For sisters who died at age 12 or older, three questions were asked to determine whether the death was maternity related: "Was [NAME OF SISTER] pregnant when she died?" and, if the response was negative, "Did she die during childbirth?" and, if not, "Did she die within two months after the end of a pregnancy or childbirth?"

A brief discussion of data quality is warranted here. This discussion refers to tables in Appendix C. One measure of the quality of the data collected is the completeness of information on siblings. Table C.8 shows the number of siblings reported by the respondents and the completeness of the data reported on current age, age at death, and years since death. The table shows that, in the 2013-14 ZDHS, a total of 93,801 siblings were recorded in the sibling histories. The survival status was not reported for 45 siblings (0.0 percent). Among surviving siblings, current age was not reported for 198 siblings (0.3 percent). For 99 percent of deceased siblings, both age at death (AD) and years since death (YSD) were reported. Both AD and YSD were missing in only 0.2 percent of cases. Rather than excluding siblings with missing information from the analysis, the information on the birth order of siblings in conjunction with other information is used to impute the missing data.<sup>1</sup> In addition, the 2013-14 ZDHS data show that deaths among 5 percent of sisters could not be classified as maternal or non-maternal (data not shown separately).

Another crude measure of data quality is the mean number of siblings, or mean sibship size (Table C.9). Sibship size is expected to decline as fertility declines over time. The data show that there has been a general decline in sibship size from the oldest to the youngest age group in line with the long-term decline in fertility observed in Zambia. The sex ratio of the enumerated siblings (the ratio of brothers to sisters multiplied by 100) is 98.8 (Table C.9), which is lower than the sex ratio of 103 that was reported in the

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<sup>1</sup> The imputation procedure is based on the assumption that the reported birth order of the siblings in the birth history is correct. The first step is to calculate birth dates. For each living sibling with a reported age and for each dead sibling with complete information on both age at death and year of death, the birth date is calculated. For a sibling missing these data, a birth date is imputed within the range defined by the birth dates of the bracketing siblings. In the case of living siblings, an age is calculated from the imputed birth date. In the case of dead siblings, if either age at death or year of death is reported, that information is combined with the birth date to produce missing information. If both pieces of information are missing, the age at death is imputed. This imputation is based on the distribution of the ages at death for those whose year of death is unreported but whose age at death is reported.



2010 Population and Housing Census (CSO, 2013). The lower than expected sex ratio in the 2013-14 ZDHS may suggest an underreporting of males but is unlikely to impact MMR estimates.

## 15.2 ESTIMATES OF ADULT MORTALITY

Another way to assess the quality of data used to estimate maternal mortality is to evaluate the plausibility and stability of overall adult mortality estimates. If the estimated rates of overall adult mortality are implausible, rates based on a subset of deaths, maternal mortality in particular, are likely to have serious problems.

The direct estimation of adult mortality uses the reported ages at death and years since death of the respondents' brothers and sisters. Mortality rates are calculated by dividing the number of deaths in each age group of women and men by the total person-years of exposure to the risk of dying in that age group during a specified period prior to the survey. To have a sufficiently large number of adult deaths to generate a robust estimate, the rates are calculated for the seven-year period preceding the survey (roughly 2007-2013). Nevertheless, age-specific mortality rates obtained in this manner are subject to considerable sampling variation.

Table 15.1 shows age-specific mortality rates for women and men age 15-49 for the seven years preceding the survey. Overall, the level of adult mortality is marginally higher among men (8.8 deaths per 1,000 population) than among women (8.0 deaths per 1,000 population). Figure 15.1 shows that, with the exception of the 20-24 and 25-29 age groups, age-specific mortality rates are higher for men than for women. In general, age-specific mortality rates show the expected increases with increasing age among both men and women. The confidence intervals for these rates can be found in Appendix Table B.15. Confidence intervals for many of the five-year mortality rates overlap.

Table 15.1 Adult mortality rates

Direct estimates of female and male mortality rates for the seven years preceding the survey, by five-year age groups, Zambia 2013-14

Age	Deaths	Exposure years	Mortality rates <sup>1</sup>
FEMALE			
15-19	91	37,435	2.44
20-24	166	41,815	3.97
25-29	237	40,132	5.90
30-34	369	34,265	10.77
35-39	337	24,651	13.65
40-44	238	15,162	15.70
45-49	147	8,586	17.15
15-49	1,585	202,044	8.04
MALE			
15-19	103	36,812	2.79
20-24	150	41,254	3.63
25-29	200	40,401	4.94
30-34	404	34,501	11.71
35-39	350	24,827	14.08
40-44	315	14,964	21.06
45-49	182	8,407	21.61
15-49	1,702	201,167	8.84
TOTAL			
15-19	194	74,247	2.61
20-24	316	83,069	3.80
25-29	436	80,533	5.42
30-34	773	68,766	11.24
35-39	686	49,478	13.87
40-44	553	30,126	18.36
45-49	329	16,993	19.36
15-49	3,287	403,211	8.43

<sup>1</sup> Expressed per 1,000 population

<sup>a</sup> Age-adjusted rate

**Figure 15.1 Age-specific mortality rates by sex**

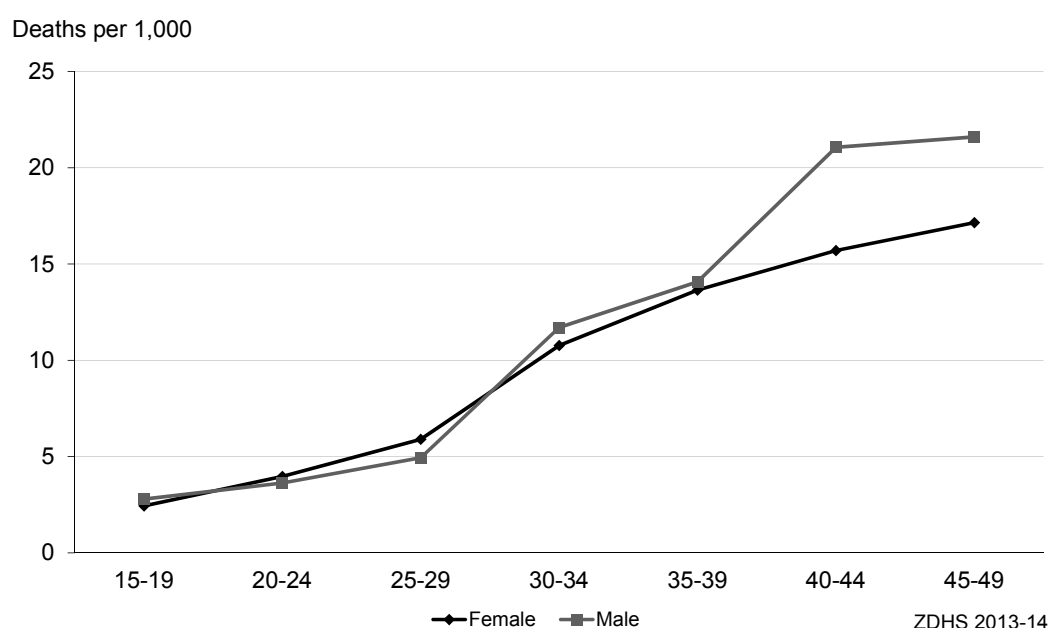


Table 15.2 shows a summary measure of the risk of dying between exact ages 15 and 50 ( ${}_{35}q_{15}$ ). Based on the 2013-14 ZDHS results, 29 percent of women and 33 percent of men are likely to die between age 15 and age 50. Seven-year  ${}_{35}q_{15}$  estimates based on data from the 1996, 2001-02, and 2007 ZDHS surveys show that men and women had a higher probability of dying between exact ages 15 and 50 in all of these survey years than in 2013-14. Confidence intervals for the 2013-14  ${}_{35}q_{15}$  estimates can be found in Appendix Table B.18.

**Table 15.2 Adult mortality probabilities**

The probability of dying between the ages of 15 and 50 among women and men for the 7 years preceding the survey, Zambia 2013-14

Survey	Female	Male
	${}_{35}q_{15}^1$	${}_{35}q_{15}^1$
2013-14 ZDHS	294	330
2007 ZDHS	421	415
2001-02 ZDHS	446	471
1996 ZDHS	353	407

<sup>1</sup> The probability of dying between exact ages 15 and 50 expressed per 1,000 person-years of exposure

### 15.3 ESTIMATES OF MATERNAL MORTALITY

It should be noted that maternal mortality is difficult to measure because large sample sizes are required to calculate accurate estimates. The maternal mortality estimates presented here are subject to large sampling errors because cost and time considerations make it impossible to draw a sample large enough to keep sampling errors reasonably small. Thus, caution should be exercised when interpreting maternal mortality data collected in any survey, and especially when comparing two or more previously conducted surveys. Definite conclusions should be based on the confidence intervals associated with maternal mortality data. Changes can be reported as significantly different only when confidence intervals do not overlap. When confidence intervals overlap, one cannot conclusively state that there has been any change in rates or ratios over the periods being compared.

Table 15.3 presents direct estimates of maternal mortality for the seven-year period preceding the survey. The maternal mortality rate among women age 15-49 is 0.74 maternal deaths per 1,000 woman-years of exposure, a rate 39 percent lower than that reported in the 2007 ZDHS, 49 percent lower than that reported in 2001-02, and 45 percent lower than that reported in 1996. By five-year age groups, the maternal mortality rate is highest among women age 30-34 (1.52). The confidence intervals for maternal mortality rates can be found in Appendix Table B.18.

**Table 15.3 Maternal mortality**

Direct estimates of maternal mortality rates for the seven years preceding the survey, by five-year age groups, Zambia 2013-14

Age	Percentage of female deaths that are maternal	Maternal deaths	Exposure years	Maternal mortality rate <sup>1</sup>
15-19	4.2	4	37,435	0.10
20-24	13.4	22	41,815	0.53
25-29	7.0	17	40,132	0.41
30-34	14.1	52	34,265	1.52
35-39	9.6	32	24,651	1.31
40-44	5.9	14	15,162	0.92
45-49	6.9	10	8,586	1.18
15-49	9.5	151	202,044	0.74
General fertility rate (GFR) <sup>2</sup>		185		
Lifetime risk of maternal death <sup>3</sup>		0.023 <sup>a</sup>		
Confidence Intervals				
2013-14 ZDHS maternal mortality ratio (MMR) <sup>4</sup>		398	323	474
2007 ZDHS maternal mortality ratio (MMR) <sup>4</sup>		591	450	732
2001-02 ZDHS maternal mortality ratio (MMR) <sup>4</sup>		729	586	872
1996 ZDHS maternal mortality ratio (MMR) <sup>4</sup>		649	519	780

<sup>1</sup> Expressed per 1,000 woman-years of exposure

<sup>2</sup> Expressed per 1,000 women age 15-49

<sup>3</sup> Calculated as  $1 - (1 - \text{MMR})^{\text{TFR}}$  where TFR represents the total fertility rate for the 10 years preceding the survey

<sup>4</sup> Expressed per 100,000 live births; calculated as the age-adjusted maternal mortality rate times 100 divided by the age-adjusted general fertility rate

<sup>a</sup> Age-adjusted rate

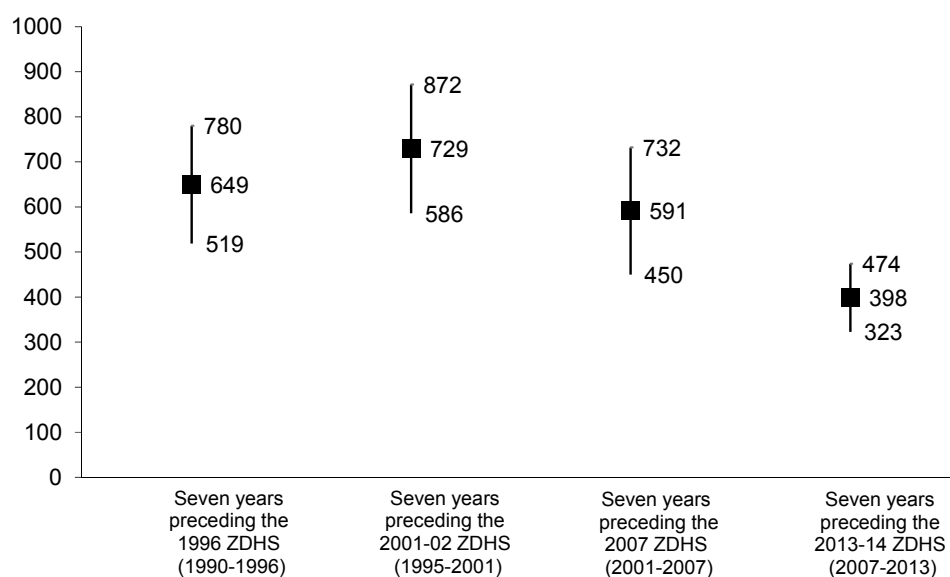
In the 2013-14 ZDHS, maternal deaths represent 9.5 percent of all deaths among women age 15-49, as compared with 9.2 percent in 2007, 10.0 percent in 2001-02, and 13.0 percent in 1996. The percentage of female deaths that are maternity related is relatively higher in the 20-24 and 30-34 age groups than in the other age groups.

The maternal mortality rate can be converted to a maternal mortality ratio (expressed as deaths per 100,000 live births) by dividing the rate by the general fertility rate (GFR) of 185 that prevailed during the same time period and multiplying the result by 100,000. This procedure produces a maternal mortality ratio (MMR) of 398 deaths per 100,000 live births during the seven-year period preceding the survey (Table 15.3). Thus, for every 1,000 live births in Zambia during the seven years preceding the 2013-14 ZDHS, about four women died during pregnancy, during childbirth, or within two months of childbirth. The lifetime risk of maternal death (0.023) indicates that about 2 percent of women die during pregnancy, during childbirth, or within two months of childbirth.

Table 15.3 and Figure 15.2 show a comparison of maternal mortality ratios for all four ZDHS surveys with their respective confidence intervals. The estimated maternal mortality ratio calculated for the seven years preceding the survey is lower in the 2013-14 ZDHS (398) than in all of the previous ZDHS surveys. There is no overlap between the confidence intervals surrounding the MMR estimates for the 2013-14 ZDHS and the surveys conducted in 2001-02 and 1996. The difference in the MMR estimates between the 2013-14 ZDHS and the 2001-02 and 1996 surveys is statistically significant and not likely to be due to sampling error. Therefore, it can be concluded that the MMR has decreased between the 1996 and 2001-02 surveys and the 2013-14 survey.

However, as shown in Figure 15.2, the confidence intervals surrounding the MMRs calculated for the 2013-14 ZDHS and the 2007 ZDHS overlap. Considering that it is still possible for a difference to be statistically significant even if the confidence intervals overlap, a statistical test of significance was conducted. According to the results of this test, the difference between the 2007 and 2013-14 MMR estimates is statistically significant and not likely to be due to sampling error.<sup>2</sup> Therefore, it can be concluded that the MMR has decreased between the 2007 and 2013-14 surveys.

**Figure 15.2 Maternal mortality ratios (MMR) with confidence intervals for the seven years preceding the 1996, 2001-02, 2007, and 2013-14 ZDHS surveys (per 100,000 live births)**



<sup>2</sup> The difference in the MMR between the two surveys is 193 deaths per 100,000 live births. The confidence interval for this difference (0.016 and 2.41) does not include zero, indicating that the difference between the two estimates is statistically significant.

### Key Findings

- One in three (35 percent) currently married women who earn cash for their work make independent decisions about how to spend their earnings.
- Fifty-nine percent of currently married women whose husband receives cash earnings say that they decide jointly with their husband about the use of his earnings.
- Seventy-four percent of women participate in decisions regarding their own health, as compared with 89 percent of men.
- One in two (53 percent) women participate in four specified decisions pertaining to their own health, major household purchases, purchases for daily household needs, and visits to their family or relatives.
- Empowerment is strongest among women who participate in all four specified decisions, who agree that wife beating is not justified for any reason, and who agree that a woman can refuse sexual intercourse with her husband for any reason.
- Contraceptive use is positively associated with all three empowerment indices measured in the 2013-14 ZDHS.

The 1994 International Conference on Population and Development declared that “advancing gender equality and equity and the empowerment of women and the elimination of all kinds of violence against women, and ensuring women’s ability to control their own fertility...are cornerstones of population and development-related programmes” (United Nations, 1994). Women’s empowerment has been defined to encompass women having a sense of self-worth, access to opportunities and resources, choices and the ability to exercise them, control over their own lives, and influence over the direction of social change (United Nations Population Information Network, 1995).

Zambia is a signatory to a number of international conventions on human rights, women’s rights, and children’s rights, as well as to agreements on international goals regarding education, health, and poverty eradication. As a signatory to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), adopted in 1979 by the United Nations General Assembly, the government of Zambia engages in efforts to promote nondiscrimination, gender equity, and social justice (Ministry of Justice, 1998). The 2003 national plan of action approved by the government for the effective implementation of CEDAW and other instruments related to human rights guarantees all rights as per the CEDAW covenants.

Data from the 2013-14 ZDHS discussed in Chapter 3 show that women in Zambia are predominantly engaged in agriculture and sales and services; few have skilled manual jobs, and only a small percentage are engaged in the professional, technical, and managerial fields. Furthermore, women lag behind men in educational attainment, literacy, and exposure to mass media, all of which are critical contributors to women’s empowerment and exert considerable influence on strengthening women’s position in the household and in society in general.

This chapter presents additional data on the status of women in Zambia, including information on gender differences in employment, access to and control over cash earnings, asset ownership, participation in household decisionmaking, and the relative earnings of husbands and wives. The chapter also explores how demographic and health indicators vary according to women’s empowerment, as measured by the

number of decisions in which women participate and their ability to refuse sexual intercourse with their husband. The ranking of women on these indices has been found to be associated with demographic and health outcomes including contraceptive use, unmet need for family planning, and access to reproductive health care services.

## 16.1 EMPLOYMENT AND FORM OF EARNINGS

Employment, particularly employment for cash, and control over how earnings are used are important indicators of empowerment for women and men. Table 16.1 shows the percentage of currently married women and men age 15-49 who were employed at any time in the 12 months before the survey and the percent distribution of employed women and men by type of earnings. The table shows that 59 percent of currently married women and almost all (97 percent) currently married men were employed in the 12 months preceding the survey. Younger women are less likely to be employed than older women, while variations by age among men are less pronounced. Employed women and men differ greatly in the type of earnings they receive for their work. Eighty-three percent of men receive cash only or cash and in-kind payment, as compared with only 63 percent of women. Women are more than twice as likely as men to not be paid at all for their work (35 percent versus 16 percent). Thus, not only are currently married women much less likely than currently married men to be employed, they are also much less likely to be paid for the work they perform.

Table 16.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and the percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Zambia 2013-14

	Among currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings						
	Percentage employed in past 12 months	Number of respondents		Cash and in-kind	In-kind only	Not paid	Missing/ don't know		Number of women
Age			Cash only					Total	
WOMEN									
15-19	41.9	613	40.9	5.4	3.1	50.6	0.0	100.0	257
20-24	47.4	1,684	51.2	6.0	0.7	41.8	0.2	100.0	799
25-29	56.4	2,181	58.9	5.2	0.9	34.9	0.1	100.0	1,230
30-34	63.5	1,976	60.4	6.0	1.2	31.9	0.5	100.0	1,255
35-39	64.6	1,572	62.5	5.6	0.7	31.0	0.2	100.0	1,016
40-44	70.9	1,102	55.4	7.7	1.1	35.5	0.3	100.0	782
45-49	69.5	730	54.6	8.3	0.3	36.5	0.1	100.0	507
Total 15-49	59.3	9,859	57.2	6.2	1.0	35.4	0.2	100.0	5,846
MEN									
15-19	93.4	36	(69.2)	(13.2)	(0.0)	(17.6)	(0.0)	(100.0)	34
20-24	93.2	523	62.5	14.7	0.3	22.5	0.0	100.0	488
25-29	96.5	1,235	70.0	11.1	0.4	18.3	0.3	100.0	1,192
30-34	97.8	1,613	74.8	11.2	0.6	13.2	0.2	100.0	1,579
35-39	97.3	1,496	72.9	11.7	0.7	14.5	0.2	100.0	1,456
40-44	97.8	1,247	69.4	13.5	0.9	16.3	0.0	100.0	1,219
45-49	97.8	884	68.8	13.9	1.2	16.0	0.1	100.0	865
Total 15-49	97.1	7,035	70.9	12.3	0.7	16.0	0.2	100.0	6,832
50-59	94.6	1,103	63.2	14.1	1.3	21.3	0.2	100.0	1,043
Total 15-59	96.8	8,137	69.9	12.5	0.8	16.7	0.2	100.0	7,874

Note: Figures in parentheses are based on 25-49 unweighted cases.

## 16.2 CONTROL OVER CASH EARNINGS AND RELATIVE MAGNITUDE OF EARNINGS

Control over cash earnings is another dimension of empowerment. Currently married women who earn cash for their work were asked who the main decisionmaker is regarding the use of their earnings. They were also asked about the magnitude of their earnings relative to their husband's earnings. This information provides insight into women's empowerment within the family and the extent of their control

over resources. It is expected that women who are employed and who receive cash earnings will be more likely to have control over household resources.

## 16.2.1 Women's Control over Their Cash Earnings

Table 16.2.1 shows the percent distribution of currently married women who received cash earnings in the past 12 months, according to the person who controls their earnings and their perception of the magnitude of their earnings relative to those of their husband. Only a third (35 percent) of currently married women who earn cash said that they themselves mainly decide how their cash earnings are used; one in two (49 percent) indicated that the decision is made jointly with their husband, and 16 percent said that the decision is made mainly by their husband. The proportion of currently married women who earn cash for their work and make independent decisions on the use of their cash earnings has decreased slightly from the 38 percent figure reported in 2007, whereas the proportion of women who say that they jointly decide with their husband on the use of their own earnings has increased from the 2007 figure of 41 percent. Overall, the proportion of women who participate alone or jointly with their husband in decisions about the use of their earnings has increased since 2007, from 79 percent to 84 percent.

**Table 16.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings**

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Zambia 2013-14

Background characteristic	Person who decides how the wife's cash earnings are used:						Wife's cash earnings compared with husband's cash earnings:						Total	Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	More	Less	About the same	Husband has no earnings	Don't know/missing			
<b>Age</b>														
15-19	23.5	48.1	26.9	1.1	0.4	100.0	6.3	72.3	17.6	1.8	2.0	100.0	119	
20-24	35.2	41.9	22.5	0.0	0.5	100.0	7.7	76.1	12.4	2.0	1.7	100.0	457	
25-29	34.8	49.8	15.1	0.0	0.3	100.0	10.0	72.9	14.5	1.8	0.9	100.0	789	
30-34	34.9	49.3	15.5	0.0	0.3	100.0	11.3	69.3	15.5	2.8	1.1	100.0	834	
35-39	36.6	49.5	13.5	0.0	0.4	100.0	13.6	64.2	17.6	2.7	1.9	100.0	692	
40-44	35.0	50.5	14.1	0.4	0.1	100.0	18.2	59.8	17.7	2.8	1.5	100.0	493	
45-49	32.8	53.1	14.0	0.1	0.0	100.0	17.7	56.4	18.1	6.3	1.6	100.0	320	
<b>Number of living children</b>														
0	32.0	50.8	15.4	0.9	0.9	100.0	9.9	64.2	21.6	2.6	1.7	100.0	145	
1-2	32.9	51.4	15.3	0.0	0.5	100.0	11.8	71.0	13.3	2.1	1.8	100.0	1,080	
3-4	39.3	45.6	15.0	0.0	0.1	100.0	11.7	70.7	14.0	2.4	1.2	100.0	1,196	
5+	32.2	49.9	17.5	0.2	0.2	100.0	13.6	62.5	19.2	3.6	1.2	100.0	1,283	
<b>Residence</b>														
Urban	43.2	48.7	7.7	0.0	0.3	100.0	13.9	70.5	10.7	3.1	1.8	100.0	1,857	
Rural	26.1	49.3	24.3	0.2	0.2	100.0	10.7	64.9	21.0	2.4	1.0	100.0	1,846	
<b>Province</b>														
Central	35.6	52.1	12.3	0.0	0.0	100.0	7.1	70.0	20.2	2.0	0.6	100.0	415	
Copperbelt	38.7	49.4	11.6	0.0	0.2	100.0	13.2	68.8	12.2	4.2	1.6	100.0	646	
Eastern	25.0	37.8	37.2	0.0	0.0	100.0	18.4	59.2	18.5	3.4	0.5	100.0	287	
Luapula	24.7	50.5	23.7	0.4	0.7	100.0	5.9	57.4	33.0	1.7	1.9	100.0	317	
Lusaka	45.5	49.5	4.8	0.0	0.2	100.0	15.4	68.9	10.9	3.1	1.8	100.0	804	
Muchinga	27.5	37.0	35.5	0.0	0.0	100.0	11.3	67.8	16.4	4.1	0.5	100.0	145	
Northern	22.9	56.4	20.3	0.0	0.4	100.0	7.6	59.7	29.2	0.6	2.9	100.0	358	
North Western	40.4	46.4	11.6	0.0	1.7	100.0	13.0	70.0	10.0	5.4	1.7	100.0	100	
Southern	36.6	43.0	19.7	0.4	0.3	100.0	15.6	78.3	3.4	2.0	0.8	100.0	489	
Western	20.4	70.6	9.0	0.0	0.0	100.0	9.4	70.8	17.5	1.9	0.5	100.0	141	
<b>Education</b>														
No education	37.8	39.5	22.1	0.6	0.0	100.0	10.4	63.6	20.9	4.5	0.5	100.0	312	
Primary	33.6	46.8	19.3	0.1	0.2	100.0	11.1	67.4	16.9	3.2	1.3	100.0	1,929	
Secondary	37.7	49.7	12.3	0.0	0.3	100.0	11.5	72.9	12.1	1.9	1.6	100.0	1,117	
More than secondary	27.8	67.6	3.8	0.0	0.8	100.0	23.3	55.8	17.5	1.1	2.3	100.0	345	
<b>Wealth quintile</b>														
Lowest	24.8	47.6	27.2	0.0	0.4	100.0	8.5	61.9	23.9	3.6	2.2	100.0	452	
Second	27.9	46.2	25.6	0.2	0.2	100.0	8.8	66.8	20.8	2.5	1.1	100.0	662	
Middle	31.5	47.0	20.9	0.3	0.3	100.0	10.8	68.5	16.9	2.8	1.0	100.0	707	
Fourth	43.4	45.2	11.4	0.0	0.0	100.0	12.6	70.1	13.2	2.9	1.1	100.0	879	
Highest	38.3	56.2	5.1	0.0	0.5	100.0	17.2	68.1	10.6	2.3	1.8	100.0	1,003	
Total	34.7	49.0	16.0	0.1	0.3	100.0	12.3	67.7	15.9	2.7	1.4	100.0	3,703	

The proportion of women who make independent decisions about the use of their earnings is higher among those in urban than rural areas (43 percent and 26 percent, respectively). Surprisingly, as women's level of education increases, they are generally less likely to make sole decisions on the use of their earnings and more likely to make joint decisions with their husband. With respect to wealth, sole decision making increases from 25 percent among women in the lowest wealth quintile to 43 percent among those in the fourth quintile before declining to 38 percent among those in the highest quintile. Women in Lusaka (46 percent) are most likely to decide by themselves on how to spend their cash earnings, while women in Western (20 percent) are least likely to do so.

Table 16.2.1 also shows women's perception of their cash earnings relative to their husbands' earnings. Among currently married women who earn cash, 68 percent say that they earn less than their husband, 12 percent say that they earn more than their husband, and 16 percent say that they earn about the same amount as their husband. Thus, about one in four (28 percent) women in Zambia with cash earnings believe that they earn about the same as or more than their husband.

### **16.2.2 Control over Husband's Cash Earnings**

Currently married men age 15-49 who receive cash earnings were asked who—the men themselves, their wife, the husband and wife jointly, or someone else—decides how their own cash earnings are used. In addition, currently married women were asked who decides how their husband's cash earnings are used. Table 16.2.2 shows that 64 percent of currently married men who receive cash earnings report that they decide jointly with their wives how their earnings will be used, while 29 percent say that they mainly make these decisions themselves. Seven percent of men say that decisions on how their earnings are used are mainly made by their wife.

The proportion of employed men who receive cash earnings and who say that they make decisions about the use of their earnings jointly with their wife is highest among the most educated (84 percent) and lowest among the least educated (57 percent). About three in four (76 percent) men in the highest wealth quintile say that they make decisions about the use of their earnings jointly with their wife. The proportion of men making decisions alone about the use of their income is higher in rural than in urban areas and decreases with increasing education, from 36 percent among those with no education to 12 percent among those with more than a secondary education.

Table 16.2.2 also shows women's responses on who makes decisions about their husband's earnings. About three in five (59 percent) currently married women whose husbands receive cash earnings say that they decide jointly with their husband about the use of his earnings, 10 percent say that they mainly decide by themselves, and 31 percent say that their husband alone decides.

A comparison between women's responses about the main decisionmaker regarding the use of their husband's earnings and men's responses about the use of their own earnings shows similarities. For instance, a similar proportion of women and men (59 percent and 64 percent, respectively) say that they jointly make the decision with their spouse.

The pattern of variation by background characteristics in men's responses about the use of their earnings is similar to the pattern observed with women's responses to the use of their earnings. In general, joint decisionmaking increases with increasing education and wealth.



Table 16.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how husband's cash earnings are used, according to background characteristics, Zambia 2013-14

Background characteristic	Men							Women						
	Person who decides how husband's cash earnings are used:							Person who decides how husband's cash earnings are used:						
	Mainly wife	Hus- band and wife jointly	Mainly hus- band	Other	Missing	Total	Number	Mainly wife	Hus- band and wife jointly	Mainly hus- band	Other	Missing	Total	Number
Age														
15-19	*	*	*	*	*	100.0	28	11.5	47.7	39.9	0.4	0.5	100.0	578
20-24	8.5	54.6	34.2	1.9	0.8	100.0	377	9.2	57.5	32.8	0.3	0.2	100.0	1,631
25-29	6.3	59.5	34.0	0.1	0.1	100.0	966	10.9	57.9	30.9	0.2	0.1	100.0	2,121
30-34	7.5	62.8	29.3	0.1	0.3	100.0	1,359	8.2	62.8	28.5	0.2	0.3	100.0	1,915
35-39	6.4	68.8	24.5	0.1	0.1	100.0	1,231	9.4	60.3	30.2	0.0	0.1	100.0	1,505
40-44	6.2	64.2	29.6	0.0	0.0	100.0	1,010	10.2	58.4	31.2	0.0	0.1	100.0	1,068
45-49	7.3	70.1	22.5	0.0	0.2	100.0	714	10.5	58.3	31.2	0.0	0.0	100.0	691
Number of living children														
0	5.0	59.0	34.5	1.0	0.5	100.0	277	11.7	55.0	32.5	0.3	0.3	100.0	462
1-2	7.2	64.0	28.4	0.2	0.3	100.0	1,776	10.8	59.7	29.0	0.3	0.2	100.0	2,993
3-4	7.4	64.7	27.6	0.2	0.1	100.0	1,656	10.4	59.1	30.3	0.0	0.2	100.0	2,954
5+	6.4	64.5	28.9	0.1	0.2	100.0	1,975	7.9	57.8	34.1	0.1	0.1	100.0	3,100
Residence														
Urban	7.2	67.8	24.8	0.1	0.1	100.0	2,660	13.1	65.2	21.4	0.0	0.2	100.0	3,866
Rural	6.6	60.8	32.0	0.3	0.3	100.0	3,024	7.5	54.2	37.9	0.2	0.2	100.0	5,642
Province														
Central	10.1	47.7	40.4	1.8	0.0	100.0	462	7.3	57.3	34.7	0.5	0.2	100.0	868
Copperbelt	7.0	73.6	19.1	0.0	0.4	100.0	918	11.1	64.5	24.2	0.1	0.1	100.0	1,412
Eastern	4.1	56.9	38.6	0.1	0.3	100.0	685	7.8	45.4	46.7	0.0	0.1	100.0	1,245
Luapula	2.8	73.8	23.2	0.2	0.0	100.0	389	5.6	63.3	30.8	0.0	0.2	100.0	708
Lusaka	5.0	68.9	26.1	0.0	0.1	100.0	1,284	15.3	67.4	17.0	0.0	0.3	100.0	1,746
Muchinga	4.5	63.6	31.9	0.0	0.0	100.0	251	6.0	43.3	50.4	0.2	0.0	100.0	563
Northern	5.1	68.4	26.2	0.0	0.4	100.0	433	6.1	58.6	34.8	0.3	0.2	100.0	813
North Western	5.3	56.5	36.5	0.0	1.7	100.0	129	9.2	61.4	28.9	0.0	0.4	100.0	380
Southern	11.7	58.2	29.8	0.1	0.1	100.0	888	10.2	59.2	30.2	0.3	0.2	100.0	1,312
Western	13.7	57.4	28.9	0.0	0.0	100.0	245	11.5	54.1	33.9	0.2	0.2	100.0	461
Education														
No education	6.6	56.8	36.1	0.5	0.0	100.0	254	8.1	50.1	41.4	0.2	0.2	100.0	1,006
Primary	7.3	60.0	32.1	0.2	0.2	100.0	2,391	9.2	55.1	35.3	0.2	0.2	100.0	5,226
Secondary	7.2	63.8	28.7	0.1	0.2	100.0	2,420	11.1	65.3	23.3	0.1	0.1	100.0	2,831
More than secondary	4.1	84.0	11.5	0.2	0.3	100.0	619	11.1	78.2	10.4	0.0	0.3	100.0	444
Wealth quintile														
Lowest	6.2	56.0	37.4	0.0	0.4	100.0	825	8.3	47.2	43.9	0.2	0.4	100.0	1,776
Second	7.6	60.3	31.6	0.3	0.2	100.0	1,059	6.5	55.2	38.0	0.2	0.1	100.0	1,898
Middle	7.2	60.0	32.2	0.3	0.3	100.0	1,114	8.9	56.8	34.0	0.3	0.1	100.0	1,904
Fourth	7.7	63.8	28.1	0.3	0.1	100.0	1,386	11.9	63.0	24.8	0.2	0.2	100.0	2,015
Highest	5.5	76.1	18.2	0.0	0.1	100.0	1,300	13.0	70.1	16.9	0.0	0.1	100.0	1,915
Total 15-49	6.9	64.1	28.6	0.2	0.2	100.0	5,684	9.8	58.7	31.2	0.2	0.2	100.0	9,508
50-59	7.2	67.2	24.5	0.2	0.9	100.0	805	na	na	na	na	na	na	na
Total 15-59	6.9	64.5	28.1	0.2	0.3	100.0	6,489	na	na	na	na	na	na	na

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

### 16.2.3 Women's Earnings Relative to Their Husband's Earnings

The level of women's earnings relative to their husband's earnings is expected to be associated with women's control over their own and their husband's earnings. To examine this association, Table 16.3 shows the percent distribution of currently married women with cash earnings by the person who has the main say in the use of their earnings and the distribution of currently married women by the person who has the main say in the use of their husband's earnings, according to women's perception of the magnitude of their own earnings relative to their husband's earnings.

**Table 16.3 Women's control over their own earnings and over those of their husbands**

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Zambia 2013-14

Women's earnings relative to husband's earnings	Person who decides how the wife's cash earnings are used:							Person who decides how the husband's cash earnings are used:							Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	Number	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total		
More than husband	37.2	50.3	12.4	0.1	0.0	100.0	456	19.3	59.1	21.6	0.0	0.0	100.0	456	
Less than husband	38.6	44.7	16.7	0.1	0.0	100.0	2,506	10.0	61.7	28.2	0.1	0.0	100.0	2,506	
Same as husband	10.7	70.9	18.4	0.0	0.0	100.0	588	5.7	72.3	22.0	0.0	0.0	100.0	588	
Husband has no cash earnings or did not work	61.1	31.7	4.5	1.8	0.9	100.0	101	na	na	na	na	na	na	na	
Woman worked but has no cash earnings	na	na	na	na	na	na	na	8.1	54.8	36.7	0.2	0.2	100.0	2,003	
Woman did not work	na	na	na	na	na	na	na	9.9	56.7	32.9	0.2	0.3	100.0	3,903	
Total <sup>1</sup>	34.7	49.0	16.0	0.1	0.3	100.0	3,703	9.8	58.7	31.2	0.2	0.2	100.0	9,508	

na = Not applicable

<sup>1</sup> Includes 52 cases where a woman does not know whether she earned more or less than her husband

The data show that women's participation in the use of their own and their husband's earnings varies by their relative earnings. The most consistent finding is that women who earn about the same as their husband are most likely to decide jointly with their husband about the use of both their own earnings (71 percent) and their husband's earnings (72 percent). Women who earn more than their husband are more likely than other women to be the main decisionmaker about the use of their husband's earnings (19 percent), while women who earn more and women who earn less than their husbands are about equally likely to be the main decisionmakers about their own earnings (37 percent versus 39 percent).

### 16.3 WOMEN'S AND MEN'S OWNERSHIP OF SELECTED ASSETS

Ownership of assets, particularly high-value assets, has many beneficial effects for households, including protection against financial ruin. Women's individual ownership of assets enables their economic empowerment and provides protection in the case of marital dissolution or abandonment. The 2013-14 ZDHS collected information on women's and men's ownership (alone, jointly, or alone and jointly) of two high-value assets, namely land and a house.

Table 16.4.1 shows that 54 percent of women age 15-49 do not own a house and 67 percent do not own any land. Nine percent of women own a house alone, and 7 percent own land alone. Notably, women who own either of these assets appear to primarily own them jointly with someone else.

A comparable proportion of men and women own a house or land. As shown in Table 16.4.2, 42 percent of men age 15-49 own a house alone and/or jointly, and 34 percent own land alone and/or jointly (as compared with 46 percent and 33 percent of women, respectively).

Women's ownership of a house and land increases with age but decreases in general with increasing wealth and education. Women in rural areas and those from Western are more likely than urban women and women in other provinces to own a house and land by themselves.

Similarly, men in rural areas are more likely than men in urban areas to own a house and land. Men's ownership of a house or land declines with increasing education and, surprisingly, increasing wealth.

Table 16.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Zambia 2013-14

Background characteristic	Percentage who own a house:			Percent-age who do not own a house	Missing	Total	Percentage who own land:			Percent-age who do not own land	Missing	Total	Number
	Alone	Jointly	Alone and jointly				Alone	Jointly	Alone and jointly				
<b>Age</b>													
15-19	3.0	8.4	2.4	86.2	0.0	100.0	1.2	5.4	1.7	91.7	0.0	100.0	3,625
20-24	6.0	24.9	4.3	64.8	0.0	100.0	3.7	17.9	3.4	74.9	0.2	100.0	3,006
25-29	7.4	33.7	7.6	51.2	0.2	100.0	5.7	24.5	4.8	64.6	0.3	100.0	2,813
30-34	10.6	40.0	8.0	41.4	0.1	100.0	7.1	28.2	6.2	58.3	0.3	100.0	2,475
35-39	14.0	41.5	8.2	36.1	0.1	100.0	10.9	28.8	5.6	54.4	0.3	100.0	2,009
40-44	19.9	46.4	7.8	25.8	0.1	100.0	15.1	34.7	6.2	43.8	0.2	100.0	1,464
45-49	21.4	48.2	11.0	19.3	0.1	100.0	16.5	30.7	8.3	44.4	0.1	100.0	1,018
<b>Residence</b>													
Urban	5.9	15.6	4.4	74.0	0.1	100.0	3.7	9.0	2.9	84.1	0.3	100.0	7,585
Rural	12.5	43.2	7.8	36.5	0.1	100.0	9.3	32.1	5.9	52.5	0.2	100.0	8,826
<b>Province</b>													
Central	11.2	28.9	7.8	52.1	0.1	100.0	5.7	23.8	5.5	64.6	0.4	100.0	1,467
Copperbelt	7.3	20.2	1.9	70.6	0.0	100.0	4.4	12.5	1.2	81.4	0.4	100.0	2,836
Eastern	9.6	40.0	10.7	39.6	0.1	100.0	4.4	14.3	6.7	74.5	0.1	100.0	1,930
Luapula	9.8	47.8	8.2	34.2	0.0	100.0	8.7	44.4	7.3	39.6	0.0	100.0	1,143
Lusaka	4.1	12.4	7.5	75.9	0.1	100.0	3.2	6.7	5.0	84.8	0.2	100.0	3,266
Muchinga	10.6	45.6	4.8	39.0	0.0	100.0	8.6	39.5	3.6	48.1	0.1	100.0	868
Northern	9.5	49.0	5.6	35.8	0.1	100.0	8.0	45.8	5.3	40.8	0.2	100.0	1,200
North Western	15.1	25.5	9.8	49.4	0.3	100.0	16.0	26.0	8.9	49.0	0.2	100.0	713
Southern	6.8	43.0	3.6	46.5	0.1	100.0	5.6	26.4	2.1	65.8	0.1	100.0	2,007
Western	30.1	24.8	5.9	39.1	0.1	100.0	21.0	21.1	4.5	53.3	0.1	100.0	980
<b>Education</b>													
No education	15.8	47.7	8.6	28.0	0.0	100.0	10.4	29.3	6.6	53.7	0.1	100.0	1,375
Primary	11.4	40.0	7.5	41.0	0.1	100.0	8.2	29.2	5.4	57.0	0.2	100.0	7,685
Secondary	6.0	17.3	4.3	72.3	0.0	100.0	3.9	11.8	2.9	81.2	0.2	100.0	6,521
More than secondary	7.5	16.2	5.3	70.7	0.3	100.0	8.6	12.7	5.2	73.2	0.3	100.0	830
<b>Wealth quintile</b>													
Lowest	19.4	43.2	6.8	30.5	0.1	100.0	13.3	33.2	5.3	47.9	0.2	100.0	2,859
Second	11.9	46.1	8.1	33.8	0.1	100.0	8.8	33.7	6.4	51.1	0.0	100.0	2,861
Middle	8.8	37.2	7.5	46.5	0.0	100.0	5.9	26.8	5.2	61.9	0.2	100.0	3,077
Fourth	4.8	19.3	5.6	70.2	0.1	100.0	3.5	12.1	3.4	80.8	0.3	100.0	3,510
Highest	5.2	15.0	4.0	75.6	0.1	100.0	4.0	8.7	3.0	84.0	0.3	100.0	4,103
<b>Total</b>	9.4	30.4	6.2	53.8	0.1	100.0	6.7	21.4	4.5	67.1	0.2	100.0	16,411

Table 16.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of housing and land, according to background characteristics, Zambia 2013-14

Background characteristic	Percentage who own a house:			Percentage who do not own a house	Missing	Total	Percentage who own land:			Percentage who do not own land	Missing	Total	Number
	Alone	Jointly	Alone and jointly				Alone	Jointly	Alone and jointly				
<b>Age</b>													
15-19	4.5	2.9	0.4	92.2	0.0	100.0	3.2	1.8	0.5	94.5	0.0	100.0	3,337
20-24	15.8	6.8	3.0	74.2	0.2	100.0	11.8	5.5	2.4	80.2	0.1	100.0	2,335
25-29	27.5	15.2	4.7	52.6	0.0	100.0	23.6	11.7	3.8	60.7	0.2	100.0	1,944
30-34	29.0	19.2	9.0	42.7	0.1	100.0	25.1	14.3	7.9	52.6	0.1	100.0	1,927
35-39	32.7	23.6	8.9	34.7	0.0	100.0	26.2	18.3	7.1	48.4	0.0	100.0	1,664
40-44	36.8	23.7	10.4	28.9	0.1	100.0	29.5	18.7	8.3	43.4	0.2	100.0	1,384
45-49	38.9	27.5	9.7	23.9	0.0	100.0	32.3	22.4	8.5	36.3	0.5	100.0	970
<b>Residence</b>													
Urban	9.9	7.7	3.2	79.1	0.1	100.0	7.9	5.1	2.3	84.5	0.2	100.0	6,326
Rural	33.4	19.6	7.4	39.5	0.1	100.0	27.4	15.9	6.5	50.2	0.1	100.0	7,235
<b>Province</b>													
Central	16.9	23.9	6.3	52.6	0.3	100.0	14.9	17.9	4.9	62.3	0.0	100.0	1,153
Copperbelt	13.5	8.5	2.2	75.8	0.0	100.0	9.6	6.8	1.1	82.5	0.0	100.0	2,395
Eastern	19.3	25.4	11.8	43.5	0.1	100.0	15.4	15.7	9.4	59.5	0.1	100.0	1,710
Luapula	24.1	21.9	13.0	40.9	0.0	100.0	23.2	18.2	13.0	45.5	0.1	100.0	855
Lusaka	5.6	8.9	4.2	81.2	0.1	100.0	6.1	5.2	2.6	85.7	0.4	100.0	2,844
Muchinga	33.1	17.9	7.9	41.1	0.0	100.0	32.3	15.8	6.9	44.9	0.2	100.0	680
Northern	34.8	18.0	2.7	44.4	0.0	100.0	32.5	17.1	5.2	44.9	0.3	100.0	929
North Western	46.3	9.1	2.4	41.8	0.3	100.0	42.0	9.2	2.4	46.1	0.3	100.0	557
Southern	44.6	2.8	0.4	52.3	0.0	100.0	31.6	2.7	0.2	65.5	0.0	100.0	1,771
Western	35.3	24.4	11.8	28.4	0.0	100.0	19.4	24.4	11.1	45.0	0.0	100.0	668
<b>Education</b>													
No education	31.8	32.8	9.4	26.0	0.0	100.0	22.2	22.6	7.9	47.4	0.0	100.0	500
Primary	29.3	17.9	7.5	45.3	0.0	100.0	23.9	13.9	6.2	56.0	0.1	100.0	5,365
Secondary	17.7	10.3	3.8	68.1	0.0	100.0	14.3	7.7	3.3	74.7	0.1	100.0	6,638
More than secondary	12.9	9.2	3.4	74.2	0.3	100.0	13.6	9.6	2.6	73.9	0.3	100.0	1,058
<b>Wealth quintile</b>													
Lowest	36.1	25.5	9.6	28.8	0.0	100.0	28.9	20.1	8.7	42.2	0.1	100.0	2,038
Second	37.7	19.7	8.1	34.5	0.0	100.0	29.7	16.9	6.7	46.6	0.0	100.0	2,448
Middle	28.3	15.6	5.5	50.4	0.1	100.0	23.4	11.0	4.5	60.9	0.2	100.0	2,547
Fourth	12.6	8.9	3.9	74.6	0.0	100.0	10.4	5.6	3.3	80.5	0.1	100.0	3,124
Highest	7.9	6.7	2.4	82.9	0.1	100.0	7.2	5.6	1.6	85.4	0.2	100.0	3,405
Total 15-49	22.5	14.1	5.4	58.0	0.1	100.0	18.3	10.8	4.5	66.2	0.1	100.0	13,561
50-59	39.7	29.3	11.9	18.7	0.4	100.0	33.4	26.1	8.6	31.3	0.7	100.0	1,212
Total 15-59	23.9	15.3	6.0	54.8	0.1	100.0	19.5	12.1	4.9	63.3	0.2	100.0	14,773

## 16.4 WOMEN'S PARTICIPATION IN DECISION MAKING

The ability of women to make decisions that affect their personal circumstances is an essential element of their empowerment and serves as an important contributor to their overall development. To assess currently married women's decision-making autonomy, the 2013-14 ZDHS collected information on their participation in four types of decisions: their own health care, major household purchases, purchases for daily household needs, and visits to family or relatives. To provide an understanding of gender differences in household decisionmaking, currently married men were asked the same questions. Table 16.5 shows the percent distribution of currently married women and men according to the person in the household who usually makes decisions concerning these matters. Women are considered to participate in decisionmaking if they make decisions alone or jointly with their husband.

Table 16.5 shows that three in four women (74 percent) participate in making decisions regarding their own health care either independently or jointly with their husband, while nine in ten men (89 percent) are involved in decisions about their own health care. More women (63 percent) than men (53 percent) make decisions about daily household needs, whereas more men (34 percent) than women (12 percent) make decisions about major household purchases. Women are much more likely to make independent decisions about their husband's visits to his family or relatives (37 percent) than about visits to her own family or relatives (21 percent). A similar pattern is seen for men, with 24 percent of men making

independent decisions about their wife's visits to her family or relatives and 6 percent making decisions about visits to his own family or relatives.

**Table 16.5 Participation in decision making**

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Zambia 2013-14

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Missing	Total	Number of women
<b>WOMEN</b>								
Own health care	31.7	42.4	25.4	0.3	0.1	0.1	100.0	9,859
Major household purchases	11.7	54.6	33.2	0.2	0.2	0.1	100.0	9,859
Purchases for daily household needs	62.8	23.3	13.4	0.3	0.1	0.1	100.0	9,859
Visits to her family or relatives	20.6	54.6	24.4	0.2	0.1	0.1	100.0	9,859
<b>MEN</b>								
Own health care	9.6	44.8	44.2	1.4	0.0	0.1	100.0	7,035
Major household purchases	8.3	57.0	34.2	0.3	0.0	0.1	100.0	7,035
Purchases for daily household needs	19.7	26.6	53.2	0.3	0.1	0.1	100.0	7,035
Visits to his family or relatives	36.6	56.9	6.1	0.3	0.1	0.1	100.0	7,035

Figure 16.1 shows the percent distribution of currently married women by the number of household decisions in which they participate. Fifty-three percent of women participate in all four decisions, 19 percent participate in three decisions, 13 percent participate in two decisions, and 8 percent participate in just one decision. Seven percent of women do not participate in any decisionmaking.

**Figure 16.1 Number of decisions in which currently married women participate**

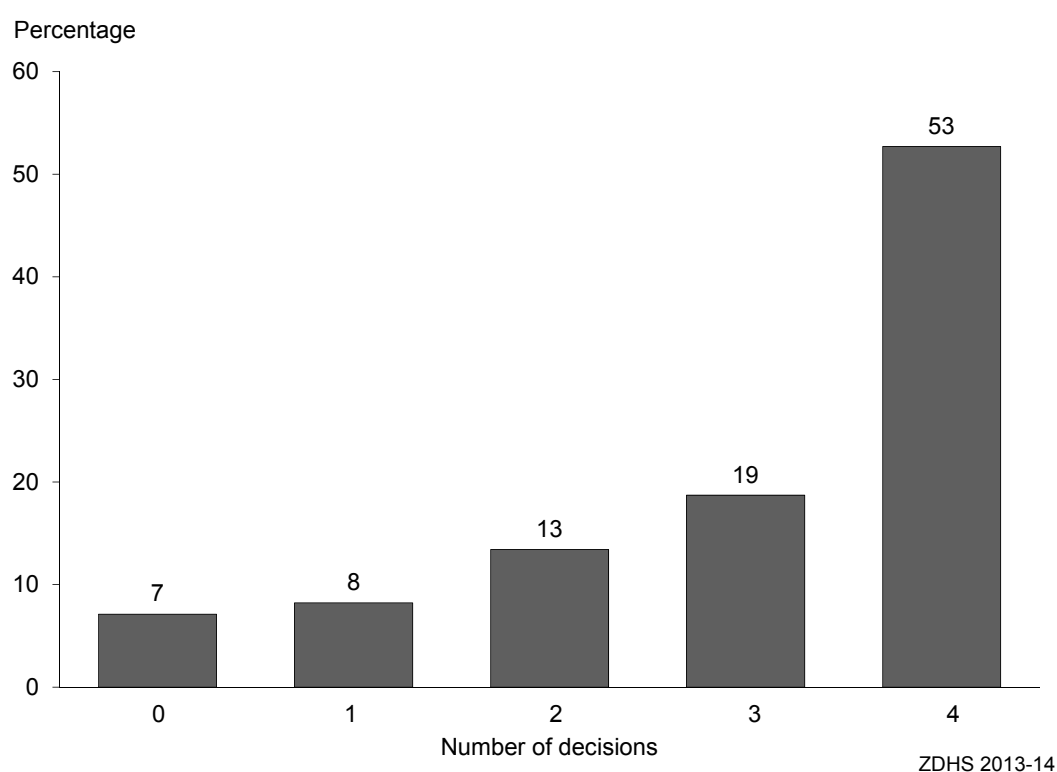


Table 16.6.1 shows how currently married women's participation (alone or jointly) in decisionmaking varies by background characteristics. The table presents the results for the four specific types of decisions asked about, namely the woman's own health care, making major household purchases, visits to her family or relatives, and purchases for daily household needs. In addition, the table includes two summary indicators: the proportion of women involved in making all four decisions and the proportion not involved in making any of the decisions.

Table 16.6.1 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Zambia 2013-14

Background characteristic	Specific decisions				All four decisions	None of the four decisions	Number of women
	Woman's own health care	Making major household purchases	Purchases for daily household needs	Visits to her family or relatives			
<b>Age</b>							
15-19	62.8	55.0	73.8	66.5	38.6	13.6	613
20-24	72.8	61.8	84.6	71.6	47.7	7.4	1,684
25-29	74.8	65.7	86.5	74.6	51.9	6.7	2,181
30-34	75.3	69.7	87.5	77.5	56.6	6.7	1,976
35-39	76.9	69.7	88.2	77.1	56.0	5.4	1,572
40-44	73.5	68.5	86.7	77.0	55.3	7.4	1,102
45-49	75.2	68.9	89.0	79.8	56.8	6.2	730
<b>Number of living children</b>							
0	70.1	64.4	79.6	72.0	49.5	11.0	487
1-2	76.1	68.0	86.7	75.8	53.7	6.6	3,090
3-4	74.7	67.2	86.6	75.1	53.3	6.7	3,051
5+	72.0	64.2	85.9	75.3	51.5	7.3	3,231
<b>Residence</b>							
Urban	85.1	77.7	92.6	84.2	64.7	2.8	3,953
Rural	66.6	58.8	81.7	69.2	44.6	10.0	5,905
<b>Province</b>							
Central	70.7	64.2	83.9	75.0	48.8	5.5	895
Copperbelt	85.5	71.1	91.3	85.2	61.6	3.3	1,477
Eastern	52.5	49.0	72.3	58.2	36.2	20.3	1,304
Luapula	79.2	68.9	90.1	87.4	58.6	3.0	740
Lusaka	88.3	84.2	94.0	88.1	70.8	1.5	1,780
Muchinga	61.2	41.5	80.0	62.8	30.0	10.5	575
Northern	76.3	57.0	81.3	77.1	47.6	8.4	820
North Western	77.4	71.2	83.1	78.6	60.2	6.3	407
Southern	67.2	69.6	90.8	59.6	45.2	5.4	1,351
Western	70.6	65.2	80.3	76.9	51.1	12.0	511
<b>Education</b>							
No education	64.3	56.4	78.2	68.3	45.4	12.9	1,081
Primary	70.1	62.0	84.0	72.4	48.1	8.5	5,422
Secondary	82.0	74.5	91.2	80.3	59.7	3.4	2,905
More than secondary	93.4	90.0	96.7	92.7	79.6	0.7	451
<b>Employment (last 12 months)</b>							
Not employed	73.1	64.7	84.1	74.8	52.2	8.5	4,012
Employed for cash	78.5	73.6	91.7	78.8	58.8	3.8	3,703
Employed not for cash	67.8	56.7	80.0	69.8	42.7	10.1	2,129
<b>Wealth quintile</b>							
Lowest	64.2	52.7	78.5	67.7	41.3	12.8	1,888
Second	66.0	58.5	80.7	69.8	44.5	10.2	2,003
Middle	70.5	63.0	85.0	70.3	47.3	7.6	1,953
Fourth	80.7	73.0	91.6	80.5	58.8	3.7	2,063
Highest	88.2	83.9	94.1	87.3	70.9	1.6	1,952
Total	74.0	66.3	86.1	75.2	52.7	7.1	9,859

Note: Total includes 15 women with information missing on employment status.

The data show that 66 percent to 86 percent of women participate in at least one of the four decisions asked about, but only half of women (53 percent) report taking part in all four decisions and 7 percent report not participating in any of the four decisions. The youngest women (age 15-19) are less likely than older women to participate in all four decisions. Women who are employed and receive cash earnings are more likely to participate in all four decisions (59 percent) than women who are not employed and women who are employed but not for cash. The percentage of women participating in all four decisions increases with increasing education and wealth. For example, 80 percent of women with more than a secondary education participate in all four decisions, as compared with 45 percent of women with no education. Similarly, 71 percent of women in the highest wealth quintile participate in all four decisions, compared with 41 percent of women in the lowest wealth quintile. Women in urban areas are more likely to participate in all four decisions than women in rural areas. The proportion of women participating in all four decisions ranges from a low of 30 percent in Muchinga to a high of 71 percent in Lusaka.

Table 16.6.2 presents similar data on men's participation in decisionmaking by background characteristics. The table shows that 94 percent of currently married men participate in decisions about visits to their family, 91 percent participate in making major household purchases, and 89 percent participate in their own health care. Less than one in two men (46 percent) are involved in purchases for daily household needs. Overall, 39 percent of men participate in all four decisions, and only 1 percent do not participate in any decisions. Men in rural areas are more likely to participate in all four decisions than men in urban areas (44 percent versus 32 percent). Men's participation in all four decisions ranges from a low of 22 percent in Copperbelt to a high of 64 percent in North Western. There is no consistent relationship between men's participation in all four decisions and other background characteristics.

**Table 16.6.2 Men's participation in decision making by background characteristics**

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, by background characteristics, Zambia 2013-14

Background characteristic	Specific decisions					All four decisions	None of the four decisions	Number of men
	Man's own health care	Making major household purchases	Purchases for daily household needs	Visits to his family or relatives				
<b>Age</b>								
15-19	(81.9)	(81.5)	(63.7)	(97.9)	(57.7)	(1.0)	36	
20-24	84.2	86.5	54.9	93.1	44.1	1.6	523	
25-29	88.0	89.3	44.9	92.1	35.9	0.9	1,235	
30-34	89.4	91.9	43.7	93.0	36.3	1.1	1,613	
35-39	90.7	92.3	46.6	93.8	41.3	1.0	1,496	
40-44	89.9	92.8	48.5	94.6	42.4	1.1	1,247	
45-49	88.0	92.0	43.4	94.1	37.6	0.5	884	
<b>Number of living children</b>								
0	88.8	91.9	48.9	94.0	40.9	0.6	350	
1-2	89.6	90.2	46.5	92.7	39.8	1.3	2,109	
3-4	88.6	90.8	43.2	94.0	35.7	0.8	2,004	
5+	88.7	92.4	48.2	93.7	41.3	1.0	2,572	
<b>Residence</b>								
Urban	90.7	90.6	37.5	92.8	32.3	1.1	2,781	
Rural	87.8	91.7	52.0	93.9	43.8	1.0	4,254	
<b>Province</b>								
Central	92.1	90.6	45.4	94.8	40.4	0.7	602	
Copperbelt	87.4	86.6	27.6	91.2	21.7	1.4	975	
Eastern	74.7	94.2	65.7	92.8	50.8	0.6	989	
Luapula	93.8	96.7	37.5	92.8	33.5	0.8	534	
Lusaka	94.9	95.7	46.0	93.6	41.9	0.7	1,313	
Muchinga	91.2	92.4	57.3	95.4	50.0	0.8	400	
Northern	81.1	92.3	41.7	91.6	34.2	3.1	583	
North Western	88.3	90.6	71.0	95.6	63.8	0.5	300	
Southern	95.4	84.0	49.0	94.6	41.1	0.7	970	
Western	91.4	89.3	26.8	95.7	23.1	1.0	370	
<b>Education</b>								
No education	81.4	92.8	58.8	90.7	46.8	0.9	380	
Primary	87.9	91.5	48.9	93.8	40.7	0.9	3,182	
Secondary	90.2	90.4	42.5	92.9	36.7	1.2	2,840	
More than secondary	93.0	92.6	42.8	96.1	39.0	0.4	634	
<b>Employment (last 12 months)</b>								
Not employed	92.1	86.5	66.3	88.9	59.1	1.8	202	
Employed for cash	89.9	91.4	44.3	93.9	37.9	0.9	5,684	
Employed not for cash	83.5	91.0	52.3	92.0	42.2	1.5	1,137	
<b>Wealth quintile</b>								
Lowest	85.6	91.3	51.0	93.4	43.2	1.4	1,333	
Second	87.8	91.4	53.4	93.1	43.5	1.0	1,508	
Middle	89.2	90.4	48.8	93.6	41.4	0.8	1,364	
Fourth	90.4	90.4	40.7	94.1	34.9	0.9	1,488	
Highest	91.5	92.7	37.2	93.1	33.2	0.8	1,342	
Total 15-49	88.9	91.2	46.3	93.5	39.2	1.0	7,035	
50-59	89.8	90.1	44.9	92.1	39.0	1.9	1,103	
Total 15-59	89.0	91.1	46.1	93.3	39.2	1.1	8,137	

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 12 men with information missing on employment status.

## 16.5 ATTITUDES TOWARD WIFE BEATING

The critical problems that women face are many and diverse. One of these problems, and among the most serious, is the issue of violence against women.

To assess women's and men's attitudes toward wife beating, respondents were asked whether a husband is justified in hitting or beating his wife in each of the following five situations: if she burns the food, if she argues with him, if she goes out without telling him, if she neglects the children, and if she refuses to have sexual intercourse with him.

Table 16.7.1 shows the percentage of women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics. About one in two women (47 percent) agree that a husband is justified in beating his wife for at least one specified reason. Twenty-four percent of women agree that a husband is justified in hitting or beating his wife if she burns the food, 34 percent if she argues with him, 30 percent if she goes out without telling him, 33 percent if she neglects the children, and 29 percent if she refuses to have sexual intercourse with him. There has been an improvement in women's attitude toward wife beating since 2007, when 62 percent of women agreed that wife beating is justified for at least one of the specified reasons.

Women who are employed but not for cash, women with more than five children, currently married and ever-married women, and women in rural areas are more likely than their counterparts in the other categories to agree that wife beating is justified for at least one specified reason. The proportion of women who agree that wife beating is justified for at least one specified reason decreases with increasing education and wealth. Agreement with wife beating for at least one of the specified reasons is lowest in Lusaka (22 percent) and highest in Northern (79 percent).

Table 16.7.2 shows similar data for men. Thirty-two percent of men agree that a man is justified in beating his wife for at least one of the specified reasons. Seven percent agree that he is justified in hitting or beating his wife if she burns the food, 20 percent if she argues with him, 16 percent if she goes out without telling him, 20 percent if she neglects the children, and 11 percent if she refuses to have sexual intercourse with him. Similar to women, there has been a marked improvement in men's attitude toward wife beating since 2007, when 49 percent of men agreed that wife beating is justified for at least one specified reason.

Men age 15-19, men who are employed but not for cash, men who have no living children, never-married men, men in rural areas, men in Luapula, men with a primary education, and men in the middle wealth quintile are more likely to agree that wife beating is justified for at least one specified reason than their counterparts in the other categories.



Table 16.7.1 Attitude toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Zambia 2013-14

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
<b>Age</b>							
15-19	24.2	33.4	30.1	34.8	24.8	48.6	3,625
20-24	23.6	33.8	29.8	33.1	26.3	47.8	3,006
25-29	23.7	34.1	30.8	33.6	30.0	47.0	2,813
30-34	22.3	31.8	28.7	31.1	29.9	44.3	2,475
35-39	22.0	31.6	27.9	29.9	30.6	43.5	2,009
40-44	26.0	36.6	32.4	35.1	34.2	49.3	1,464
45-49	22.8	34.9	28.1	33.9	34.5	47.0	1,018
<b>Marital status</b>							
Never married	19.5	28.5	24.9	30.4	20.4	42.5	4,572
Married or living together	24.9	35.8	32.1	34.3	31.8	48.7	9,859
Divorced/separated/widowed	25.9	33.8	29.0	33.3	34.0	47.7	1,980
<b>Number of living children</b>							
0	19.6	28.6	25.2	30.0	20.7	42.2	4,112
1-2	22.4	31.6	28.3	31.1	26.7	45.5	4,821
3-4	24.1	35.1	31.2	33.5	31.8	47.4	3,750
5+	28.7	39.9	35.1	38.6	37.7	53.2	3,727
<b>Residence</b>							
Urban	13.5	23.5	20.7	24.0	18.8	34.9	7,585
Rural	32.1	42.2	37.5	40.9	37.5	57.1	8,826
<b>Province</b>							
Central	28.3	46.3	43.4	42.0	31.3	59.9	1,467
Copperbelt	17.9	32.7	30.7	33.5	28.2	47.3	2,836
Eastern	16.9	23.3	18.4	22.1	21.1	37.5	1,930
Luapula	57.2	70.4	56.4	63.1	67.8	76.7	1,143
Lusaka	7.0	13.2	10.9	14.0	10.0	21.6	3,266
Muchinga	41.5	51.7	46.5	50.5	45.7	65.0	868
Northern	43.9	65.8	47.9	52.8	59.7	79.1	1,200
North Western	31.1	42.0	40.1	40.5	38.3	55.7	713
Southern	17.9	19.1	23.3	28.7	13.9	39.4	2,007
Western	26.0	29.0	29.4	32.7	31.3	46.9	980
<b>Education</b>							
No education	32.3	40.2	33.8	37.2	39.2	54.1	1,375
Primary	29.5	40.6	36.0	38.7	36.7	54.6	7,685
Secondary	17.3	27.3	24.5	28.4	20.7	40.2	6,521
More than secondary	2.5	6.2	7.0	10.5	3.5	15.0	830
<b>Employment (last 12 months)</b>							
Not employed	19.3	28.3	26.0	28.1	22.5	41.0	7,861
Employed for cash	22.4	33.4	29.4	33.1	28.7	45.9	5,452
Employed not for cash	36.4	47.0	40.2	45.7	45.5	63.7	3,055
<b>Wealth quintile</b>							
Lowest	37.5	46.8	40.7	42.7	45.6	61.7	2,859
Second	34.8	46.4	41.4	44.8	40.7	61.4	2,861
Middle	28.6	39.4	35.6	40.6	33.4	54.9	3,077
Fourth	16.3	27.6	24.3	27.2	20.6	39.7	3,510
Highest	8.2	15.9	14.2	17.6	12.5	26.5	4,103
<b>Total</b>	<b>23.5</b>	<b>33.5</b>	<b>29.7</b>	<b>33.1</b>	<b>28.9</b>	<b>46.9</b>	<b>16,411</b>

Note: Total includes 43 women with information missing on employment status.

Table 16.7.2 Attitude toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Zambia 2013-14

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
<b>Age</b>							
15-19	11.2	25.3	20.8	27.0	13.7	40.6	3,337
20-24	7.8	19.9	15.5	21.5	9.4	32.5	2,335
25-29	6.9	20.3	16.3	19.3	10.1	32.3	1,944
30-34	5.6	16.4	15.0	16.2	9.0	27.1	1,927
35-39	4.6	17.0	12.8	14.5	9.2	26.1	1,664
40-44	5.1	17.7	12.9	14.9	10.9	27.4	1,384
45-49	5.6	16.4	12.0	14.3	8.9	23.0	970
<b>Marital status</b>							
Never married	9.2	21.7	17.5	23.0	11.2	35.3	5,985
Married or living together	5.6	18.4	14.8	17.0	10.0	28.6	7,035
Divorced/separated/widowed	9.2	21.5	14.9	19.0	12.3	32.6	542
<b>Number of living children</b>							
0	9.2	21.7	17.5	22.6	11.3	35.1	6,083
1-2	5.9	17.9	14.0	18.6	9.4	29.3	2,689
3-4	5.6	17.8	15.0	15.6	9.6	27.6	2,146
5+	6.0	19.8	15.4	17.6	10.9	29.7	2,644
<b>Residence</b>							
Urban	5.1	15.4	12.7	15.6	7.7	25.0	6,326
Rural	9.3	23.9	19.0	23.4	13.2	37.6	7,235
<b>Province</b>							
Central	8.3	19.0	16.7	19.6	7.7	27.3	1,153
Copperbelt	7.1	24.4	18.8	19.5	9.4	32.6	2,395
Eastern	6.6	11.8	6.8	12.0	9.7	22.9	1,710
Luapula	10.0	35.7	27.8	32.8	20.2	49.7	855
Lusaka	3.4	7.7	7.1	11.3	6.2	16.8	2,844
Muchinga	13.6	30.6	27.2	29.4	21.8	46.1	680
Northern	11.8	35.8	27.1	30.1	20.1	48.6	929
North Western	4.7	15.4	11.3	13.0	7.7	26.0	557
Southern	8.8	24.3	20.9	27.2	8.8	43.8	1,771
Western	7.9	17.9	15.7	21.6	11.3	33.8	668
<b>Education</b>							
No education	7.1	20.0	14.0	19.3	10.9	29.9	500
Primary	10.4	25.2	20.9	24.1	15.2	38.8	5,365
Secondary	6.0	18.2	14.3	18.5	8.3	29.7	6,638
More than secondary	0.7	3.9	2.9	5.7	1.7	9.1	1,058
<b>Employment (last 12 months)</b>							
Not employed	7.6	18.3	15.0	19.8	10.9	30.1	2,732
Employed for cash	6.7	19.0	14.9	18.2	10.0	29.7	8,299
Employed not for cash	9.6	25.0	20.9	24.6	12.2	40.1	2,510
<b>Wealth quintile</b>							
Lowest	9.8	25.4	19.6	24.0	15.6	38.7	2,038
Second	9.5	24.1	19.4	23.6	13.9	38.8	2,448
Middle	10.0	25.4	21.7	25.7	13.8	39.5	2,547
Fourth	6.7	18.8	15.5	17.4	8.9	29.5	3,124
Highest	3.1	10.8	7.7	12.0	4.5	18.5	3,405
Total 15-49	7.4	20.0	16.0	19.7	10.6	31.7	13,561
50-59	3.9	12.4	9.8	11.1	8.5	19.8	1,212
Total 15-59	7.1	19.3	15.5	19.0	10.4	30.7	14,773

Note: Total includes 21 men with information missing on employment status.

## 16.6 WOMEN'S ATTITUDE TOWARD REFUSING SEX WITH THEIR HUSBAND

The extent of control women have over when and with whom they have sex has important implications for demographic and health outcomes, such as transmission of HIV and other sexually transmitted infections, and is also an indicator of women's autonomy and status. Women were asked if a wife is justified in refusing to have sex with her husband under three circumstances: she knows her husband has a sexually transmitted disease, she knows her husband has had sex with other women, and she is tired or not in the mood. Empowered women are more likely to believe that a woman has the right to refuse sexual relations with her husband for any reason.

Table 16.8.1 shows that 45 percent of women believe that a wife is justified in refusing sexual intercourse with her husband for all of the specified reasons. In contrast, 13 percent believe that she is not justified for any of the specified reasons. Knowledge that a husband has a sexually transmitted disease is the most widely accepted reason for refusing sexual relations (72 percent). Differences by age, employment, number of living children, and residence are not marked. Women in Western are most likely to agree that a woman is justified in refusing sexual intercourse with her husband for all of the specified reasons, and women in Copperbelt and Luapula are least likely to agree. Education and wealth have a positive impact on women's empowerment as measured by this indicator. Women with more than a secondary education and those in the highest wealth quintile are most likely to agree that refusing sexual intercourse is justified for all of the specified reasons.

Table 16.8.1 Attitude toward refusing sexual intercourse with husband: Women

Percentage of all women age 15-49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances, by background characteristics, Zambia 2013-14

Background characteristic	Wife is justified in refusing intercourse with her husband if she:			Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number
	Knows husband has a sexually transmitted disease	Knows husband has intercourse with other women	Is tired or not in the mood			
<b>Age</b>						
15-19	65.4	62.7	58.3	41.5	19.0	3,625
20-24	70.8	66.3	67.4	45.4	11.7	3,006
25-29	75.1	67.6	68.0	47.9	10.0	2,813
30-34	74.1	63.3	65.6	44.9	11.5	2,475
35-39	73.3	66.5	66.0	44.7	10.2	2,009
40-44	73.5	65.4	65.4	43.9	10.4	1,464
45-49	77.2	61.8	62.6	44.6	11.5	1,018
<b>Number of living children</b>						
0	67.3	65.8	61.1	44.5	17.4	4,112
1-2	74.2	65.7	67.0	46.3	10.4	4,821
3-4	73.1	65.2	66.8	45.0	11.0	3,750
5+	72.3	62.7	63.1	42.1	12.0	3,727
<b>Residence</b>						
Urban	76.0	67.1	64.9	46.6	10.7	7,585
Rural	68.2	63.1	64.3	42.9	14.3	8,826
<b>Province</b>						
Central	72.1	55.2	64.1	38.6	13.5	1,467
Copperbelt	76.8	56.4	56.3	36.4	12.5	2,836
Eastern	67.0	66.2	69.6	45.1	12.3	1,930
Luapula	61.4	52.9	50.9	35.6	25.0	1,143
Lusaka	75.7	73.2	67.5	52.1	10.6	3,266
Muchinga	69.6	72.1	53.4	39.7	14.0	868
Northern	74.3	65.3	56.7	42.6	12.5	1,200
North Western	76.3	72.3	75.0	58.0	11.2	713
Southern	63.9	64.1	73.0	43.1	11.2	2,007
Western	77.1	77.8	80.2	62.1	8.4	980
<b>Education</b>						
No education	67.7	60.4	60.9	42.0	16.3	1,375
Primary	69.2	61.7	61.2	40.4	14.3	7,685
Secondary	74.0	68.0	67.3	47.7	11.0	6,521
More than secondary	85.1	79.1	80.4	63.6	4.7	830
<b>Employment (last 12 months)</b>						
Not employed	70.9	65.6	64.5	45.6	14.1	7,861
Employed for cash	74.2	65.7	64.6	44.2	10.2	5,452
Employed not for cash	69.6	61.8	64.8	42.7	13.4	3,055
<b>Wealth quintile</b>						
Lowest	68.3	61.7	60.7	41.9	15.9	2,859
Second	66.2	63.1	62.7	41.0	15.5	2,861
Middle	70.4	62.8	65.6	43.0	12.4	3,077
Fourth	74.7	65.5	66.0	45.1	10.2	3,510
Highest	76.8	69.6	66.6	49.8	10.8	4,103
<b>Total</b>	<b>71.8</b>	<b>64.9</b>	<b>64.6</b>	<b>44.6</b>	<b>12.7</b>	<b>16,411</b>

Note: Total includes 43 women with information missing on employment status.

Table 16.8.2 shows comparable results for men. Men age 15-49 are more likely than women in the same age group to agree that a wife is justified in refusing to have sexual intercourse with her husband for all three of the specified reasons (57 percent versus 45 percent). Knowledge that a husband has a sexually transmitted disease is the most frequently given reason by men to justify a woman refusing sexual intercourse with her husband (80 percent).

Table 16.8.2 Attitude toward refusing sexual intercourse with husband: Men

Percentage of all men age 15-49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances, by background characteristics, Zambia 2013-14

Background characteristic	Wife is justified in refusing intercourse with her husband if she:			Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number
	Knows husband has a sexually transmitted disease	Knows husband has intercourse with other women	Is tired or not in the mood			
<b>Age</b>						
15-19	72.2	65.8	66.6	48.3	13.7	3,337
20-24	81.0	73.8	76.1	58.7	7.8	2,335
25-29	80.4	71.2	76.6	56.1	7.2	1,944
30-34	83.3	74.2	79.7	60.6	5.7	1,927
35-39	82.5	73.4	79.6	60.9	7.1	1,664
40-44	83.4	75.8	80.0	61.9	6.0	1,384
45-49	83.4	73.6	80.2	60.8	5.9	970
<b>Number of living children</b>						
0	76.9	70.3	71.6	54.0	10.6	6,083
1-2	83.0	74.4	78.4	60.5	6.5	2,689
3-4	84.4	73.3	78.5	60.6	5.9	2,146
5+	79.0	70.6	78.8	56.2	7.7	2,644
<b>Residence</b>						
Urban	85.6	78.6	79.2	65.0	5.9	6,326
Rural	74.6	65.6	72.2	49.6	10.7	7,235
<b>Province</b>						
Central	72.3	62.2	71.6	48.4	15.1	1,153
Copperbelt	89.0	83.2	80.0	66.7	3.4	2,395
Eastern	72.1	69.2	73.3	53.0	11.4	1,710
Luapula	67.2	66.5	71.5	46.0	11.2	855
Lusaka	85.5	80.2	78.7	69.0	7.5	2,844
Muchinga	75.8	68.5	59.2	47.0	14.8	680
Northern	82.1	67.9	70.4	52.7	9.2	929
North Western	82.3	74.3	82.5	63.9	7.8	557
Southern	73.1	55.4	73.5	39.9	7.9	1,771
Western	85.9	72.2	85.5	61.9	3.2	668
<b>Education</b>						
No education	72.9	64.7	71.2	49.3	12.0	500
Primary	75.1	65.0	70.1	49.2	11.5	5,365
Secondary	82.0	75.1	77.8	60.3	6.8	6,638
More than secondary	91.6	86.9	89.6	76.9	2.0	1,058
<b>Employment (last 12 months)</b>						
Not employed	75.9	71.8	70.8	56.6	13.2	2,732
Employed for cash	83.2	73.9	78.5	59.7	6.2	8,299
Employed not for cash	72.3	64.0	70.6	47.2	10.9	2,510
<b>Wealth quintile</b>						
Lowest	73.8	65.4	69.4	49.4	12.8	2,038
Second	73.5	65.9	73.4	50.0	10.8	2,448
Middle	76.5	66.0	73.0	50.3	9.0	2,547
Fourth	83.3	73.8	75.4	58.9	7.2	3,124
Highest	86.7	81.8	82.5	69.0	5.0	3,405
Total 15-49	79.7	71.6	75.5	56.8	8.5	13,561
50-59	84.4	78.0	81.4	65.0	6.0	1,212
Total 15-59	80.1	72.2	75.9	57.5	8.3	14,773

Note: Total includes 21 men with information missing on employment status.

The youngest cohort of men, men who are employed but not for cash, men with no living children, men in rural areas, and men in Southern are least likely to believe that a wife is justified in refusing sexual intercourse with her husband for all of the specified reasons.

Men's agreement with a wife's right to refuse sexual intercourse with her husband increases with increasing education, from 49 percent among those with no education to 77 percent among those with

more than a secondary education. A similar pattern is seen for wealth, with the percentage increasing from 49 percent among men in the lowest wealth quintile to 69 percent among men in the highest quintile.

## 16.7 WOMEN'S EMPOWERMENT INDICATORS

Women's empowerment has important implications for demographic and health outcomes, including women's use of family planning and maternal health care services. Three summary indices of women's empowerment were used to assess the relationship of selected demographic and health outcomes with women's empowerment. The first index is the number of decisions in which currently married women participate. This index, which ranges from 0 (participation in none of the four decisions) to 3-4 (participation in all of the decisions), provides insight into women's control over their daily lives. The second index, based on attitudes toward wifebeating, ranges from 0 (wifebeating is not justified for any reason) to 5 (wife beating is justified for all of the specified reasons). The third index, which measures women's attitude toward refusing sexual intercourse with their husband, ranges from 0 (agrees with none of the reasons justifying refusal) to 3 (agrees with all of the reasons). This index provides insight into women's perceptions of gender equality in sexual roles and relates positively to women's self-esteem.

Table 16.9 examines the relationship between the three empowerment indices. Empowerment is strongest for those women who participate in all decisions, agree that wife beating is not justified for any reason, and agree that a woman can refuse sexual intercourse with her husband for any reason. Women who participate in all decisions are most likely to agree that wife beating is not justified for any of the specified reasons and that a woman has the right to refuse sexual relations with her husband for all of the specified reasons (62 percent and 59 percent, respectively). Similarly, the percentage of women who disagree with all of the reasons justifying wife beating is highest among those who participate in all decisions (57 percent) and agree that a woman can refuse sexual intercourse with her husband for all three reasons (58 percent). The percentage of women who agree with all of the reasons justifying a woman's refusal to have sexual intercourse with her husband is highest among those who participate in all four decisions (47 percent) and believe that wifebeating is not justified for any reason (50 percent).

**Table 16.9 Indicators of women's empowerment**

Percentage of currently married women age 15-49 who participate in all decision making, percentage who disagree with all of the reasons justifying wifebeating, and percentage who agree with all reasons for refusing sexual intercourse with husband, by value on each of the indicators of women's empowerment, Zambia 2013-14

Empowerment indicator	Percentage who participate in all decision making	Percentage who disagree with all the reasons justifying wifebeating	Percentage who agree with all the reasons for refusing sexual intercourse with husband	Number of women
<b>Number of decisions in which women participate<sup>1</sup></b>				
0	na	41.1	39.2	700
1-2	na	36.3	35.1	2,124
3-4	na	56.8	46.6	7,035
<b>Number of reasons for which wifebeating is justified<sup>2</sup></b>				
0	62.4	na	49.6	5,057
1-2	44.9	na	38.0	1,657
3-4	40.0	na	36.7	1,680
5	42.3	na	37.1	1,465
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>3</sup></b>				
0	43.5	44.6	na	1,129
1-2	49.0	46.2	na	4,431
3	58.8	58.4	na	4,299

na = Not applicable

<sup>1</sup> See Table 16.6.1 for the list of decisions.

<sup>2</sup> See Table 16.7.1 for the list of reasons.

<sup>3</sup> See Table 16.8.1 for the list of reasons.

## 16.8 CURRENT USE OF CONTRACEPTION BY WOMEN'S STATUS

A woman's ability to have only the number of children she wants and to determine the types of contraceptive methods she will use is affected by her control over her own life, including her sexual relationship with her husband. A woman who is unable to control other aspects of her life may be less able to make decisions regarding her fertility. She may also feel the need to choose contraceptive methods that are less obvious or do not need the approval or knowledge of her husband. Table 16.10 shows the relationship of each of the empowerment indices with current use of contraceptive methods among currently married women.

Table 16.10 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Zambia 2013-14

Empowerment indicator	Modern methods						Any traditional method	Not currently using	Total	Number of women
	Any method	Any modern method	Female sterilisation	Temporary modern female methods <sup>1</sup>	Male condom					
Number of decisions in which women participate <sup>2</sup>										
0	40.7	36.2	2.2	29.7	4.3	4.5	59.3	100.0	700	
1-2	47.8	42.9	1.7	38.2	3.1	4.9	52.2	100.0	2,124	
3-4	50.2	46.1	1.9	39.9	4.3	4.1	49.8	100.0	7,035	
Number of reasons for which wifebeating is justified <sup>3</sup>										
0	51.8	48.3	2.3	41.1	4.8	3.5	48.2	100.0	5,057	
1-2	50.0	45.4	1.5	39.8	4.1	4.6	50.0	100.0	1,657	
3-4	47.0	41.5	1.2	36.7	3.6	5.5	53.0	100.0	1,680	
5	40.6	35.6	1.7	32.1	1.7	5.1	59.4	100.0	1,465	
Number of reasons given for refusing to have sexual intercourse with husband <sup>4</sup>										
0	45.8	40.0	0.6	35.8	3.5	5.8	54.2	100.0	1,129	
1-2	48.9	44.3	1.9	38.3	4.1	4.6	51.1	100.0	4,431	
3	50.0	46.4	2.2	40.1	4.0	3.6	50.0	100.0	4,299	
Total	49.0	44.8	1.9	38.8	4.0	4.3	51.0	100.0	9,859	

Note: If more than one method is used, only the most effective method is considered in this tabulation.

<sup>1</sup> Pill, IUD, injectables, implants, female condom, diaphragm, foam/jelly, lactational amenorrhoea method, and standard days method

<sup>2</sup> See Table 16.6.1 for the list of decisions.

<sup>3</sup> See Table 16.7.1 for the list of reasons.

<sup>4</sup> See Table 16.8.1 for the list of reasons.

As expected, contraceptive use is positively associated with all three empowerment indices. Use of any contraceptive method and any modern method rises with the number of decisions in which a woman participates, declines with the number of reasons justifying wifebeating, and increases with the number of reasons justifying a woman's refusal to have sexual intercourse with her husband. The percentage of women using any method increases from 41 percent among those who do not participate in any decisions to 50 percent among those who participate in 3-4 decisions. Similarly, use of any method increases from 46 percent among women with a score of 0 on the negotiating safer sexual relations empowerment index to 50 percent among those with a score of 3 on that index. In the same vein, the use of any method decreases from 52 percent among women who say that wife beating is not justified for any reason to 41 percent among women who agree that wife beating is justified for all five reasons.

Women's use of temporary modern female methods is also higher among those who participate in any decisions than among those who participate in none. Furthermore, women's use of temporary female methods decreases with increasing scores on the second empowerment index (from 41 percent to 32 percent) and increases with increasing scores on the third empowerment index (from 36 percent to 40 percent). The relationship between women's empowerment and use of female sterilisation and male condoms is less clear.

## 16.9 IDEAL FAMILY SIZE AND UNMET NEED BY WOMEN'S STATUS

Table 16.11 shows how women's mean ideal number of children and their unmet need for family planning vary according to the empowerment indices.

**Table 16.11 Ideal number of children and unmet need for family planning by women's empowerment**

Mean ideal number of children for women age 15-49 and the percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Zambia 2013-14

Empowerment indicator	Mean ideal number of children <sup>1</sup>	Number of women	Percentage of currently married women with an unmet need for family planning <sup>2</sup>			Number of women
			For spacing	For limiting	Total	
Number of decisions in which women participate <sup>3</sup>						
0	5.4	664	17.5	6.7	24.2	700
1-2	5.2	2,043	16.1	8.0	24.1	2,124
3-4	5.0	6,770	12.9	7.0	19.9	7,035
Number of reasons for which wifebeating is justified <sup>4</sup>						
0	4.4	8,475	12.4	6.7	19.0	5,057
1-2	4.7	2,724	14.5	7.0	21.5	1,657
3-4	4.9	2,582	15.2	7.8	23.0	1,680
5	5.2	2,068	17.3	8.7	26.0	1,465
Number of reasons given for refusing to have sexual intercourse with husband <sup>5</sup>						
0	4.7	1,928	14.3	6.6	20.9	1,129
1-2	4.8	6,768	15.1	7.8	22.9	4,431
3	4.6	7,153	12.7	6.7	19.4	4,299
Total	4.7	15,849	13.9	7.2	21.1	9,859

<sup>1</sup> Mean excludes respondents who gave non-numeric responses.

<sup>2</sup> See Table 7.10 for the definition of unmet need for family planning.

<sup>3</sup> Restricted to currently married women. See Table 16.6.1 for the list of decisions.

<sup>4</sup> See Table 16.7.1 for the list of reasons.

<sup>5</sup> See Table 16.8.1 for the list of reasons.

The table shows that mean ideal number of children declines with women's empowerment as measured by two of the three indices: the number of decisions in which women participate and the number of reasons for which wife beating is justified. Mean ideal family size falls from 5.4 to 5.0 as the number of decisions increases from 0 to 4. In addition, mean ideal number of children increases from 4.4 to 5.2 as the number of reasons for which wifebeating is justified rises from 0 to 5. There is no consistent relationship between mean ideal family size and women's empowerment as measured by number of reasons justifying a woman's refusal to have sexual relations with her husband.

Unmet need for spacing is also inversely related to decision making. Unmet need for spacing declines from 18 percent among women who do not participate in any decisions to 13 percent among women who participate in 3-4 decisions. Spacing needs increase as the number of reasons for which wifebeating is justified increases, from 12 percent among women who believe that wifebeating is not justified for any reason to 17 percent among women who believe that wifebeating is justified for all five reasons. A similar relationship is observed with respect to unmet need for limiting. There is no consistent relationship between unmet need for spacing and number of reasons justifying a woman's refusal to have sexual intercourse with her husband. Also, there is no clear association between unmet need for limiting and women's decision-making power or the number of reasons justifying a woman's refusal to have sexual intercourse with her husband.

## 16.10 REPRODUCTIVE HEALTH CARE AND WOMEN'S EMPOWERMENT

Table 16.12 shows women's use of antenatal, delivery, and postnatal care services according to their scores on the empowerment indices. It is expected that empowered women will be more likely to seek health care services that better meet their reproductive health goals, including safe motherhood.

**Table 16.12 Reproductive health care by women's empowerment**

Percentage of women age 15-49 with a live birth in the five years preceding the survey who received antenatal care, delivery assistance, and postnatal care from health personnel for the most recent birth, by indicators of women's empowerment, Zambia 2013-14

Empowerment indicator	Percentage receiving antenatal care from a skilled provider <sup>1</sup>	Percentage receiving delivery care from a skilled provider <sup>1</sup>	Received postnatal care from health personnel within the first two days since delivery <sup>2</sup>	Number of women with a child born in the last five years
<b>Number of decisions in which women participate<sup>3</sup></b>				
0	94.4	59.4	54.4	542
1-2	94.2	60.7	55.9	1,724
3-4	96.4	70.4	65.9	5,158
<b>Number of reasons for which wifebeating is justified<sup>4</sup></b>				
0	96.6	75.2	69.9	4,595
1-2	95.9	65.1	59.4	1,649
3-4	94.8	60.5	57.0	1,660
5	93.8	60.6	54.1	1,420
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>5</sup></b>				
0	94.5	64.3	56.7	1,083
1-2	95.8	67.6	63.0	4,125
3	96.1	70.7	65.4	4,117
Total	95.7	68.6	63.3	9,324

<sup>1</sup>"Skilled provider" includes doctor, clinical officer, or nurse/midwife.

<sup>2</sup> Includes women who received a postnatal checkup from a doctor, clinical officer, nurse/midwife, community health worker, or traditional birth attendant (TBA) in the first two days after the birth. Includes women who gave birth in a health facility and those who did not give birth in a health facility.

<sup>3</sup> Restricted to currently married women. See Table 16.6.1 for the list of decisions.

<sup>4</sup> See Table 16.7.1 for the list of reasons.

<sup>5</sup> See Table 16.8.1 for the list of reasons.

Use of skilled birth attendance at delivery and receipt of postnatal care from health personnel within the first two days of delivery are positively associated with women's empowerment. The percentage of women receiving delivery care from a skilled provider increases with the number of decisions in which women participate, declines with the number of reasons justifying wifebeating, and increases with the number of reasons justifying a woman's refusal to have sexual intercourse with her husband. The impact of empowerment on use of antenatal care services is less obvious because the majority of women receive these services.



**Key Findings**

- Forty-three percent of women age 15-49 have experienced physical violence at least once since age 15, and 37 percent experienced physical violence within the 12 months prior to the survey.
- Overall, 47 percent of ever-married women age 15-49 report ever having experienced physical, sexual, and/or emotional violence from their current or most recent husband or partner, and 31 percent report having experienced such violence in the past 12 months.
- Among ever-married women who had experienced spousal physical violence in the past 12 months, 43 percent reported experiencing physical injuries.
- Ten percent of women reported experiencing violence during pregnancy.
- Nine percent of Zambian women who have experienced violence have never sought help and never told anyone about the violence.

Various population-based studies in Zambia have indicated domestic violence as a reason for poor health, insecurity, and inadequate social mobilisation among women. A domestic violence module was included in the 2013-14 ZDHS, recognizing the seriousness of the problem of gender-based violence in Zambia.

Gender-based violence is defined as any act that results in, or is likely to result in, physical, sexual, or psychological harm or suffering among women, including threats of such acts and coercion or arbitrary deprivations of liberty, whether occurring in public or in private life (United Nations, 1993; United Nations, 1995). Domestic violence includes physical, sexual, emotional, psychological, or economic abuse committed by a person against a spouse, child, and any other person who is a member of the household, dependent, or parent of a child of that household. Domestic violence has negative health consequences on the victims and especially on the reproductive health of women.

In addition to ratifying a number of international and regional conventions on women's rights, gender equality, and social inclusion, Zambia has implemented the Anti-Gender-Based Violence Act of 2011 (MGCD, 2011) and the National Gender Policy of 2014 (MGCD, 2014).

## 17.1 MEASUREMENT OF VIOLENCE

Collecting valid, reliable, and ethical data on domestic violence poses particular challenges because what constitutes violence or abuse varies across cultures and individuals and a culture of silence usually surrounds domestic violence and can affect reporting. The sensitivity of the topic is another issue. Assuring the safety of respondents and interviewers when asking about domestic violence in a familial setting and protecting women who disclose violence and the risk of double-victimisation of respondents as they relive their experience while reporting raise specific ethical concerns. The responses to these challenges by the 2013-14 ZDHS are described below.

### 17.1.1 Use of Valid Measures of Violence

In the 2013-14 ZDHS, information was obtained from ever-married women on violence committed by their current and former spouses and by others, and information was collected from never-married women on violence by anyone, including boyfriends. Since international research shows that

intimate partner violence is one of the most common forms of violence against women, information on spousal violence was measured in more detail than violence by other perpetrators. This was done by using a shortened and modified version of the Conflict Tactics Scale (Strauss, 1990). Specifically, spousal violence by the most current husband/partner for currently married women and the most recent husband/partner for formerly married women was measured by asking all ever-married women the following set of questions.

(Does/did) your (last) (husband/partner) ever:

- (a) Push you, shake you, or throw something at you?
- (b) Slap you?
- (c) Twist your arm or pull your hair?
- (d) Punch you with his fist or with something that could hurt you?
- (e) Kick you, drag you, or beat you up?
- (f) Try to choke you or burn you on purpose?
- (g) Threaten or attack you with a knife, gun, or any other weapon?
- (h) Physically force you to have sexual intercourse with him even when you did not want to?
- (i) Force you to perform any sexual acts you did not want to?

For every question that a woman answered ‘yes,’ she was asked about the frequency of the act in the 12 months preceding the survey. A ‘yes’ answer to one or more of items (a) to (g) above constitutes evidence of physical violence, and a ‘yes’ answer to item (h) or (i) constitutes evidence of sexual violence.

Similarly, emotional violence among ever-married women was measured by the following questions.

(Does/did) your (last) (husband/partner) ever:

- (a) Say or do something to humiliate you in front of others?
- (b) Threaten to hurt or harm you or someone close to you?
- (c) Insult you or make you feel bad about yourself?

This approach of asking about specific acts to measure different forms of violence has the advantage of not being affected by different understandings of what constitutes a summary term such as “violence.” By including a wide range of acts, this approach has the additional advantage of giving the respondent multiple opportunities to disclose any experience of violence.

In addition to these questions that were asked only of ever-married women, all women were asked about physical violence from persons other than the current or most recent spouse/partner.<sup>1</sup> Respondents who answered yes to this question were asked who committed violence against them and the frequency of such violence during the 12 months preceding the survey. Women who reported experiencing different forms of violence were asked for the perpetrators of the violence.

Although this approach to questioning is generally considered to be optimal, the possibility of underreporting of violence, particularly sexual violence, cannot be entirely ruled out in any survey, and this survey is no exception.

### **17.1.2 Ethical Considerations in the 2013-14 ZDHS**

In recognition of the challenges in collecting data on violence, the interviewers in the 2013-14 ZDHS were given special training. The training focused on how to ask sensitive questions, ensure privacy, and build rapport between the interviewer and respondent. Rapport with the interviewer, confidentiality,

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<sup>1</sup> As none of the women selected for the domestic violence module were living together with a partner who was not their husband, the following sections refer to husbands only, as necessary.

and privacy are all key to building respondents' confidence that they can safely share their experiences with the interviewer. Placement of the violence questions at the end of the questionnaire also provides time for the interviewer to develop a certain degree of intimacy that should further encourage respondents to share their experiences of violence, if any. In addition, the following protections were built into the survey or the questionnaire in keeping with the World Health Organization's ethical and safety recommendations for research on domestic violence (WHO, 2001):

1. Only one woman was randomly selected per household to respond to the domestic violence module to maintain confidentiality. The random selection of one woman was done through a simple selection procedure based on the Kish Grid, which was built into the Household Questionnaire (Kish, 1965).
2. As a means of obtaining additional consent, beyond the initial consent at the start of the interview, the respondent was informed that the questions could be sensitive and was reassured regarding the confidentiality of her responses.
3. The domestic violence module was administered only if privacy could be obtained. The interviewers were instructed to skip the module, thank the respondent, and end the interview if they could not maintain privacy during the administration of this module.
4. A brochure that included information on domestic violence and contact information for service centres across the country was provided to all eligible women after the interview was completed, regardless of whether they were selected for the domestic violence module or not. This was done to safeguard against identifying the woman selected for the module and to provide information to all women so that they could access the services and be informed about what to do in the event of domestic violence.

### **17.1.3 Subsample for the Violence Module**

Further, in keeping with ethical requirements, as mentioned above, only one woman per household was selected for the module. These restrictions resulted in a total of 11,778 women who were successfully interviewed. Specially constructed weights were used to adjust for the selection of only one woman per household and to ensure that the domestic violence subsample is nationally representative.

## **17.2 EXPERIENCE OF PHYSICAL VIOLENCE**

Table 17.1 shows that 43 percent of women age 15-49 have experienced physical violence since age 15 and that 37 percent experienced physical violence in the 12 months prior to the survey. Overall, 4 percent of women reported that they had experienced physical violence often, and 15 percent said they had experienced physical violence sometimes in the past 12 months.

The experience of physical violence varies substantially by background characteristics. Women age 15-19 are the least likely when compared with other age groups to have experienced physical violence ever (29 percent) or in the 12 months prior to the survey (26 percent).

Ever-married women are more likely than those who never-married to have experienced physical violence, indicating that in Zambia ever-married women are more exposed to physical violence. Fifty-seven percent of women who are divorced, separated, or widowed and 48 percent of currently married women have experienced physical violence since age 15, as compared with 27 percent of never-married women. The percentage of women who have ever experienced physical violence since age 15 is lowest among women with no children (28 percent) when compared with women who have one or more children (45-51 percent).

Table 17.1 Experience of physical violence

Percentage of women age 15-49 who have ever experienced physical violence since age 15 and percentage who have experienced violence during the 12 months preceding the survey, by background characteristics, Zambia 2013-14

Background characteristic	Percentage who have ever experienced physical violence since age 15 <sup>1</sup>	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes <sup>2</sup>	
<b>Age</b>					
15-19	29.3	1.1	12.1	13.2	2,532
20-24	42.4	2.5	16.7	19.3	2,220
25-29	49.2	4.6	17.2	21.8	2,010
30-39	49.6	5.0	15.8	21.1	3,250
40-49	46.9	4.1	10.7	15.1	1,765
<b>Marital status</b>					
Never married	26.5	0.5	7.1	7.6	3,207
Married or living together	48.4	4.2	18.5	22.9	7,145
Divorced/separated/widowed	56.5	6.7	12.3	19.0	1,427
<b>Number of living children</b>					
0	28.3	1.2	9.4	10.6	2,870
1-2	45.0	2.7	16.9	19.7	3,507
3-4	51.4	5.8	17.9	23.8	2,723
5+	49.3	4.8	14.1	19.0	2,678
<b>Religion</b>					
Catholic	43.6	2.9	14.6	17.5	2,129
Protestant	43.5	3.6	14.7	18.5	9,477
Muslim	20.9	3.8	2.1	6.0	75
Other	51.2	3.5	20.2	23.7	74
<b>Residence</b>					
Urban	44.7	3.7	13.7	17.6	5,426
Rural	42.3	3.4	15.5	18.9	6,352
<b>Province</b>					
Central	42.0	2.1	15.1	17.2	1,036
Copperbelt	48.2	4.7	14.9	19.6	2,017
Eastern	34.1	3.2	11.2	14.3	1,411
Luapula	50.4	2.7	21.6	24.3	839
Lusaka	41.6	3.8	12.6	16.8	2,374
Muchinga	43.4	7.0	16.1	23.1	597
Northern	53.2	3.8	17.1	21.0	864
North Western	35.3	1.6	12.7	14.4	525
Southern	45.0	2.7	15.7	18.4	1,427
Western	38.6	2.5	14.2	16.8	689
<b>Education</b>					
No education	45.1	5.2	14.3	19.5	990
Primary	46.6	4.3	16.3	20.7	5,596
Secondary	39.9	2.5	13.6	16.1	4,641
More than secondary	37.7	1.0	7.8	8.8	551
<b>Employment</b>					
Employed for cash	51.0	4.4	16.9	21.4	3,988
Employed not for cash	46.3	3.8	16.9	21.0	2,160
Not employed	36.8	2.7	12.1	14.9	5,606
<b>Wealth quintile</b>					
Lowest	45.0	4.2	16.4	20.7	2,073
Second	41.8	3.5	14.8	18.3	2,070
Middle	45.6	3.3	17.9	21.2	2,204
Fourth	45.0	4.5	14.3	18.9	2,514
Highest	40.4	2.3	11.2	13.7	2,916
Total 15-49	43.4	3.5	14.7	18.3	11,778

Note: Total includes 25 women for whom information on employment status is missing and 23 women for whom information on religion is missing.

<sup>1</sup> Includes violence in the past 12 months. For women who were married before age 15 and who reported physical violence by a spouse, the violence could have occurred before age 15.

<sup>2</sup> Includes women for whom frequency in the past 12 months is not known.

Urban women are slightly more likely than women living in rural areas to have experienced physical violence since age 15 (45 percent versus 42 percent). By province, this percentage ranges from 34 percent in Eastern to 53 percent in Northern.

Ever married Muslim women are the least likely to experience physical violence since age 15 and in the 12 months preceding the survey compared with women from other religions.

Experience of physical violence generally decreases with level of education, from 45 percent and 46 percent, respectively, among women with no or with primary education to 38 percent among those with more than a secondary education. Women who are employed and receive their payment in cash are more likely than other women to have ever experienced physical violence since age 15 (51 percent) and during the 12 months preceding the survey (43 percent). On the other hand, unemployed women are the least likely to experience physical violence, with 37 percent having experienced violence since age 15 and 30 percent during the past 12 months. A similar pattern was observed in the 2007 ZDHS.

There are no notable variations by wealth.

### 17.3 PERPETRATORS OF PHYSICAL VIOLENCE

Table 17.2 shows perpetrators of physical violence, according to women's marital status, among those who have experienced physical violence since age 15. The most commonly reported perpetrators of physical violence among ever-married women are the current husband or partner (63 percent), followed by the former husband or partners (29 percent), indicating a high level of spousal violence.

Among never-married women who have experienced physical violence since age 15, the most common perpetrators of violence are mothers or step-mothers (28 percent), other people (19 percent) or other relatives (18 percent), and fathers or step-fathers (16 percent).

**Table 17.2 Persons committing physical violence**

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to the respondent's current marital status, Zambia 2013-14

Person	Marital status		Total
	Ever-married	Never married	
Current husband/partner	63.1	na	52.6
Former husband/partner	28.6	na	23.9
Current boyfriend	0.2	4.2	0.9
Former boyfriend	2.1	8.7	3.2
Father/step-father	5.4	15.5	7.1
Mother/step-mother	8.9	27.7	12.0
Sister/brother	5.8	14.2	7.2
Daughter/ son	0.1	0.0	0.1
Other relative	5.0	18.4	7.2
Mother-in-law	0.2	na	0.1
Other in-law	0.2	na	0.3
Teacher	3.4	13.6	5.1
Police/soldier	0.3	0.0	0.2
Other	5.9	18.7	8.0
Number of women who have experienced physical violence since age 15	4,262	850	5,111

na = Not applicable

### 17.4 EXPERIENCE OF SEXUAL VIOLENCE

Table 17.3 shows the percentage of women age 15-49 who have ever experienced sexual violence and who have experienced sexual violence in the 12 months preceding the survey, according to background characteristics.

The results show that 17 percent of women have ever experienced sexual violence and 10 percent experienced it in the past 12 months. This percentages generally increase with age and are lowest among youngest women age 15-19 (8 percent and 4 percent, respectively). Women who are divorced, separated, or widowed are more likely to have ever experienced sexual violence (25 percent) than currently married women (20 percent) and never-married women (8 percent).

The experience of sexual violence generally increases with the number of living children and it is lowest among women who have no children (9 percent). Women in Southern are the most likely to have

experienced sexual violence in the 12 months preceding the survey (23 percent), while women in Lusaka are the least likely (12 percent).

Ever-married Muslim women are the least likely to have experienced sexual violence when compared with women from other religions. Experience of sexual violence is lowest among women with secondary or more than a secondary education (15 percent), those who are not employed (13 percent), and women in the highest wealth quintile (14 percent).

**Table 17.3 Experience of sexual violence**

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who have experienced sexual violence in the 12 months preceding the survey, by background characteristics, Zambia 2013-14

Background characteristic	Percentage who have experienced sexual violence:		Number of women
	Ever <sup>1</sup>	In the past 12 months	
<b>Age</b>			
15-19	8.2	4.2	2,532
20-24	16.3	10.2	2,220
25-29	20.3	13.5	2,010
30-39	21.6	13.6	3,250
40-49	21.1	10.2	1,765
<b>Marital status</b>			
Never married	7.5	2.2	3,207
Married or living together	20.3	14.4	7,145
Divorced/separated/widowed	25.2	9.3	1,427
<b>Number of living children</b>			
0	9.1	4.0	2,870
1-2	17.2	10.3	3,507
3-4	22.7	14.4	2,723
5+	21.4	13.6	2,678
<b>Religion</b>			
Catholic	14.5	7.9	2,129
Protestant	18.2	11.0	9,477
Muslim	4.4	4.0	75
Other	23.9	19.7	74
<b>Residence</b>			
Urban	16.6	8.5	5,426
Rural	18.2	12.1	6,352
<b>Province</b>			
Central	14.2	7.7	1,036
Copperbelt	20.3	9.7	2,017
Eastern	14.6	8.5	1,411
Luapula	20.9	14.0	839
Lusaka	11.9	6.2	2,374
Muchinga	21.7	16.2	597
Northern	15.8	8.7	864
North Western	15.5	9.7	525
Southern	23.3	18.1	1,427
Western	22.3	13.1	689
<b>Education</b>			
No education	19.5	12.2	990
Primary	19.6	12.8	5,596
Secondary	14.7	7.8	4,641
More than secondary	14.8	5.3	551
<b>Employment</b>			
Employed for cash	22.5	13.5	3,988
Employed not for cash	20.4	13.6	2,160
Not employed	12.7	7.1	5,606
<b>Wealth quintile</b>			
Lowest	18.4	11.5	2,073
Second	20.1	13.7	2,070
Middle	19.4	12.7	2,204
Fourth	16.7	9.5	2,514
Highest	14.0	6.5	2,916
Total 15-49	17.4	10.4	11,778

Note: Total includes 25 women for whom information on employment status is missing and 23 women for whom information on religion is missing.

<sup>1</sup> Includes violence in the past 12 months

## 17.5 PERPETRATORS OF SEXUAL VIOLENCE

Table 17.4 shows the percentage of women who have ever experienced sexual violence according to specific persons who committed the violence, according to respondent's marital status. Among ever-married women, the current husband or partner is the most commonly reported perpetrator of sexual violence (64 percent), followed by the former husband or partner (31 percent). Among never-married women, the current or former boyfriend is the most common perpetrator (38 percent), followed by a stranger (17 percent), friend or acquaintance (15 percent), and other relative (14 percent).

**Table 17.4 Persons committing sexual violence**

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence according to the respondent's current marital status, Zambia 2013-14

Person	Marital status		Total
	Ever-married	Never married	
Current husband/partner	63.9	na	56.3
Former husband/partner	30.9	na	27.3
Current/former boyfriend	3.2	37.8	7.3
Father/step father	0.9	1.6	1.0
Brother/step brother	0.1	0.6	0.2
Other relative	2.6	13.8	3.9
In-law	0.2	na	0.2
Own friend/acquaintance	1.9	14.7	3.4
Family friend	1.1	4.1	1.4
Teacher	0.4	2.2	0.6
Employer/someone at work	0.3	0.0	0.3
Priest/religious leader	0.2	0.0	0.2
Stranger	4.4	17.1	5.9
Other	1.4	7.5	2.1
Number women who have experienced sexual violence	1,811	242	2,053

na = Not applicable

<sup>1</sup> Women can report more than one person who committed the violence.

## 17.6 AGE AT FIRST EXPERIENCE OF SEXUAL VIOLENCE

Table 17.5 presents information on women age 15-49 years who have experienced sexual violence by age at first experience of sexual violence according to current age. Overall, 83 percent of women have not experienced sexual violence, 93 percent of never-married women and 79 percent of ever-married women. Among women who have ever experienced sexual violence, 5 percent first experienced it by age 18 and 9 percent experienced it by age 22. Ever married women are more likely to have experienced sexual violence by exact age 22 (10 percent) than the never-married women (7 percent).

**Table 17.5 Age at first experience of sexual violence**

Percentage of women age 15-49 who experienced sexual violence by specific exact ages, according to current age and current marital status, Zambia 2013-14

Background characteristic	Percentage who first experienced sexual violence by exact age:					Percentage who have not experienced sexual violence	Number of women
	10	12	15	18	22		
<b>Age</b>							
15-19	0.1	0.3	2.3	na	na	91.8	2,532
20-24	0.2	0.4	1.6	5.4	na	83.7	2,220
25-29	0.2	0.3	1.3	4.3	9.6	79.7	2,010
30-39	0.2	0.3	1.0	4.3	8.8	78.4	3,250
40-49	0.0	0.1	1.0	4.3	7.4	78.9	1,765
<b>Marital status</b>							
Never married	0.1	0.3	2.0	5.1	6.5	92.5	3,207
Ever married	0.2	0.3	1.2	5.0	10.3	78.9	8,571
Total	0.2	0.3	1.4	5.0	9.3	82.6	11,778

na = Not applicable

## 17.7 EXPERIENCE OF DIFFERENT FORMS OF VIOLENCE

Table 17.6 presents information on the experience of various forms of violence among women age 15-49. Overall, 47 percent of women reported that they have experienced either physical or sexual violence and 30 percent have experienced physical violence only. Fourteen percent of women have experienced physical violence and sexual violence, 4 percent have experienced sexual violence only, and 14 percent have experienced both physical and sexual violence. The percentage of women who have ever experienced physical or sexual violence increases with age up to the 30-39 age group, after which it decreases somewhat.

Table 17.6 Experience of different forms of violence					
Percentage of women age 15-49 who have ever experienced different forms of violence by current age, country, Zambia 2013-14					
Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	24.0	2.9	5.3	32.2	2,532
15-17	22.2	2.7	3.7	28.6	1,545
18-19	26.7	3.1	7.9	37.8	987
20-24	30.0	3.9	12.4	46.3	2,220
25-29	32.5	3.7	16.7	52.8	2,010
30-39	31.5	3.5	18.1	53.1	3,250
40-49	29.7	3.9	17.2	50.8	1,765
Total	29.5	3.5	13.9	46.9	11,778

## 17.8 VIOLENCE DURING PREGNANCY

Respondents who had ever been pregnant were asked specifically whether they had ever experienced physical violence while pregnant and, if so, who the perpetrators of the violence were.

Table 17.7 shows that 10 percent of women experienced physical violence during a pregnancy. There is no clear pattern between age and violence during pregnancy. However, women age 25-29 are slightly more likely to report having experienced such violence than other women (11 percent). Women who are divorced, separated, or widowed are more likely to report experiencing violence during pregnancy (16 percent) than women who are currently married (9 percent) or never married (6 percent).

Women with three or four children are the most likely to report violence during pregnancy (12 percent), while women with no living children are the least likely (6 percent). By province, violence during pregnancy ranges from 5 percent in North Western to 12 percent each in Central and Northern.

By education, women with no or with primary education are more likely to have experienced violence during pregnancy (10-11 percent) and those with more than a secondary education are the least likely (5 percent).

Violence during pregnancy fluctuates by wealth and it is lowest among the richest women (8 percent).



**Table 17.7 Experience of violence during pregnancy**

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Zambia 2013-14

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
<b>Age</b>		
15-19	8.3	768
20-24	9.4	1,733
25-29	10.7	1,897
30-39	9.5	3,187
40-49	9.1	1,735
<b>Marital status</b>		
Never married	5.8	886
Married or living together	8.7	7,032
Divorced/separated/widowed	16.1	1,402
<b>Number of living children</b>		
0	5.7	411
1-2	8.2	3,507
3-4	11.6	2,723
5+	9.9	2,678
<b>Religion</b>		
Catholic	11.7	1,582
Protestant	9.3	7,590
Muslim	1.1	62
Other	5.7	66
<b>Residence</b>		
Urban	10.4	3,993
Rural	9.0	5,327
<b>Province</b>		
Central	11.7	833
Copperbelt	11.3	1,460
Eastern	8.3	1,142
Luapula	9.8	723
Lusaka	9.9	1,775
Muchinga	8.0	479
Northern	12.1	721
North Western	5.2	431
Southern	7.5	1,175
Western	9.3	580
<b>Education</b>		
No education	10.3	950
Primary	10.6	4,889
Secondary	8.3	3,089
More than secondary	5.0	391
<b>Wealth quintile</b>		
Lowest	10.9	1,836
Second	8.9	1,769
Middle	10.9	1,837
Fourth	9.5	1,990
Highest	7.7	1,888
Total 15-49	9.6	9,320

Note: Total includes 20 women for whom information on religion is missing.

## 17.9 MARITAL CONTROL BY HUSBAND

Close control and monitoring of their wives' behaviour by husbands is known to be an important warning sign and correlate of violence in a relationship. A series of questions were included in the 2013-14 ZDHS to elicit the degree of marital control exercised by husbands over wives.

Table 17.8 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husbands/partners have ever demonstrated specific types of controlling behaviours, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of women whose husband/partner:							Number of ever-married women
	Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	
<b>Age</b>								
15-19	62.1	34.3	22.6	9.1	53.4	34.3	28.3	469
20-24	66.6	39.4	23.0	12.7	57.4	37.8	23.3	1,435
25-29	65.6	37.7	22.2	12.9	58.5	37.0	23.3	1,801
30-39	63.9	35.5	20.4	13.6	55.1	34.6	26.0	3,128
40-49	57.5	33.5	17.5	11.5	50.1	31.3	31.3	1,738
<b>Marital status</b>								
Married or living together	62.7	33.8	19.1	11.2	54.9	33.2	26.6	7,145
Divorced/separated/widowed	66.3	47.9	29.2	19.7	56.1	43.7	24.3	1,427
<b>Number of living children</b>								
0	66.6	33.8	22.3	12.2	59.0	34.1	22.7	422
1-2	64.7	37.3	22.6	12.6	56.0	36.6	24.8	2,793
3-4	63.6	37.0	21.3	14.1	55.3	35.8	26.7	2,685
5+	61.0	34.3	18.1	11.2	53.2	32.5	27.6	2,672
<b>Religion</b>								
Catholic	67.0	39.3	22.6	10.5	54.3	36.6	23.2	1,441
Protestant	62.7	35.5	20.3	13.0	55.5	34.7	26.5	6,983
Muslim	33.7	18.1	14.3	7.4	20.0	14.6	60.5	62
Other	70.9	48.1	32.5	20.8	64.0	47.9	19.1	65
<b>Residence</b>								
Urban	65.2	36.0	23.6	14.3	55.7	36.1	25.4	3,597
Rural	62.0	36.3	18.7	11.4	54.7	34.1	26.7	4,974
<b>Province</b>								
Central	66.9	36.7	15.8	7.5	61.8	32.5	20.6	785
Copperbelt	70.9	43.4	28.8	17.2	69.6	42.2	14.7	1,318
Eastern	60.1	38.9	16.0	9.2	48.8	32.8	30.5	1,084
Luapula	67.9	50.3	21.8	10.1	65.1	46.9	20.2	677
Lusaka	58.8	32.7	19.6	12.3	44.7	31.9	34.8	1,642
Muchinga	70.4	29.5	15.7	14.6	73.5	33.1	16.4	458
Northern	69.3	36.0	22.3	13.2	60.6	37.8	17.4	699
North Western	68.5	38.0	19.6	17.8	46.7	33.1	24.4	366
Southern	55.7	26.2	21.2	14.4	47.4	30.9	34.9	1,083
Western	50.2	27.8	23.0	9.8	37.2	25.1	40.1	460
<b>Education</b>								
No education	57.0	36.5	20.4	11.9	47.4	31.5	32.0	933
Primary	63.7	37.3	19.6	12.2	55.3	35.4	26.0	4,715
Secondary	65.6	35.6	23.4	13.5	57.9	36.4	24.2	2,570
More than secondary	58.3	23.0	17.6	13.4	52.5	26.5	27.9	353
<b>Employment</b>								
Employed for cash	66.2	38.3	22.2	12.8	59.3	37.7	22.9	3,455
Employed not for cash	64.1	37.9	19.7	13.6	55.7	35.2	23.6	1,806
Not employed	59.8	32.9	19.9	11.9	50.4	31.9	31.0	3,292
<b>Wealth quintile</b>								
Lowest	64.1	40.4	18.9	11.4	53.8	36.0	25.7	1,741
Second	61.3	37.1	19.6	11.0	54.8	34.6	27.6	1,656
Middle	66.8	36.6	22.0	14.5	60.1	37.4	22.0	1,672
Fourth	60.9	34.7	19.8	11.4	52.8	32.7	29.4	1,829
Highest	63.8	31.8	23.6	15.0	54.2	34.3	26.0	1,674
<b>Woman afraid of husband/partner</b>								
Most of the time afraid	76.5	56.3	36.8	22.4	72.5	56.4	13.7	1,504
Sometimes afraid	71.4	41.8	22.5	14.1	61.9	39.9	18.6	2,931
Never afraid	52.7	24.7	13.6	8.1	43.9	23.7	36.2	4,076
<b>Total</b>	<b>63.3</b>	<b>36.1</b>	<b>20.8</b>	<b>12.6</b>	<b>55.1</b>	<b>34.9</b>	<b>26.2</b>	<b>8,571</b>

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women. Total includes 19 women for whom information on religion is missing, 19 women for whom information on employment status is missing, and 61 women for whom information on whether the woman is afraid of her husband/partner is missing.

Controlling behaviours most often manifest themselves in terms of extreme possessiveness, jealousy, and attempts to isolate the woman from her family and friends. To determine the degree of marital control husbands exercise over their wives, ever-married women were asked whether their current or former husband exhibited each of the following controlling behaviours: (1) is jealous or gets angry if she talks to other men, (2) frequently accuses her of being unfaithful, (3) does not permit meetings with female friends, (4) tries to limit contact with her family, (5) insists on knowing where she is at all times. Because the concentration of such behaviours is more significant than the display of any single behaviour, the proportion of women whose husbands display at least three of the specified behaviours is highlighted.

Table 17.8 presents the percentage of ever-married women whose husbands display each of the listed behaviours, by selected background characteristics. The main controlling behaviours women experienced from their husbands were jealousy or anger if they talked to other men and husbands insisting on knowing where they are at all times (63 percent and 55 percent, respectively). The next most common behaviours were husbands or partner frequently accusing women of being unfaithful (36 percent), not permitting them to meet female friends (21 percent), and limiting their contact with their family (13 percent).

Thirty-five percent of ever-married women say that their husbands display three or more of these controlling behaviours, a decrease from 42 percent reported in the 2007 ZDHS survey. Women who are divorced, separated, or widowed (44 percent), those who live in Luapula (47 percent), and women who are afraid of their husband or partner most of the time (56 percent) are most likely to report that their husbands display at least three controlling behaviors than other women. In general, having a husband who displays at least three controlling behaviors varies minimally and inconsistently by background characteristics.

## **17.10 FORMS OF SPOUSAL VIOLENCE**

Different types of violence are not mutually exclusive, and women may report multiple forms of violence. Research suggests that physical violence in intimate relationships is often accompanied by psychological abuse and, in one-third to more than one-half of cases, by sexual abuse (Krug et al., 2002).

Table 17.9 shows the percentage of ever-married women age 15-49 who have experienced various forms of violence by their husbands over the course of the marriage and in the 12 months preceding the survey. Women who are currently married reported on violence committed by their current husband, and women who are widowed, divorced, or separated reported on violence committed by their most recent husband.

Thirty-nine percent of ever-married women reported ever experiencing physical violence from their husband, 17 percent reported ever experiencing sexual violence, and 24 percent reported experiencing emotional violence.

Overall, 47 percent of ever-married women age 15-49 report ever having experienced physical, sexual, and/or emotional violence from their current or most recent spouse, and 31 percent report having experienced such violence in the past 12 months. Slapping is the most common form of physical violence by the spouse, experienced by 35 percent of women. Sixteen percent of women reported having been pushed, shaken, or something thrown at them. The most common form of emotional violence reported by women were their husband insulting them or making them feel bad about themselves (18 percent). The majority of women who had ever experienced each of these forms of violence had also experienced the same type of violence in the past 12 months.

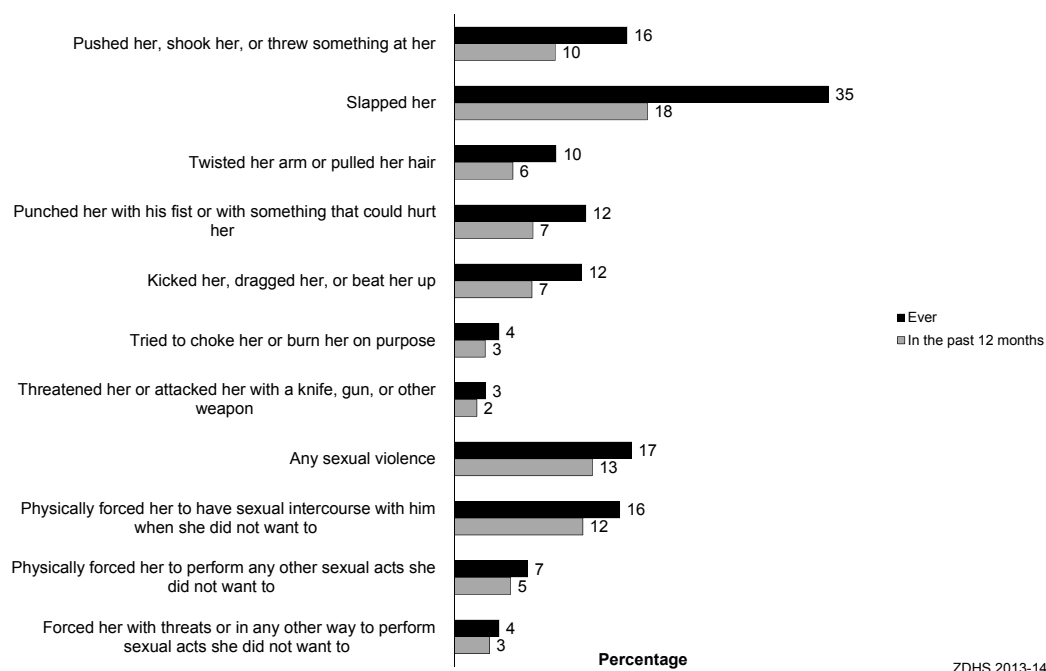
Table 17.9 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey, committed by their husband/partner, Zambia 2013-14

Type of violence	Ever	In the past 12 months		
		Often	Sometimes	Often or sometimes
SPOUSAL VIOLENCE COMMITTED BY CURRENT OR MOST RECENT HUSBAND/PARTNER				
Physical violence				
Any physical violence	38.8	4.6	16.7	21.3
Pushed her, shook her, or threw something at her	16.3	2.2	7.3	9.5
Slapped her	35.3	3.7	14.5	18.2
Twisted her arm or pulled her hair	9.6	1.5	4.0	5.5
Punched her with his fist or with something that could hurt her	12.4	2.1	5.4	7.4
Kicked her, dragged her, or beat her up	12.0	2.1	5.2	7.3
Tried to choke her or burn her on purpose	4.2	0.9	2.0	2.9
Threatened her or attacked her with a knife, gun, or other weapon	2.9	0.8	1.2	2.1
Sexual violence				
Any sexual violence	16.7	4.1	8.9	13.0
Physically forced her to have sexual intercourse with him when she did not want to	15.6	3.6	8.5	12.1
Physically forced her to perform any other sexual acts she did not want to	6.9	1.6	3.7	5.3
Forced her with threats or in any other way to perform sexual acts she did not want to	4.2	1.3	2.0	3.3
Emotional violence				
Any emotional violence	24.0	5.6	12.1	17.8
Said or did something to humiliate her in front of others	15.8	3.7	7.5	11.2
Threatened to hurt or harm her or someone she cared about	9.4	2.2	4.4	6.6
Insulted her or made her feel bad about herself	17.9	4.3	9.2	13.5
Any form of physical and/or sexual violence	42.7	6.9	19.7	26.5
Any form of emotional and/or physical and/or sexual violence	47.1	9.2	21.9	31.1
SPOUSAL VIOLENCE COMMITTED BY ANY HUSBAND/PARTNER				
Spousal violence committed by any husband/partner				
Physical violence	42.3	na	na	21.4
Sexual violence	18.7	na	na	13.1
Physical and/or sexual violence	45.9	na	na	26.7
Number of ever-married women	8,571	8,571	8,571	8,571
na = Not applicable				

Figure 17.1 shows the percentage of ever-married women who have experienced specific types of spousal physical or sexual violence by the current or most recent husband/partner.

**Figure 17.1 Percentage of ever-married women age 15-49 who have experienced specific types of spousal physical or sexual violence by the current/most recent husband/partner**



Forty-two percent of women reported having experienced physical violence and 19 percent reported having experienced sexual violence from any husband (current or former).

### 17.11 SPOUSAL VIOLENCE BY BACKGROUND CHARACTERISTICS

Table 17.10 shows the percentage of ever-married women age 15-49 who have experienced spousal emotional, physical, or sexual violence by selected background characteristics. Youngest women age 15-19 (40 percent) and those who have no children (37 percent) are the least likely to have experienced physical, sexual or emotional violence by their husband or partner when compared with other groups. Formerly married women are more likely to have experienced physical, sexual, or emotional spousal violence (56 percent) than currently married women (45 percent). At the provincial level, women in Luapula are most likely to have experienced physical, sexual, or emotional violence (58 percent) while the lowest proportion is reported in Lusaka (38 percent).

By education, this percentage is highest for women with primary education (50 percent) and lowest for those with more than a secondary education (29 percent). Women who are employed (for cash or not for cash) are much more likely to report that they have ever experienced any of the three forms of spousal abuse (50-52 percent) compared with unemployed women (41 percent).

The relationship between women's experience of violence and wealth is not consistent. Nonetheless, women in the highest wealth quintile are the least likely to experience any form of spousal violence (42 percent) when compared with women in the other quintiles (46-51 percent).

Table 17.10 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical or sexual violence committed by their husband/partner, by background characteristics, Zambia 2013-14

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
<b>Age</b>								
15-19	16.7	33.1	13.8	10.3	6.8	36.7	40.1	469
20-24	22.9	39.9	16.8	13.3	7.7	43.5	47.9	1,435
25-29	24.5	42.0	17.3	13.6	8.8	45.7	49.8	1,801
30-39	25.3	39.0	17.2	13.1	8.8	43.2	47.5	3,128
40-49	23.8	35.8	15.8	11.7	7.9	40.0	45.0	1,738
<b>Marital status</b>								
Married or living together	21.9	36.9	15.9	11.8	7.5	40.9	45.4	7,145
Divorced/separated/widowed	34.4	48.8	20.8	17.8	12.5	51.9	56.0	1,427
<b>Number of living children</b>								
0	18.1	29.1	13.0	9.5	7.1	32.5	37.3	422
1-2	21.8	36.8	15.1	11.6	7.2	40.3	44.3	2,793
3-4	26.2	41.8	18.4	15.1	10.4	45.2	49.6	2,685
5+	24.9	39.5	17.2	12.3	7.6	44.4	49.2	2,672
<b>Religion</b>								
Catholic	25.5	41.4	13.5	11.0	8.1	43.8	48.4	1,441
Protestant	23.7	38.5	17.5	13.2	8.4	42.7	47.0	6,983
Muslim	12.8	19.8	5.2	4.5	4.5	20.5	24.0	62
Other	31.5	43.7	20.6	16.8	14.1	47.5	54.8	65
<b>Residence</b>								
Urban	24.5	40.1	14.5	12.0	8.0	42.6	46.7	3,597
Rural	23.6	38.0	18.3	13.4	8.6	42.8	47.5	4,974
<b>Province</b>								
Central	21.0	38.4	12.6	10.4	6.6	40.6	45.1	785
Copperbelt	26.7	46.3	18.7	16.2	10.3	48.8	53.2	1,318
Eastern	24.3	30.6	14.7	10.7	8.0	34.6	40.6	1,084
Luapula	34.3	45.7	18.2	12.8	10.7	51.0	58.0	677
Lusaka	20.6	34.0	9.3	8.5	6.5	34.8	38.0	1,642
Muchinga	26.1	41.7	23.1	18.0	10.4	46.9	50.5	458
Northern	22.3	48.6	14.2	11.9	6.4	50.9	54.3	699
North Western	19.6	31.1	15.2	10.0	6.6	36.3	40.7	366
Southern	23.7	36.9	26.0	16.3	8.7	46.5	50.9	1,083
Western	21.9	38.1	23.5	17.9	11.0	43.8	47.5	460
<b>Education</b>								
No education	24.0	36.4	16.3	12.3	8.6	40.5	44.8	933
Primary	25.1	41.1	18.1	13.8	8.6	45.4	49.8	4,715
Secondary	22.2	37.4	15.1	11.9	8.1	40.6	44.9	2,570
More than secondary	21.7	25.9	10.2	6.7	6.1	29.4	34.6	353
<b>Employment</b>								
Employed for cash	26.9	42.5	19.0	14.7	9.8	46.7	51.6	3,455
Employed not for cash	22.5	41.0	19.5	14.7	8.9	45.7	50.0	1,806
Not employed	21.6	33.9	12.8	9.8	6.5	36.9	40.9	3,292
<b>Wealth quintile</b>								
Lowest	24.3	41.1	16.8	12.9	8.3	45.0	49.8	1,741
Second	24.6	36.8	19.5	14.4	9.1	42.0	47.4	1,656
Middle	26.7	41.8	19.8	14.2	10.0	47.4	51.2	1,672
Fourth	24.4	39.0	14.9	12.1	8.1	41.9	45.6	1,829
Highest	19.8	35.3	12.6	10.6	6.2	37.4	41.8	1,674
Total 15-49	24.0	38.8	16.7	12.8	8.3	42.7	47.1	8,571

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women. Total includes 19 women for whom information on religion is missing and 19 women for whom information on employment status is missing.

## 17.12 VIOLENCE BY SPOUSAL CHARACTERISTICS AND WOMEN'S EMPOWERMENT INDICATORS

Table 17.11 presents information on ever-married women age 15-49 who have experienced emotional, physical, or sexual violence committed by their husband according to spousal characteristics and empowerment indicators. The data show that spousal violence fluctuates by husband's or partner's education. Fifty percent of women whose spouse has primary education have experienced physical, sexual, or emotional spousal violence, compared with 35 percent of women whose spouse has more than a secondary education.

Table 17.11 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical or sexual violence committed by their husband/partner, by husband's characteristics and empowerment indicators, Zambia 2013-14

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
<b>Husband's/partner's education</b>								
No education	22.6	35.5	15.6	10.3	7.5	40.8	45.4	509
Primary	25.9	40.6	18.7	14.1	9.2	45.2	50.3	3,154
Secondary	23.7	40.2	15.8	12.6	8.1	43.4	47.3	3,919
More than secondary	17.8	26.1	13.0	9.5	6.2	29.7	34.8	724
<b>Husband's/partner's alcohol consumption</b>								
Does not drink	17.0	29.1	13.8	9.2	5.2	33.6	37.8	4,582
Drinks/never gets drunk	20.1	28.7	7.9	7.4	4.1	29.2	38.0	70
Gets drunk sometimes	24.8	43.5	16.2	12.8	8.4	46.9	51.4	2,593
Gets drunk very often	47.1	64.8	28.5	25.6	19.4	67.6	72.4	1,309
<b>Spousal education difference</b>								
Husband better educated	23.4	38.7	16.2	12.5	7.9	42.3	46.7	5,288
Wife better educated	27.4	39.6	18.0	13.2	10.0	44.4	49.5	1,479
Both equally educated	22.2	38.4	16.2	13.0	8.0	41.7	45.9	1,231
Neither educated	27.1	38.5	16.0	11.8	8.1	42.7	47.7	202
<b>Spousal age difference<sup>1</sup></b>								
Wife older	26.7	42.5	20.7	14.8	9.4	48.4	52.4	189
Wife is same age	20.2	33.4	13.6	9.8	7.3	37.3	42.2	184
Wife's 1-4 years younger	21.7	36.5	16.2	12.2	7.0	40.5	45.5	2,438
Wife's 5-9 years younger	21.4	36.9	15.9	11.6	7.3	41.2	45.4	2,918
Wife's 10+ years younger	22.2	36.7	14.7	11.2	8.6	40.2	43.9	1,308
<b>Number of marital control behaviours displayed by husband/partner<sup>2</sup></b>								
0	6.0	16.3	5.6	3.7	1.2	18.1	20.1	2,244
1-2	18.6	36.4	13.1	9.4	4.9	40.1	44.9	3,333
3-4	39.3	56.4	27.0	21.2	14.9	62.2	67.9	2,443
5-6	61.8	67.4	38.3	33.1	29.5	72.7	78.9	552
<b>Number of decisions in which women participate<sup>3</sup></b>								
0	26.7	33.6	19.7	15.1	11.1	38.3	43.8	509
1-2	25.8	41.8	21.2	15.4	9.2	47.6	52.9	1,515
3-4	20.3	35.7	13.9	10.4	6.6	39.2	43.3	5,120
<b>Number of reasons for which wife-beating is justified<sup>4</sup></b>								
0	20.2	32.1	12.7	10.0	6.7	34.8	38.9	4,445
1-2	25.4	41.7	18.2	12.9	8.6	46.9	51.2	1,372
3-4	29.1	49.2	24.0	19.1	11.2	54.2	59.2	1,462
5	29.5	47.3	20.7	15.3	10.3	52.6	57.4	1,291
<b>Woman's father beat her mother</b>								
Yes	27.3	44.8	20.8	16.5	10.2	49.1	53.6	3,115
No	21.4	33.7	13.8	10.1	7.1	37.4	41.7	4,679
DK/missing	26.1	46.0	17.8	14.2	8.3	49.5	54.4	777
<b>Woman afraid of husband/partner</b>								
Most of the time afraid	44.9	62.1	31.7	27.4	19.9	66.4	69.7	1,504
Sometimes afraid	26.7	45.7	16.6	13.1	8.7	49.2	54.3	2,931
Never afraid	14.4	25.5	11.3	7.3	3.9	29.5	33.8	4,076
Total 15-49	24.0	38.8	16.7	12.8	8.3	42.7	47.1	8,571

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women. Total includes 265 women for whom information on husband's/partner's education is missing, 18 women for whom information on husband's/partner's consumption of alcohol is missing, 371 women for whom information on spousal education difference is missing, 107 women for whom information on spousal age difference is missing, and 61 women for whom information on whether the woman is afraid or her husband/partner is missing.

<sup>1</sup> Includes only women who have been married only once.

<sup>2</sup> According to the wife's report. See Table 17.8 for list of behaviours.

<sup>3</sup> According to the wife's report. Includes only currently married women. See Table 16.6.1 for the list of decisions.

<sup>4</sup> According to the wife's report. See Table 16.7.1 for the list of reasons.

There is a strong relationship between the experience of emotional, physical, or sexual violence and husband's alcohol use. Women whose husbands get drunk very often are the notably more likely to experience any form of spousal violence when compared with women whose husbands do not drink or never get drunk (72 percent versus 38 percent). Women who are the same age as their spouse are the least likely to experience emotional, physical, or sexual violence (42 percent), while those who are older are the most likely (52 percent).

Spousal violence increases linearly with the number of controlling behaviours displayed by the husband. Among women whose husbands exhibit five or six types of controlling behaviours, about eight in ten (79 percent) have experienced some form of spousal violence. In contrast, only one in five (20 percent)

of women whose husbands display none of the six controlling behaviours have experienced some form of spousal violence.

Women's experience of violence does not follow a clear pattern by the number of decisions they participate in. Women who justify wife beating for any of the six reasons have a higher prevalence of emotional, physical, or sexual violence. Women who reject all of the reasons experience less violence (39 percent) than women who agree with one to two reasons (51 percent), three to four reasons (59 percent), or five reasons (57 percent).

It is often stated that violence perpetuates violence. Table 17.11 shows that a family history of domestic violence is associated with a respondent's own experience of domestic violence. Among women whose fathers beat their mothers, 54 percent have experienced emotional, physical, or sexual violence, as compared with 42 percent of women whose fathers did not beat their mothers.

Women who report being afraid of their husbands most of the time are more likely to suffer spousal violence (70 percent) than women who are afraid only sometimes (34 percent) and those who are never afraid (40 percent).

### **17.13 RECENT SPOUSAL VIOLENCE**

Recent experience of spousal violence is an indicator of the extent to which domestic violence is a current problem. Table 17.12 shows that, overall, 27 percent of ever-married women experienced physical or sexual violence perpetrated by their current or most recent husband in the 12 months preceding the survey.

Women's likelihood of experiencing physical or sexual violence in the past 12 months is lowest among women age 45-49 (19 percent). Women who are currently married are more likely to have experienced recent spousal physical violence than those who are divorced, separated, or widowed (28 percent and 20 percent, respectively).

Variations exist by province. Women in Southern are the most likely to have experienced violence in the past 12 months (35 percent) and women in Eastern are the least likely (20 percent). The prevalence of recent spousal physical or sexual violence is lowest among women with more than a secondary education (14 percent) and those in the highest wealth quintile (21 percent). Unemployed women (23 percent) are less likely than women who are employed for cash or not for cash (29 percent, each) to have experienced physical or sexual violence in the past 12 months.

As expected, women who are never afraid of their husbands are least likely to report experiencing recent spousal physical violence (17 percent) when compared with those who are afraid most of the time (44 percent) or some of the time (32 percent).



Table 17.12 Physical or sexual violence in the past 12 months by any husband/partner

Percentage of ever-married women who have experienced physical or sexual violence by any husband/partner in the past 12 months, by background characteristics, Zambia 2013-14

Background characteristic	Percentage of women who have experienced physical or sexual violence in the past 12 months from any husband/partner	Number of ever-married women
<b>Age</b>		
15-19	29.8	469
20-24	31.6	1,435
25-29	29.0	1,801
30-39	26.7	3,128
40-49	19.2	1,738
<b>Marital status</b>		
Married or living together	28.0	7,145
Divorced/separated/widowed	20.2	1,427
<b>Number of living children</b>		
0	25.0	422
1-2	26.7	2,793
3-4	28.4	2,685
5+	25.1	2,672
<b>Religion</b>		
Catholic	25.3	1,441
Protestant	27.1	6,983
Muslim	7.8	62
Other	31.3	65
<b>Residence</b>		
Urban	25.8	3,597
Rural	27.3	4,974
<b>Province</b>		
Central	23.2	785
Copperbelt	27.8	1,318
Eastern	20.3	1,084
Luapula	33.5	677
Lusaka	22.5	1,642
Muchinga	33.0	458
Northern	25.4	699
North Western	23.6	366
Southern	35.3	1,083
Western	27.1	460
<b>Education</b>		
No education	24.5	933
Primary	28.6	4,715
Secondary	25.7	2,570
More than secondary	14.3	353
<b>Employment</b>		
Employed for cash	29.1	3,455
Employed not for cash	28.9	1,806
Not employed	22.8	3,292
<b>Wealth quintile</b>		
Lowest	26.5	1,741
Second	28.3	1,656
Middle	31.1	1,672
Fourth	26.3	1,829
Highest	21.1	1,674
<b>Woman afraid of husband/partner</b>		
Most of the time afraid	43.6	1,504
Sometimes afraid	31.5	2,931
Never afraid	17.0	4,076
Total 15-49	26.7	8,571

Note: Any husband/partner includes all current, most recent and former husbands/partners. Total includes 19 women for whom information on religion is missing, 19 women for whom information on employment status is missing, and 61 women for whom information on whether the woman is afraid of husband/partner is missing.

## 17.14 ONSET OF SPOUSAL VIOLENCE

To obtain information on the onset of marital violence, the 2013-14 ZDHS asked ever-married women how long after marriage spousal violence first began, if ever. Table 17.13 shows the interval between marriage and the first episode of sexual or physical violence by the current husband. Fifty-nine percent of women have never experienced spousal sexual or physical violence from their current husband. Thirty-seven percent first experienced spousal sexual or physical violence at 10 years of marriage, 32 percent at five years of marriage, and 18 percent at two years of marriage. In addition, 2 percent of currently married women experienced violence from their spouse even before marriage. Women who have been married for less than two years are the most likely to have never faced violence from their husbands (72 percent).

Twenty-seven percent of women who had been married for two to four years first experienced spousal physical or sexual violence during their second year of marriage. Looking at years since marriage, among women who had been married for five to nine years, 16 percent first experienced violence during their second year of marriage and 36 percent first experienced it during their fifth year of marriage. Among women who had been married for ten or more years, 15 percent first experienced violence during their second year of marriage, 29 percent first experienced it during their fifth year of marriage, and 37 percent first experienced it during their tenth year of marriage.

**Table 17.13 Experience of spousal violence by duration of marriage**

Among currently married women age 15-49 who have been married only once, the percentage who first experienced physical or sexual violence committed by their current husband/partner by specific exact years since marriage according to marital duration, Zambia 2013-14

Duration of marriage	Percentage who first experienced spousal physical or sexual violence by exact marital duration:				Percentage who have not experienced spousal sexual or physical violence	Number of currently married women who have been married only once
	Before marriage	2 years	5 years	10 years		
<b>Years since marriage</b>						
<2	5.3	na	na	na	72.4	594
2-4	2.0	27.3	na	na	62.5	887
5-9	2.5	16.0	35.5	na	58.5	1,284
10+	1.7	14.7	29.4	36.8	56.5	3,087
Total	2.3	18.2	31.8	37.0	59.4	5,852

## 17.15 PHYSICAL CONSEQUENCES OF SPOUSAL VIOLENCE

In the 2013-14 ZDHS, ever-married women age 15-49 were asked whether they had sustained some form of injury as a result of physical or sexual violence inflicted by their husband.

Among women who had experienced any physical violence from their spouse, 37 percent reported that they suffered cuts, bruises, or aches; 13 percent had eye injuries, sprains, dislocations, or burns; and 5 percent had deep wounds, broken bones, broken teeth, or other serious injuries (Table 17.14). Overall, 39 percent of women who had ever experienced spousal physical violence suffered one or more of these injuries. Women who had experienced violence in the past 12 months were more likely than women who had ever experienced spousal violence to have suffered one or more of these injuries.

Women were also asked whether they had sustained some form of injury as a result of sexual violence inflicted by their husband. Table 17.14 shows that among women who had experienced sexual violence from their spouse, 39 percent reported that they suffered cuts, bruises, or aches, 17 percent sustained eye injuries, sprains, dislocations, or burns; and 7 percent reported that they had deep wounds, broken bones, broken teeth, or other serious injuries. Forty-one percent of women who experienced sexual violence ever or in the past 12 months suffered one or more of these injuries.

In addition, women were asked whether they had sustained some form of injury as a result of either physical or sexual violence inflicted by their husband. Among women who had experienced any physical or sexual violence from their spouse, 34 percent reported that they suffered cuts, bruises, or aches; 11 percent had eye injuries, sprains, dislocations, or burns; and 5 percent had deep wounds, broken bones,

broken teeth, or other serious injuries. Overall, 36 percent of women who had ever experienced spousal physical or sexual violence and 38 percent of those who experienced it in the past 12 months suffered one or more of these injuries.

**Table 17.14 Injuries to women due to spousal violence**

Percentage of ever-married women age 15-49 who have experienced specific types of spousal violence by types of injuries resulting from the violence, according to the type of violence and whether they experienced the violence ever and in the 12 months preceding the survey, Zambia 2013-14

Type of violence	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have ever experienced any physical or sexual violence
<b>Experienced physical violence<sup>1</sup></b>					
Ever <sup>2</sup>	36.7	12.5	5.1	38.5	3,330
In the past 12 months	40.9	16.2	6.8	42.7	1,822
<b>Experienced sexual violence</b>					
Ever <sup>2</sup>	39.3	17.2	6.7	41.4	1,431
In the past 12 months	39.3	16.8	7.3	40.7	1,113
<b>Experienced physical or sexual violence<sup>1</sup></b>					
Ever <sup>2</sup>	34.0	11.4	4.7	35.7	3,663
In the past 12 months	36.0	13.5	5.6	37.5	2,274

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women.

<sup>1</sup> Excludes women who reported violence only in response to a direct question on violence during pregnancy

<sup>2</sup> Includes in the past 12 months

## 17.16 VIOLENCE BY WOMEN AGAINST THEIR HUSBANDS

In cases of domestic violence, either person (husband or wife) can be the perpetrator of violence. In the 2013-14 ZDHS, ever-married women were asked about instances when they were the instigator of spousal violence. Specifically, they were asked whether they had initiated physical violence against their husband or partner when he was not already hitting or beating them.

Table 17.15 shows the percentage of ever-married women age 15-49 who reported initiating physical violence against their spouse ever and in the 12 months prior to the survey. Overall, 9 percent of women reported that they had initiated physical violence against their husbands, and 5 percent had done so in the past 12 months. Women who have been physically abused by their husband ever and in the past 12 months, formerly married women, those with 3-4 children, women living in urban areas and in Copperbelt, women employed for cash and those in the fourth wealth quintile are more likely to commit physical violence against their husbands or partners than their counterparts in the other categories.

Table 17.16 shows that violence against their spouse ever or in the past 12 months is substantially higher among women whose spouse gets drunk very often (19 percent and 13 percent, respectively) and among women whose husbands display five or six controlling behaviours (20 percent and 14 percent, respectively).

Table 17.15 Women's violence against their spouse

Percentage of ever-married women age 15-49 who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting her, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, Zambia 2013-14

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever <sup>1</sup>	In the past 12 months	
<b>Woman's experience of spousal physical violence</b>			
Ever <sup>1</sup>	17.9	11.9	3,330
In the past 12 months	22.5	17.8	1,822
Never	2.5	1.2	5,242
<b>Age</b>			
15-19	3.3	2.3	469
20-24	6.8	4.2	1,435
25-29	9.0	6.2	1,801
30-39	9.2	5.7	3,128
40-49	9.4	5.7	1,738
<b>Marital status</b>			
Married or living together	7.9	5.4	7,145
Divorced/separated/widowed	11.4	5.1	1,427
<b>Number of living children</b>			
0	8.3	4.6	422
1-2	6.8	4.0	2,793
3-4	10.0	7.0	2,685
5+	8.7	5.3	2,672
<b>Religion</b>			
Catholic	9.0	6.2	1,441
Protestant	8.4	5.2	6,983
Muslim	6.5	6.5	62
Other	5.8	5.8	65
<b>Residence</b>			
Urban	10.9	7.4	3,597
Rural	6.7	3.9	4,974
<b>Province</b>			
Central	5.6	3.9	785
Copperbelt	16.7	11.5	1,318
Eastern	5.5	3.5	1,084
Luapula	8.1	4.8	677
Lusaka	8.1	5.8	1,642
Muchinga	8.7	5.8	458
Northern	8.7	3.6	699
North Western	4.8	2.5	366
Southern	6.3	3.6	1,083
Western	5.7	2.8	460
<b>Employment</b>			
Employed for cash	10.0	6.3	3,455
Employed not for cash	7.3	4.1	1,806
Not employed	7.5	5.1	3,292
<b>Wealth quintile</b>			
Lowest	7.0	3.7	1,741
Second	6.1	3.8	1,656
Middle	8.3	5.0	1,672
Fourth	11.2	8.1	1,829
Highest	9.5	6.1	1,674
Total	8.5	5.4	8,571

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women. Total includes 19 women for whom information on religion is missing and 19 women for whom information on employment status is missing.

<sup>1</sup> Includes in the past 12 months

**Table 17.16 Women's violence against their spouse by husband's characteristics and empowerment indicators**

Percentage of ever-married women age 15-49 who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting her, ever and in the past 12 months, according to their husband's characteristics, Zambia 2013-14

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever <sup>1</sup>	In the past 12 months	
<b>Husband's/partner's education</b>			
No education	5.4	3.1	509
Primary	7.6	5.0	3,154
Secondary	9.6	6.0	3,919
More than secondary	8.7	5.1	724
<b>Husband's/partner's alcohol consumption</b>			
Does not drink	5.2	3.0	4,582
Drinks/never gets drunk	10.2	5.9	70
Gets drunk sometimes	8.8	5.5	2,593
Gets drunk very often	19.4	13.4	1,309
<b>Spousal education difference</b>			
Husband better educated	8.6	5.6	5,288
Wife better educated	8.8	5.3	1,479
Both equally educated	7.4	4.1	1,231
Neither educated	5.3	3.0	202
<b>Spousal age difference<sup>2</sup></b>			
Wife older	7.8	6.8	189
Wife is same age	10.9	7.9	184
Wife's 1-4 years younger	7.8	4.9	2,438
Wife's 5-9 years younger	7.8	5.7	2,918
Wife's 10+ years younger	7.5	5.0	1,308
<b>Number of marital control behaviours displayed by husband/partner<sup>3</sup></b>			
0	3.3	1.7	2,244
1-2	6.4	3.9	3,333
3-4	13.4	8.7	2,443
5-6	20.2	14.4	552
<b>Number of decisions in which women participate<sup>4</sup></b>			
0	7.5	5.8	509
1-2	7.6	5.4	1,515
3-4	8.0	5.4	5,120
<b>Number of reasons for which wife-beating is justified<sup>5</sup></b>			
0	6.7	4.2	4,445
1-2	7.7	4.0	1,372
3-4	11.5	7.2	1,462
5	12.0	8.8	1,291
<b>Woman's father beat her mother</b>			
Yes	11.4	7.1	3,115
No	6.4	4.2	4,679
DK/missing	8.7	5.6	777
<b>Woman afraid of husband/partner</b>			
Most of the time afraid	11.1	6.8	1,504
Sometimes afraid	11.6	7.7	2,931
Never afraid	5.3	3.2	4,076
<b>Total</b>	<b>8.5</b>	<b>5.4</b>	<b>8,571</b>

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women. Total includes 265 women for whom information on husband's/partner's education is missing, 18 women for whom information on husband's/partner's consumption of alcohol is missing, 371 women for whom information on spousal education difference is missing, 107 women for whom information on spousal age difference is missing, and 61 women for whom information on whether the woman is afraid of her husband/partner is missing.

<sup>1</sup> Includes in the past 12 months

<sup>2</sup> Includes only women who have been married only once.

<sup>3</sup> According to the wife's report. See Table 17.8 for list of behaviours.

<sup>4</sup> According to the wife's report. Includes only currently married women. See Table 16.6.1 for list of decisions.

<sup>5</sup> According to the wife's report. See Table 16.7.1 for list of decisions.

## 17.17 HELP-SEEKING BEHAVIOUR BY WOMEN WHO EXPERIENCE VIOLENCE

The final section of this chapter describes help-seeking behaviour by women age 15-49 who have ever experienced physical or sexual violence. Table 17.17 shows the percent distribution of women who have ever experienced physical or sexual violence committed by anyone, according to whether they ever sought help to stop the violence and, among those who did not seek help, whether or not they told anyone about the violence.

Table 17.17 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behaviour by type of violence and background characteristics, Zambia 2013-14

Background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Missing/ don't know	Total	Number of women who have ever experienced any physical or sexual violence
<b>Type of violence experienced</b>						
Physical only	39.3	8.6	42.1	10.1	100.0	3,474
Sexual only	27.7	4.0	62.7	5.6	100.0	416
Physical and sexual	54.6	9.4	34.8	1.2	100.0	1,637
<b>Age</b>						
15-19	36.4	9.8	38.7	15.1	100.0	814
20-24	38.5	9.5	44.1	8.0	100.0	1,028
25-29	44.9	7.2	42.8	5.1	100.0	1,062
30-39	47.5	9.2	38.3	5.0	100.0	1,726
40-49	42.9	6.2	45.5	5.3	100.0	897
<b>Marital status</b>						
Never married	32.7	10.2	39.4	17.8	100.0	958
Married or living together	41.7	8.6	44.8	4.9	100.0	3,717
Divorced/separated/widowed	59.9	5.9	29.4	4.8	100.0	852
<b>Number of living children</b>						
0	30.8	11.4	42.0	15.8	100.0	907
1-2	44.7	7.6	39.8	7.8	100.0	1,709
3-4	46.6	7.6	41.0	4.8	100.0	1,485
5+	44.8	8.5	43.5	3.2	100.0	1,426
<b>Religion</b>						
Catholic	42.0	6.9	43.5	7.6	100.0	987
Protestant	43.2	8.9	41.0	6.9	100.0	4,476
Muslim	*	*	*	*	100.0	16
Other	(44.0)	(0.9)	(40.6)	(14.5)	100.0	41
<b>Residence</b>						
Urban	41.3	9.4	40.5	8.7	100.0	2,592
Rural	44.4	7.6	42.3	5.7	100.0	2,935
<b>Province</b>						
Central	42.6	6.5	35.4	15.4	100.0	457
Copperbelt	48.3	8.5	39.2	4.0	100.0	1,029
Eastern	56.5	6.5	28.3	8.7	100.0	530
Luapula	46.0	8.1	41.3	4.6	100.0	451
Lusaka	35.1	9.4	42.8	12.8	100.0	1,040
Muchinga	36.8	11.4	50.0	1.9	100.0	284
Northern	28.8	7.3	61.0	2.9	100.0	485
North Western	49.8	3.7	37.5	8.9	100.0	213
Southern	40.4	10.3	45.0	4.3	100.0	730
Western	53.8	9.9	32.2	4.1	100.0	309
<b>Education</b>						
No education	45.2	8.0	40.2	6.6	100.0	475
Primary	43.9	7.7	43.3	5.1	100.0	2,801
Secondary	42.1	9.4	39.1	9.3	100.0	2,024
More than secondary	33.5	11.0	42.2	13.2	100.0	227
<b>Employment</b>						
Employed for cash	46.7	8.1	39.4	5.8	100.0	2,201
Employed not for cash	39.7	7.4	48.3	4.7	100.0	1,093
Not employed	40.8	9.4	40.3	9.5	100.0	2,217
<b>Wealth quintile</b>						
Lowest	47.4	6.8	42.0	3.9	100.0	1,004
Second	43.5	8.5	42.1	5.8	100.0	948
Middle	44.4	7.5	42.6	5.5	100.0	1,108
Fourth	42.0	10.0	39.5	8.6	100.0	1,202
Highest	38.7	9.2	41.4	10.6	100.0	1,265
<b>Total</b>	<b>43.0</b>	<b>8.5</b>	<b>41.5</b>	<b>7.1</b>	<b>100.0</b>	<b>5,527</b>

Note: Women can report more than one source from which they sought help. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. Total includes 7 women for whom information on religion is missing and 16 women for whom information on employment status is missing.

Overall, 43 percent of women who have experienced any type of physical or sexual violence from anyone sought help to stop the violence, 9 percent never sought help but told someone, and 42 percent did not seek help and never told anyone.

Help seeking to stop violence is higher among women who experienced physical violence (39 percent) than those who experienced sexual violence (28 percent). Women age 15-24 (36-39 percent), those who never married (33 percent), and women with no living children (31 percent) are the least likely to seek help to stop violence. By province, the percentage of women who seek help to stop the violence ranges from 57 percent in Eastern to 29 percent in Northern.

Women who are employed for cash (47 percent) are more likely to seek for help compared with women employed for cash (41 percent) and unemployed women (40 percent). Help seeking decreases by education and fluctuates by wealth quintile; it is lowest for women in the highest wealth quintile (39 percent).

Table 17.18 shows the percentage of abused women who reported seeking help, by sources from which help was sought. The most common sources of help are the woman's own family (69 percent), followed by their husband's or partner's family (43 percent). Eight percent of women who have ever experienced physical or sexual violence sought help from the police.

**Table 17.18 Sources for help to stop the violence**

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Zambia 2013-14

Person	Type of violence experienced			Total
	Physical only	Sexual only	Physical and sexual	
Own family	70.7	75.0	65.6	69.0
Husband/partner's family	42.9	10.9	47.8	43.2
Husband/partner	0.7	1.9	0.8	0.8
Boyfriend	0.0	0.0	0.4	0.2
Friend	4.2	15.8	8.9	6.6
Neighbour	5.1	1.8	7.2	5.7
Religious leader	2.2	1.2	7.7	4.2
Doctor/medical personnel	2.0	0.4	1.0	1.5
Police	6.7	2.4	10.1	7.8
Lawyer	0.4	1.3	2.1	1.1
Social work organisation	1.4	1.3	3.4	2.2
Other	4.1	5.7	4.3	4.2
Number of women who have experienced violence and sought help	1,365	115	894	2,374





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## A.1 INTRODUCTION

The 2013-14 Zambia Demographic and Health Survey (2013-14 ZDHS) follows similar surveys conducted in 1992, 1996, 2001-02, and 2007. A nationally representative sample of about 18,050 households was selected. All women age 15-49 who were usual residents of the selected households, or who slept in the households the night before the survey, were eligible to be interviewed. The survey resulted in 16,411 interviews of women age 15-49. As with prior surveys, the main objectives of the 2013-14 ZDHS were to provide up-to-date information on fertility and childhood mortality levels; fertility preferences; awareness, approval, and use of family planning methods; maternal and child health; adult and maternal mortality; and knowledge and attitudes toward HIV/AIDS and other sexually transmitted infections (STIs). HIV testing was implemented for the third time in the 2013-14 ZDHS to provide a measure of HIV prevalence among the general population. The survey produced representative results for the country as a whole, for the urban and the rural areas separately, and for each of the 10 provinces.

A male survey was conducted at the same time as the female survey in all the selected survey households. All men age 15-59 who were usual residents of the selected households, or who slept in the households the night before the survey, were eligible for the male survey. The survey collected information on men's basic demographic and social status, their knowledge of family planning methods, and their knowledge and attitudes toward HIV/AIDS and other sexually transmitted infections. The survey resulted in 14,993 interviews of men age 15-59. All male and female respondents in the selected households were eligible for HIV testing; in addition, all women age 15-49 and all children under age 5 were eligible for anthropometry measurement.

## A.2 SAMPLING FRAME

Zambia is divided into ten provinces. In turn, each province is subdivided into districts, each district into constituencies, and each constituency into wards. In addition to these administrative units, during the 2010 Zambia Population and Housing Census (CSO, 2012), each ward was subdivided in convenient areas called census supervisory areas (CSAs), and in turn each CSA was subdivided into standard enumeration areas (SEAs). An SEA is a convenient geographical area with an average size of 110 households or 510 people. It contains information about its location, the type of residences, the number of households, and the population. Each SEA has a cartographic map that delimits the boundaries and shows the main landmarks of the SEA. In total, Zambia has 74 districts, 150 constituencies, 1,292 wards, 8,196 CSAs, and 25,632 SEAs. The list of SEAs was used as the sampling frame for the 2014 ZDHS.

Estimates of demographic and health indicators from the 2013-14 ZDHS will be reported for the country as a whole, for urban and rural areas separately, and for each of the ten provinces, namely, (1) Central, (2) Copperbelt, (3) Eastern, (4) Luapula, (5) Lusaka, (6) Muchinga, (7) Northwestern, (8) Northern, (9) Southern, and (10) Western.

Table A.1 below shows the 2010 census population distribution of the Republic of Zambia by province and by type of residence. In Zambia, about 40 percent of the population live in urban areas.

Table A.1 Population distribution by province and by residence from the 2010 Census of Population and Housing, Zambia 2013-14

Province	Urban	Rural	Total	Percent urban	Percent province
Central	328,537	978,574	1,307,111	25.13	9.99
Copperbelt	1,596,374	376,789	1,973,163	80.90	15.07
Eastern	199,479	1,393,185	1,592,664	12.52	12.17
Luapula	194,744	797,463	992,207	19.63	7.58
Lusaka	1,842,076	336,318	2,178,394	84.56	16.64
Muchinga	123,393	596,469	719,862	17.14	5.50
Northwestern	157,902	569,142	727,044	21.72	5.55
Northern	201,873	903,951	1,105,824	18.26	8.45
Southern	389,215	1,200,761	1,589,976	24.48	12.15
Western	133,090	770,093	903,183	14.74	6.90
Zambia	5,166,683	7,922,745	13,089,428	39.47	100.00

### A.3 SAMPLE DESIGN AND SAMPLING PROCEDURE

The sample for the 2013-14 ZDHS is a stratified sample selected in two stages from the CPH 2010 frame. Stratification is achieved by separating each province into urban and rural areas. Thus, the 10 provinces are stratified into 20 sampling strata. Samples are selected independently in every stratum, by a two-stage selection process. Implicit stratifications and proportional allocation are achieved at each of the lower geographic/administrative levels by sorting the sampling frame according to the geographic/administrative order and by using a probability proportional to size selection at the first stage of sampling.

In the first stage, 722 SEAs are selected with probability proportional to the SEA size. The SEA size is the number of households residing in the SEA. A household listing operation was carried out in all selected SEAs, and the resulting lists of households served as the sampling frame for the selection of households in the second stage. To minimise the task of household listing, selected SEAs with more than 300 households were segmented. Only one segment was selected for the survey with probability proportional to the segment size. Household listing was conducted only in the selected segment. So a 2013-14 ZDHS cluster is either an SEA or a segment of an SEA.

In the second stage of selection, a fixed number of 25 households per cluster is selected with an equal probability systematic selection from the newly created household listing. The survey interviewer is instructed to interview only the pre-selected households. No replacements and no changes of the pre-selected households are allowed in the implementing stages in order to prevent bias. All women age 15-49 and men age 15-59 who are usual members of the selected households or who spent the night before the survey in the selected households are eligible for the individual interview.

Table A.2 shows the allocation of households according to province and urban-rural areas, and Tables A.3 and A.4 show the expected number of eligible and completed women's and men's interviews by province and urban-rural areas. To ensure that the survey precision is comparable across provinces, the sample allocation figures a power allocation between provinces and between different types of residence within each province. Based on a fixed sample take of 25 households per cluster, the survey selected 722 EAs, 305 in urban areas and 417 in rural areas. The survey was expected to be conducted in 18,050 residential households, 7,625 in urban areas and 10,425 in rural areas. The sample was expected to result in about 16,516 completed interviews with women age 15-49, 8,356 in urban areas and 8,160 in rural areas, and about 14,993 completed interviews with men age 15-59, 7,447 in urban areas and 7,546 in rural areas.



Table A.2 Sample allocation of clusters and households, according to province and by type of residence, Zambia 2013-14

Province	Allocation of clusters			Allocation of households		
	Urban	Rural	Total	Urban	Rural	Total
Central	26	40	66	650	1,000	1,650
Copperbelt	44	26	70	1,100	650	1,750
Eastern	27	59	86	675	1,475	2,150
Luapula	26	48	74	650	1,200	1,850
Lusaka	48	26	74	1,200	650	1,850
Muchinga	26	42	68	650	1,050	1,700
North-Western	28	42	70	700	1,050	1,750
Northern	27	47	74	675	1,175	1,850
Southern	27	45	72	675	1,125	1,800
Western	26	42	68	650	1,050	1,700
Zambia	305	417	722	7,625	10,425	18,050

Table A.3 Sample allocation of eligible women and completed women's interviews, according to province and by type of residence, Zambia 2013-14

Province	Eligible women 15-49			Completed women's interviews		
	Urban	Rural	Total	Urban	Rural	Total
Central	744	807	1,551	712	783	1,495
Copperbelt	1,259	524	1,783	1,205	509	1,714
Eastern	773	1,189	1,962	740	1,154	1,894
Luapula	744	968	1,712	712	940	1,652
Lusaka	1,374	524	1,898	1,315	509	1,824
Muchinga	744	847	1,591	712	822	1,534
North-Western	802	847	1,649	768	822	1,590
Northern	773	947	1,720	740	919	1,659
Southern	773	907	1,680	740	880	1,620
Western	744	847	1,591	712	822	1,534
Zambia	8,730	8,407	17,137	8,356	8,160	16,516

Table A.4 Sample allocation of eligible men and completed men's interviews, according to province and by type of residence, Zambia 2013-14

Province	Eligible men 15-59			Completed men's interviews		
	Urban	Rural	Total	Urban	Rural	Total
Central	723	774	1,497	635	724	1,359
Copperbelt	1,223	503	1,726	1,074	471	1,545
Eastern	751	1,140	1,891	659	1,067	1,726
Luapula	723	928	1,651	635	868	1,503
Lusaka	1,335	503	1,838	1,172	471	1,643
Muchinga	723	812	1,535	635	760	1,395
North-Western	779	812	1,591	684	760	1,444
Northern	751	909	1,660	659	851	1,510
Southern	751	870	1,621	659	814	1,473
Western	723	812	1,535	635	760	1,395
Zambia	8,482	8,063	16,545	7,447	7,546	14,993

The above calculations are based on the facts obtained from the 2007 ZDHS: there are 1.232 and 0.915 women age 15-49 per household in urban and rural areas, respectively; there are 1.197 and 0.877 men age 15-59 per household in urban and rural areas, respectively. The household response rates are 93 percent and 88 percent in urban and rural areas, respectively; the female response rates are 96 percent and 97 percent in urban and rural areas, respectively; the male response rates are 88 percent and 94 percent in urban and rural areas, respectively.

#### A.4 SAMPLING PROBABILITIES

Due to the non-proportional allocation of a sample to different provinces and to their urban and rural areas, and the possible differences in response rates, sampling weight will be required for any analysis using the 2013-14ZDHS data. This ensures the representativeness of the survey results at the national level and at the domain level. Because the 2013-14 ZDHS sample is a two-stage stratified cluster sample, sampling weights will be calculated based on sampling probabilities separately for each sampling stage and for each cluster. We use the following notations:

- $P_{1hi}$ : first-stage sampling probability of the  $i^{th}$  cluster in stratum  $h$   
 $P_{2hi}$ : second -stage sampling probability within the  $i^{th}$  cluster (households)

Let  $a_h$  be the number of SEAs selected in stratum  $h$ ,  $M_{hi}$  the number of households according to the sampling frame in the  $i^{th}$ SEA, and  $\sum M_{hi}$  the total number of households in the stratum. The probability of selecting the  $i^{th}$ SEA in the 2014 ZDHS sample is calculated as follows:

$$\frac{a_h M_{hi}}{\sum M_{hi}}$$

Let  $b_{hi}$  be the proportion of households in the selected cluster compared to the total number of households in SEA and  $i$  in stratum  $h$  if the SEA is segmented, otherwise  $b_{hi} = 1$ . Then the probability of selecting cluster  $i$  in the sample is:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let  $L_{hi}$  be the number of households listed in the household listing operation in cluster  $i$  in stratum  $h$ , let  $g_{hi}$  be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster  $i$  of stratum  $h$  is therefore the product of the two stages of selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The sampling weight for each household in cluster  $i$  of stratum  $h$  is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

Design weight is adjusted for household non-response and for individual non-response to get the sampling weights for households and for women's and men's surveys. The differences in the household sampling weight and the individual sampling weights are introduced by individual non-response. The final sampling weights are normalised to get the total number of unweighted cases equal to the total number of weighted cases at the national level, for both household and individual weights. The normalised weights are relative weights that are valid for estimating means, proportions, and ratios but not valid for estimating population totals and pooled data.

Table A.5 Sample implementation: Women

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women's, and overall women's response rates, according to urban-rural residence and region (unweighted), Zambia 2013-14

Result	Residence		Region										Total
	Urban	Rural	Central	Copperbelt	Eastern	Luapula	Lusaka	Muchinga	Northern	North Western	Southern	Western	
<b>Selected households</b>													
Completed (C)	91.1	86.1	85.0	90.6	89.9	91.6	93.4	84.1	85.9	84.8	90.0	85.5	88.2
Household present but no competent respondent at home (HP)	0.7	0.8	1.6	0.3	0.6	0.4	0.3	0.4	0.8	1.8	0.6	1.1	0.8
Postponed (P)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0
Refused (R)	0.4	0.5	0.4	0.8	0.5	0.1	0.4	0.4	1.2	0.2	0.3	0.1	0.4
Dwelling not found (DNF)	0.2	0.9	0.8	0.1	0.3	0.2	0.0	3.4	0.8	0.2	0.3	0.5	0.6
Household absent (HA)	1.6	2.7	3.3	1.9	1.7	2.0	0.9	2.9	1.7	2.8	2.0	3.5	2.2
Dwelling vacant/address not a dwelling (DV)	4.7	7.1	6.7	4.7	6.0	4.7	4.7	6.9	7.4	6.5	5.4	8.4	6.1
Dwelling destroyed (DD)	1.3	1.8	2.2	1.5	1.0	1.1	0.3	1.8	2.3	3.6	1.3	0.8	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	7,637	10,415	1,650	1,753	2,154	1,840	1,850	1,700	1,850	1,755	1,800	1,700	18,052
Household response rate (HRR) <sup>1</sup>	98.5	97.5	96.8	98.6	98.5	99.4	99.2	95.2	96.9	97.5	98.6	98.0	97.9
<b>Eligible women</b>													
Completed (EWC)	95.8	96.5	95.4	95.7	96.9	96.8	97.5	94.6	96.8	97.8	96.3	93.1	96.2
Not at home (EWNH)	2.4	2.2	3.3	1.7	2.2	2.0	1.5	3.7	1.6	0.9	1.9	4.9	2.3
Postponed (EWP)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	1.1	0.6	0.6	1.8	0.3	0.5	0.5	0.9	0.9	0.8	0.8	1.1	0.8
Partly completed (EWPC)	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.2	0.2	0.0	0.1	0.1	0.1
Incapacitated (EWI)	0.4	0.6	0.4	0.6	0.6	0.6	0.4	0.5	0.5	0.4	0.8	0.5	0.5
Other (EWO)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	8,212	8,852	1,468	1,850	2,101	1,637	1,962	1,538	1,633	1,605	1,799	1,471	17,064
Eligible women response rate (EWRR) <sup>2</sup>	95.8	96.5	95.4	95.7	96.9	96.8	97.5	94.6	96.8	97.8	96.3	93.1	96.2
Overall women response rate (ORR) <sup>3</sup>	94.4	94.0	92.3	94.4	95.4	96.2	96.7	90.1	93.7	95.4	94.9	91.2	94.2

<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

<sup>2</sup> The eligible women's response rate (EWRR) is equivalent to the percentage of interviews completed (EWC).

<sup>3</sup> The overall women's response rate (OWRR) is calculated as follows:

$$OWRR = HRR * EWRR/100$$

Table A.6 Sample implementation: Men

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men's and overall men's response rates, according to urban-rural residence and region (unweighted), Zambia 2013-14

Result	Residence		Region										Total
	Urban	Rural	Central	Copperbelt	Eastern	Luapula	Lusaka	Muchinga	Northern	North Western	Southern	Western	
<b>Selected households</b>													
Completed (C)	91.1	86.1	85.0	90.6	89.9	91.6	93.4	84.1	85.9	84.8	90.0	85.5	88.2
Household present but no competent respondent at home (HP)	0.7	0.8	1.6	0.3	0.6	0.4	0.3	0.4	0.8	1.8	0.6	1.1	0.8
Postponed (P)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0
Refused (R)	0.4	0.5	0.4	0.8	0.5	0.1	0.4	0.4	1.2	0.2	0.3	0.1	0.4
Dwelling not found (DNF)	0.2	0.9	0.8	0.1	0.3	0.2	0.0	3.4	0.8	0.2	0.3	0.5	0.6
Household absent (HA)	1.6	2.7	3.3	1.9	1.7	2.0	0.9	2.9	1.7	2.8	2.0	3.5	2.2
Dwelling vacant/address not a dwelling (DV)	4.7	7.1	6.7	4.7	6.0	4.7	4.7	6.9	7.4	6.5	5.4	8.4	6.1
Dwelling destroyed (DD)	1.3	1.8	2.2	1.5	1.0	1.1	0.3	1.8	2.3	3.6	1.3	0.8	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	7,637	10,415	1,650	1,753	2,154	1,840	1,850	1,700	1,850	1,755	1,800	1,700	18,052
Household response rate (HRR) <sup>1</sup>	98.5	97.5	96.8	98.6	98.5	99.4	99.2	95.2	96.9	97.5	98.6	98.0	97.9
<b>Eligible men</b>													
Completed (EMC)	89.1	92.9	88.4	87.9	92.6	93.9	93.1	87.7	94.4	91.9	94.0	84.8	91.1
Not at home (EMNH)	7.8	5.2	10.2	7.7	5.5	4.0	4.3	10.6	3.1	4.8	4.1	13.2	6.4
Postponed (EMP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Refused (EMR)	2.2	0.8	0.8	2.8	0.8	0.9	1.7	1.0	1.6	2.5	1.2	1.0	1.4
Partly completed (EMPC)	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.1	0.0	0.1
Incapacitated (EMI)	0.7	1.0	0.6	1.5	1.0	1.0	0.9	0.4	0.7	0.6	0.6	0.9	0.8
Other (EMO)	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	7,660	8,549	1,349	1,851	2,128	1,457	1,991	1,451	1,540	1,462	1,781	1,199	16,209
Eligible men's response rate (EMRR) <sup>2</sup>	89.1	92.9	88.4	87.9	92.6	93.9	93.1	87.7	94.4	91.9	94.0	84.8	91.1
Overall men's response rate (ORR) <sup>3</sup>	87.8	90.6	85.5	86.7	91.2	93.3	92.4	83.5	91.5	89.6	92.7	83.1	89.2

<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

<sup>2</sup> The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC)

<sup>3</sup> The overall men response rate (OMRR) is calculated as:

$$OMRR = HRR * EMRR/100$$

Table A.7 Coverage of HIV testing by social and demographic characteristics: Women

Percent distribution of interviewed women age 15-49 by HIV testing status, according to social and demographic characteristics (unweighted), Zambia 2013-14

Characteristic	Testing status			Total	Number
	Dried blood sample tested <sup>1</sup>	Refused to provide blood	Other/missing <sup>2</sup>		
<b>Marital status</b>					
Never married	93.8	5.8	0.4	100.0	4,753
Ever had sexual intercourse	94.4	5.3	0.3	100.0	2,608
Never had sexual intercourse	93.0	6.4	0.6	100.0	2,145
Married/living together	94.3	5.3	0.3	100.0	9,649
Divorced or separated	93.7	6.1	0.2	100.0	1,438
Widowed	92.5	6.7	0.9	100.0	571
<b>Type of union</b>					
In polygynous union	94.8	4.7	0.4	100.0	1,123
In non-polygynous union	94.2	5.5	0.3	100.0	8,447
Not currently in union	93.6	5.9	0.4	100.0	6,762
Don't know/missing	98.7	1.3	0.0	100.0	79
<b>Ever had sexual intercourse</b>					
Yes	94.2	5.4	0.3	100.0	14,244
No	93.0	6.4	0.6	100.0	2,139
Missing	78.6	21.4	0.0	100.0	28
<b>Currently pregnant</b>					
Pregnant	95.0	4.6	0.4	100.0	1,420
Not pregnant or not sure	93.9	5.7	0.4	100.0	14,991
<b>Times slept away from home in past 12 months</b>					
None	94.4	5.2	0.4	100.0	9,684
1-2	94.4	5.4	0.2	100.0	4,381
3-4	92.5	7.1	0.4	100.0	1,421
5+	91.2	8.2	0.7	100.0	907
Missing	100.0	0.0	0.0	100.0	18
<b>Time away in past 12 months</b>					
Away for more than 1 month	93.7	5.9	0.4	100.0	2,993
Away for less than 1 month	93.4	6.3	0.3	100.0	3,707
No away	94.4	5.2	0.4	100.0	9,695
Missing	93.8	6.3	0.0	100.0	16
<b>Religion</b>					
Catholic	94.3	5.6	0.1	100.0	2,895
Protestant	94.1	5.5	0.4	100.0	13,298
Muslim	84.8	15.2	0.0	100.0	79
Missing	90.2	9.8	0.0	100.0	41
Total	94.0	5.6	0.4	100.0	16,411

<sup>1</sup> Includes all dried blood samples tested at the lab and for which there is a result, i.e., positive, negative, or indeterminate. Indeterminate means that the sample went through the entire algorithm, but the final result was inconclusive.

<sup>2</sup> Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table A.8 Coverage of HIV testing by social and demographic characteristics: Men

Percent distribution of interviewed men 15-59 by HIV testing status, according to social and demographic characteristics (unweighted), Zambia 2013-14

Characteristic	Testing status				Total	Number
	Dried blood sampletested <sup>1</sup>	Refused to provide blood	Absent at the time of blood collection	Other/missing <sup>2</sup>		
<b>Marital status</b>						
Never married	92.2	6.8	0.0	1.0	100.0	5,924
Ever had sexual intercourse	92.6	6.4	0.0	0.9	100.0	3,891
Never had sexual intercourse	91.2	7.5	0.0	1.3	100.0	2,033
Married/living together	91.7	7.6	0.0	0.6	100.0	8,225
Divorced or separated	91.1	8.2	0.0	0.7	100.0	538
Widowed	94.2	5.8	0.0	0.0	100.0	86
<b>Type of union</b>						
In polygynous union	94.3	5.1	0.0	0.7	100.0	610
In nonpolygynous union	91.5	7.8	0.0	0.6	100.0	7,615
Not currently in union	92.1	6.9	0.0	1.0	100.0	6,548
<b>Ever had sexual intercourse</b>						
Yes	92.0	7.3	0.0	0.7	100.0	12,732
No	91.3	7.4	0.0	1.3	100.0	2,028
Missing	69.2	30.8	0.0	0.0	100.0	13
<b>Male circumcision</b>						
Circumcised	91.2	7.9	0.0	0.9	100.0	3,635
Not circumcised	92.1	7.1	0.0	0.8	100.0	11,120
Don't know/missing	88.9	11.1	0.0	0.0	100.0	18
<b>Times slept away from home in past 12 months</b>						
None	92.3	6.9	0.0	0.8	100.0	8,293
1-2	92.0	7.3	0.0	0.7	100.0	3,150
3-4	91.2	7.8	0.1	1.0	100.0	1,533
5+	90.2	9.0	0.0	0.8	100.0	1,778
Missing	89.5	10.5	0.0	0.0	100.0	19
<b>Time away in past 12 months</b>						
Away for more than 1 month	92.3	7.0	0.0	0.7	100.0	2,417
Away for less than 1 month	90.7	8.4	0.0	0.9	100.0	4,027
No away	92.3	6.9	0.0	0.8	100.0	8,293
Missing	91.7	5.6	0.0	2.8	100.0	36
<b>Religion</b>						
Catholic	91.1	7.9	0.0	1.1	100.0	2,929
Protestant	92.2	7.0	0.0	0.7	100.0	11,522
Muslim	82.6	17.4	0.0	0.0	100.0	109
Missing	93.0	7.0	0.0	0.0	100.0	57
Total	91.9	7.3	0.0	0.8	100.0	14,773

<sup>1</sup> Includes all dried blood samples tested at the lab and for which there is a result, i.e., positive, negative, or indeterminate. Indeterminate means that the sample went through the entire algorithm, but the final result was inconclusive.

<sup>2</sup> Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table A.9 Coverage of HIV testing by sexual behaviour characteristics: Women

Percent distribution of interviewed women age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), Zambia 2013-14

	Testing status				
Sexual behaviour characteristic	Dried blood sampletested <sup>1</sup>	Refused to provide blood	Other/ missing <sup>2</sup>	Total	Number
<b>Age at first sexual intercourse</b>					
<16	95.0	4.7	0.3	100.0	4,841
16-17	95.0	4.7	0.4	100.0	4,230
18-19	93.6	6.0	0.4	100.0	2,452
20+	91.8	8.0	0.3	100.0	1,588
Missing	93.0	6.5	0.4	100.0	1,133
<b>Multiple sexual partners and partner concurrency in past 12 months</b>					
0	92.6	7.0	0.4	100.0	1,998
1	94.5	5.2	0.3	100.0	11,971
2+	96.2	3.4	0.4	100.0	264
Had concurrent partners <sup>1</sup>	96.4	3.6	0.0	100.0	55
None of the partners were concurrent	96.2	3.3	0.5	100.0	209
Missing	45.5	45.5	9.1	100.0	11
<b>Condom use at last sexual intercourse in past 12 months</b>					
Used condom	93.8	5.7	0.5	100.0	1,906
Did not use condom	94.7	5.0	0.3	100.0	10,322
No sexual intercourse in last 12 months	92.4	7.2	0.4	100.0	2,009
Don't know/missing	85.7	14.3	0.0	100.0	7
<b>Number of lifetime partners</b>					
1	94.1	5.6	0.2	100.0	6,321
2	94.1	5.5	0.4	100.0	4,386
3-4	94.7	4.8	0.5	100.0	2,849
5-9	95.1	4.3	0.5	100.0	552
10+	92.6	7.4	0.0	100.0	81
Missing	83.6	14.5	1.8	100.0	55
<b>Prior HIV testing</b>					
Ever tested	94.3	5.4	0.3	100.0	12,463
Received results	94.3	5.4	0.3	100.0	12,260
Did not received results	97.0	3.0	0.0	100.0	203
Never tested	93.3	6.1	0.6	100.0	1,736
Missing	97.8	2.2	0.0	100.0	45
Total	94.2	5.4	0.3	100.0	14,244

<sup>1</sup> Includes all dried blood samples tested at the lab and for which there is a result, i.e., positive, negative, or indeterminate. Indeterminate means that the sample went through the entire algorithm, but the final result was inconclusive.

<sup>2</sup> Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

<sup>3</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey.

Table A.10 Coverage of HIV testing by sexual behaviour characteristics: Men

Percent distribution of interviewed men age 15-59 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), Zambia 2013-14

	Testing status					
Sexual behaviour characteristic	Dried blood sampletested <sup>1</sup>	Refused to provide blood	Absent at the time of blood collection	Other/ missing <sup>2</sup>	Total	Number
<b>Age at first sexual intercourse</b>						
<16	93.1	6.2	0.0	0.7	100.0	4,194
16-17	91.3	7.9	0.0	0.8	100.0	2,760
18-19	92.1	7.0	0.0	0.9	100.0	2,608
20+	91.3	8.1	0.0	0.6	100.0	3,012
Missing	88.6	10.1	0.0	1.3	100.0	158
<b>Multiple sexual partners and partner concurrency in past 12 months</b>						
0	91.7	7.7	0.0	0.6	100.0	1,433
1	91.9	7.4	0.0	0.7	100.0	9,008
2+	92.8	6.1	0.0	1.1	100.0	2,283
Had concurrent partners <sup>1</sup>	92.9	6.3	0.0	0.7	100.0	1,087
None of the partners were concurrent	92.6	5.9	0.1	1.3	100.0	1,196
Missing	37.5	62.5	0.0	0.0	100.0	8
<b>Condom use at last sexual intercourse in past 12 months</b>						
Used condom	91.2	7.9	0.0	0.8	100.0	2,791
Did not use condom	92.4	6.9	0.0	0.7	100.0	8,497
No sexual intercourse in last 12 months	91.4	8.0	0.0	0.6	100.0	1,441
Don't know/missing	100.0	0.0	0.0	0.0	100.0	3
<b>Paid for sexual intercourse in past 12 months</b>						
Yes	93.3	5.7	0.0	1.0	100.0	629
Used condom	93.0	5.8	0.0	1.1	100.0	359
Did not use condom	93.7	5.6	0.0	0.7	100.0	270
No (No paid sexual intercourse/no sexual intercourse in last 12 months)	91.9	7.3	0.0	0.7	100.0	12,103
<b>Number of lifetime partners</b>						
1	91.9	7.6	0.0	0.5	100.0	1,704
2	91.3	7.9	0.0	0.7	100.0	2,136
3-4	92.0	7.4	0.0	0.6	100.0	3,667
5-9	92.7	6.5	0.0	0.8	100.0	3,255
10+	92.7	6.5	0.0	0.9	100.0	1,844
Missing	77.8	19.8	0.0	2.4	100.0	126
<b>Prior HIV testing</b>						
Ever tested	92.3	7.0	0.0	0.7	100.0	9,035
Received results	92.3	6.9	0.0	0.7	100.0	8,441
Did not received results	91.9	7.6	0.0	0.5	100.0	594
Never tested	91.2	7.9	0.0	0.8	100.0	3,697
Total	92.0	7.3	0.0	0.7	100.0	12,732

<sup>1</sup> Includes all dried blood samples tested at the lab and for which there is a result, i.e., positive, negative, or indeterminate. Indeterminate means that the sample went through the entire algorithm, but the final result was inconclusive.

<sup>2</sup> Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

<sup>3</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey. (Respondents with concurrent partners includes polygynous men who had overlapping sexual partnerships with two or more wives).



The estimates from a sample survey are affected by two types of errors: non-sampling errors and sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2014 Zambia DHS (ZDHS) to minimize this type of error, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2014 ZDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2014 ZDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. Sampling errors are computed in either ISSA or SAS, using programs developed by ICF International. These programs use the Taylor linearization method of variance estimation for survey estimates that are means, proportions or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate,  $r = y/x$ , where  $y$  represents the total sample value for variable  $y$ , and  $x$  represents the total number of cases in the group or subgroup under consideration. The variance of  $r$  is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = \text{var}(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[ \frac{m_h}{m_h - 1} \left( \sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}, \text{ and } z_h = y_h - rx_h$$

where  $h$  represents the stratum which varies from 1 to  $H$ ,  
 $m_h$  is the total number of clusters selected in the  $h^{\text{th}}$  stratum,  
 $y_{hi}$  is the sum of the weighted values of variable  $y$  in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  stratum,  
 $x_{hi}$  is the sum of the weighted number of cases in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  stratum, and  
 $f$  is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2014 ZDHS, there were 722 non-empty clusters. Hence, 722 replications were created. The variance of a rate  $r$  is calculated as follows:

$$SE^2(r) = \text{var}(r) = \frac{1}{k(k-1)} \sum_{i=1}^k (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where  $r$  is the estimate computed from the full sample of 722 clusters,  
 $r_{(i)}$  is the estimate computed from the reduced sample of 721 clusters ( $i^{\text{th}}$  cluster excluded),  
and  
 $k$  is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2014 ZDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the ten provinces. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 through B.14 present the value of the statistic (R), its standard error (SE), the number of un-weighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ( $R \pm 2SE$ ), for each selected variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for *the number of children ever born for women 40-49 years*) can be interpreted as follows: the overall average from the national sample is 6.341 and its standard error is 0.077. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e.,  $6.341 \pm 2 \times 0.077$ . There is a high probability (95 percent) that the true proportion of women 40-49 with children ever born is between 6.187 and 6.496.

For the total sample, the value of the DEFT, averaged over all variables, is 1.490. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.490 over that in an equivalent simple random sample.

Table B.1 List of indicators for sampling errors, Zambia DHS 2014

Variable	Base population
	WOMEN
Urban residence	All women 15-49
Literacy	All women 15-49
No education	All women 15-49
Secondary or higher education	All women 15-49
Never married (never in union)	All women 15-49
Currently married (in union)	All women 15-49
Married before age 20	Women age 25-49
Had first sexual intercourse before age 18	Women age 25-49
Currently pregnant	All women 15-49
Children ever born	All women 15-49
Children surviving	All women 15-49
Children ever born to women age 40-49	Women age 40-49
Currently using any method	Currently married women 15-49
Currently using a modern method	Currently married women 15-49
Currently using a traditional method	Currently married women 15-49
Currently using pill	Currently married women 15-49
Currently using IUD	Currently married women 15-49
Currently using condoms	Currently married women 15-49
Currently using injectables	Currently married women 15-49
Currently using female sterilization	Currently married women 15-49
Currently using rhythm method	Currently married women 15-49
Currently using withdrawal	Currently married women 15-49
Used public sector source	Currently married women 15-49
Want no more children	Currently married women 15-49
Want to delay birth at least 2 years	Currently married women 15-49
Ideal number of children	All women 15-49
Mothers received antenatal care for last birth	Women with at least 1 live birth in past 5 years
Mothers protected against tetanus for last birth	Women with at least 1 live birth in past 5 years
Births with skilled attendant at delivery	Women with at least 1 live birth in past 5 years
Had diarrhoea in 2 weeks before survey	Children under 5 years
Treated with ORS	Children under 5 years with diarrhoea in past two weeks
Sought medical treatment for diarrhea	Children under 5 years with diarrhoea in past two weeks
Vaccination card seen	Children age 12-59 months
Received BCG vaccination	Children age 12-23 months
Received DPT vaccination (3 doses)	Children age 12-23 months
Received polio vaccination (3 doses)	Children age 12-23 months
Received measles vaccination	Children age 12-23 months
Received all vaccinations	Children age 12-23 months
Height-for-age (below -2SD)	Children under 5 years who were measured
Weight-for-height (below -2SD)	Children under 5 years who were measured
Weight-for-age (below -2SD)	Children under 5 years who were measured
Body Mass Index (BMI) < 18.5	All women 15-49 who were measured
Has heard about HIV/AIDS	All women 15-49
Knows about condoms	All women 15-49
Knows about limiting partners	All women 15-49
Had 2+ sexual partners in past 12 months	All women 15-49
Abstinence among youth (never had sex)	Never-married women 15-24
Sexually active in past 12 months among never married youth	Never-married women 15-24
Had an HIV test and received results in past 12 months	All women 15-49
Accepting attitudes towards people with HIV	All women 15-49
Ever experienced any physical violence since age 15	All women 15-49
Ever experienced any sexual violence	All women 15-49
Ever experienced any physical or sexual violence by husband/partner	All women 15-49
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	All women 15-49
Total Fertility Rate (last 3 years)	Women years of exposure to child birth
Neonatal mortality*	Children exposed to the risk of mortality
Post-neonatal mortality*	Children exposed to the risk of mortality
Infant mortality*	Children exposed to the risk of mortality
Child mortality*	Children exposed to the risk of mortality
Under five mortality*	Children exposed to the risk of mortality
HIV positive	All women 15-49 tested

Continued...

Table B.1—*Continued*

Variable	Base population
	MEN
Urban residence	All men 15-49
Literacy	All men 15-49
No education	All men 15-49
Secondary or higher education	All men 15-49
Never married (in union)	All men 15-49
Currently married (in union)	All men 15-49
Had first sexual intercourse before age 18	Men age 25-49
Want no more children	Currently married men 15-49
Want to delay birth at least 2 years	Currently married men 15-49
Ideal number of children	All men 15-49
Had 2+ sexual partners in past 12 months	Men age 15-24
Abstinence among never married youth (never had sex)	All never married men 15-24
Sexually active in past 12 months among never married youth	All never married men 15-24
Paid for sexual intercourse in past 12 months	All men 15-49
Had HIV test and received results in past 12 months	All men 15-49
Accepting attitudes towards people with HIV	All men 15-49
HIV positive (15-49)	All men 15-49 tested
HIV positive (15-59)	All men 15-59 tested
	WOMEN and MEN
HIV positive (15-49)	All women and men 15-49 tested
* Mortality rates are calculated for last 0-4 years before the survey for the national sample, and last 0-9 years before the survey for regional samples	

Table B.2 Sampling errors: Total sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.462	0.008	16411	16411	2.150	0.018	0.445	0.479
Literacy	0.675	0.007	16411	16411	1.920	0.010	0.661	0.689
No education	0.084	0.004	16411	16411	1.799	0.046	0.076	0.092
Secondary or higher education	0.448	0.009	16411	16411	2.243	0.019	0.430	0.465
Never married (never in union)	0.279	0.005	16411	16411	1.513	0.019	0.268	0.289
Currently married (in union)	0.601	0.006	16411	16411	1.585	0.010	0.589	0.613
Married before age 20	0.654	0.009	9685	9780	1.767	0.013	0.636	0.671
Had first sexual intercourse before age 18	0.583	0.008	9685	9780	1.568	0.013	0.567	0.598
Currently pregnant	0.087	0.003	16411	16411	1.290	0.033	0.081	0.093
Children ever born	2.995	0.030	16411	16411	1.396	0.010	2.935	3.056
Children surviving	2.659	0.026	16411	16411	1.368	0.010	2.607	2.711
Children ever born to women age 40-49	6.341	0.077	2486	2482	1.347	0.012	6.187	6.496
Currently using any method	0.490	0.007	9649	9859	1.454	0.015	0.475	0.505
Currently using a modern method	0.448	0.008	9649	9859	1.500	0.017	0.432	0.463
Currently using a traditional method	0.043	0.003	9649	9859	1.597	0.077	0.036	0.049
Currently using pill	0.118	0.005	9649	9859	1.547	0.043	0.107	0.128
Currently using IUD	0.012	0.002	9649	9859	1.397	0.130	0.009	0.015
Currently using condoms	0.040	0.003	9649	9859	1.311	0.065	0.035	0.045
Currently using injectables	0.193	0.005	9649	9859	1.361	0.028	0.182	0.204
Currently using female sterilization	0.019	0.002	9649	9859	1.312	0.097	0.015	0.022
Currently using rhythm	0.007	0.001	9649	9859	1.335	0.166	0.004	0.009
Currently using withdrawal	0.032	0.003	9649	9859	1.677	0.094	0.026	0.038
Used public sector source	0.816	0.009	5125	5212	1.681	0.011	0.798	0.835
Want no more children	0.370	0.007	9649	9859	1.364	0.018	0.356	0.383
Want to delay birth at least 2 years	0.410	0.007	9649	9859	1.305	0.016	0.397	0.423
Ideal number of children	4.664	0.026	15877	15849	1.678	0.006	4.611	4.716
Mothers received antenatal care for last birth	0.957	0.004	9353	9324	1.702	0.004	0.950	0.965
Mothers protected against tetanus for last birth	0.819	0.006	9353	9324	1.504	0.007	0.807	0.831
Births with skilled attendant at delivery	0.642	0.009	13457	13383	1.863	0.014	0.624	0.660
Had diarrhea in the last 2 weeks	0.161	0.005	12714	12634	1.426	0.030	0.151	0.170
Treated with ORS	0.641	0.015	2045	2030	1.294	0.023	0.612	0.670
Sought medical treatment for diarrhea	0.656	0.013	2045	2030	1.212	0.021	0.629	0.683
Vaccination card seen	0.804	0.010	2580	2575	1.240	0.012	0.784	0.823
Received BCG vaccination	0.949	0.006	2580	2575	1.299	0.006	0.937	0.960
Received DPT vaccination (3 doses)	0.858	0.010	2580	2575	1.430	0.012	0.838	0.878
Received polio vaccination (3 doses)	0.776	0.011	2580	2575	1.322	0.014	0.753	0.798
Received measles vaccination	0.849	0.010	2580	2575	1.332	0.011	0.830	0.868
Received all vaccinations	0.683	0.012	2580	2575	1.296	0.018	0.659	0.707
Height-for-age (-2SD)	0.401	0.006	12408	12328	1.305	0.015	0.388	0.413
Weight-for-height (-2SD)	0.060	0.003	12408	12328	1.266	0.047	0.055	0.066
Weight-for-age (-2SD)	0.148	0.004	12408	12328	1.263	0.029	0.139	0.156
Body Mass Index (BMI) < 18.5	0.103	0.003	14510	14502	1.329	0.033	0.096	0.109
Has heard about HIV/AIDS	0.994	0.001	16411	16411	1.309	0.001	0.993	0.996
Knows about condoms	0.824	0.006	16411	16411	1.887	0.007	0.813	0.835
Knows about limiting partners	0.923	0.004	16411	16411	1.883	0.004	0.915	0.930
Had 2+ sexual partners in past 12 months	0.017	0.001	16411	16411	1.439	0.086	0.014	0.020
Abstinence among never married youth (never had sex)	0.528	0.011	4219	4043	1.460	0.021	0.505	0.550
Sexually active in past 12 months among never married youth	0.318	0.011	4219	4043	1.466	0.033	0.297	0.339
Had HIV test and received results in past 12 months	0.462	0.006	16411	16411	1.665	0.014	0.449	0.475
Accepting attitudes towards people with HIV	0.187	0.006	16305	16316	1.869	0.031	0.175	0.198
Ever experienced any physical violence since age 15	0.434	0.007	11778	11778	1.553	0.016	0.420	0.448
Ever experienced any sexual violence	0.174	0.005	11778	11778	1.521	0.031	0.164	0.185
Ever experienced any physical or sexual violence by husband/partner	0.459	0.008	9416	8571	1.607	0.018	0.443	0.476
Ever experienced any physical or sexual violence in the last 12 months	0.267	0.007	9416	8571	1.534	0.026	0.253	0.281
Total fertility rate (3 years)	5.263	0.101	45817	45819	1.463	0.019	5.060	5.466
Neonatal mortality rate (last 0-4 years)	24.188	1.739	13586	13538	1.222	0.072	20.709	27.666
Post-neonatal mortality rate (last 0-4 years)	20.451	1.586	13607	13554	1.270	0.078	17.279	23.623
Infant mortality rate (last 0-4 years)	44.639	2.393	13613	13560	1.268	0.054	39.854	49.424
Child mortality rate (last 0-4 years)	31.377	1.861	13501	13424	1.152	0.059	27.655	35.098
Under-five mortality rate (last 0-4 years)	74.615	3.119	13793	13733	1.273	0.042	68.377	80.852
HIV positive	0.151	0.005	15433	14719	1.646	0.031	0.141	0.160

Continued...

Table B.2—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.466	0.010	13530	13561	2.217	0.020	0.447	0.486
Literacy	0.827	0.005	13530	13561	1.629	0.006	0.816	0.837
No education	0.037	0.003	13530	13561	1.654	0.073	0.032	0.042
Secondary or higher education	0.568	0.008	13530	13561	1.891	0.014	0.551	0.584
Never married (in union)	0.441	0.006	13530	13561	1.396	0.014	0.429	0.453
Currently married (in union)	0.519	0.006	13530	13561	1.353	0.011	0.507	0.530
Had first sexual intercourse before age 18	0.460	0.008	7880	7890	1.419	0.017	0.444	0.475
Want no more children	0.286	0.007	7100	7035	1.287	0.024	0.272	0.300
Want to delay birth at least 2 years	0.461	0.008	7100	7035	1.281	0.016	0.446	0.476
Ideal number of children	5.012	0.034	13426	13454	1.584	0.007	4.943	5.081
Had 2+ sexual partners in past 12 months	0.157	0.005	13530	13561	1.454	0.029	0.147	0.166
Abstinence among never married youth (never had sex)	0.411	0.010	5054	5056	1.384	0.023	0.392	0.430
Sexually active in past 12 months among never married youth	0.407	0.009	5054	5056	1.320	0.022	0.389	0.425
Had paid sex in past 12 months	0.046	0.003	13530	13561	1.411	0.055	0.041	0.051
Had HIV test and received results in past 12 months	0.371	0.006	13530	13561	1.447	0.016	0.359	0.383
Accepting attitudes towards people with HIV	0.272	0.007	13477	13506	1.906	0.027	0.257	0.286
HIV positive (15-49)	0.113	0.005	12450	13140	1.655	0.042	0.104	0.123
HIV positive (15-59)	0.119	0.005	13574	14288	1.671	0.039	0.109	0.128
WOMEN and MEN								
HIV positive (15-49)	0.133	0.004	27883	27859	1.988	0.030	0.125	0.141

Table B.3 Sampling errors: Urban sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	1.000	0.000	7871	7585	NA	NA	1.000	1.000
Literacy	0.828	0.009	7871	7585	2.181	0.011	0.810	0.847
No education	0.034	0.004	7871	7585	1.764	0.106	0.027	0.041
Secondary or higher education	0.652	0.014	7871	7585	2.658	0.022	0.623	0.680
Never married (never in union)	0.349	0.009	7871	7585	1.653	0.025	0.332	0.367
Currently married (in union)	0.521	0.009	7871	7585	1.684	0.018	0.502	0.540
Married before age 20	0.555	0.017	4445	4339	2.232	0.030	0.521	0.588
Had first sexual intercourse before age 18	0.508	0.015	4445	4339	2.005	0.030	0.478	0.538
Currently pregnant	0.072	0.004	7871	7585	1.331	0.054	0.064	0.080
Children ever born	2.270	0.041	7871	7585	1.562	0.018	2.189	2.351
Children surviving	2.053	0.035	7871	7585	1.495	0.017	1.983	2.122
Children ever born to women age 40-49	5.208	0.123	1025	972	1.492	0.024	4.962	5.454
Currently using any method	0.566	0.011	4025	3953	1.450	0.020	0.544	0.589
Currently using a modern method	0.534	0.012	4025	3953	1.480	0.022	0.511	0.557
Currently using a traditional method	0.032	0.004	4025	3953	1.539	0.133	0.024	0.041
Currently using pill	0.159	0.009	4025	3953	1.560	0.057	0.141	0.177
Currently using IUD	0.020	0.003	4025	3953	1.480	0.162	0.014	0.027
Currently using condoms	0.053	0.005	4025	3953	1.395	0.093	0.043	0.063
Currently using injectables	0.190	0.008	4025	3953	1.304	0.042	0.174	0.206
Currently using female sterilization	0.022	0.004	4025	3953	1.504	0.156	0.015	0.029
Currently using rhythm	0.008	0.002	4025	3953	1.311	0.224	0.005	0.012
Currently using withdrawal	0.022	0.004	4025	3953	1.544	0.163	0.015	0.029
Used public sector source	0.752	0.015	2625	2577	1.759	0.020	0.723	0.782
Want no more children	0.380	0.011	4025	3953	1.425	0.029	0.358	0.401
Want to delay birth at least 2 years	0.393	0.010	4025	3953	1.295	0.025	0.373	0.413
Ideal number of children	4.156	0.038	7750	7461	1.949	0.009	4.080	4.232
Mothers received antenatal care for last birth	0.986	0.003	3785	3528	1.525	0.003	0.980	0.992
Mothers protected against tetanus for last birth	0.861	0.010	3785	3528	1.717	0.011	0.842	0.881
Births with skilled attendant at delivery	0.885	0.007	4998	4574	1.464	0.008	0.870	0.900
Had diarrhea in the last 2 weeks	0.179	0.009	4706	4318	1.465	0.048	0.162	0.196
Treated with ORS	0.677	0.021	832	772	1.203	0.031	0.635	0.718
Sought medical treatment for diarrhea	0.641	0.022	832	772	1.220	0.034	0.598	0.684
Vaccination card seen	0.766	0.020	927	852	1.382	0.026	0.727	0.806
Received BCG vaccination	0.972	0.007	927	852	1.317	0.007	0.958	0.987
Received DPT vaccination (3 doses)	0.924	0.013	927	852	1.449	0.014	0.898	0.950
Received polio vaccination (3 doses)	0.831	0.016	927	852	1.250	0.019	0.799	0.862
Received measles vaccination	0.893	0.016	927	852	1.508	0.018	0.861	0.924
Received all vaccinations	0.759	0.019	927	852	1.302	0.025	0.721	0.797
Height-for-age (-2SD)	0.360	0.010	4556	4140	1.336	0.029	0.340	0.381
Weight-for-height (-2SD)	0.064	0.005	4556	4140	1.418	0.086	0.053	0.075
Weight-for-age (-2SD)	0.129	0.008	4556	4140	1.546	0.063	0.113	0.145
Body Mass Index (BMI) < 18.5	0.083	0.005	7143	6881	1.388	0.055	0.074	0.092
Has heard about HIV/AIDS	0.998	0.001	7871	7585	1.311	0.001	0.997	0.999
Knows about condoms	0.848	0.008	7871	7585	1.912	0.009	0.832	0.863
Knows about limiting partners	0.935	0.006	7871	7585	2.097	0.006	0.923	0.946
Had 2+ sexual partners in past 12 months	0.022	0.003	7871	7585	1.588	0.118	0.017	0.028
Abstinence among never married youth (never had sex)	0.563	0.016	2428	2265	1.615	0.029	0.531	0.596
Sexually active in past 12 months among never married youth	0.271	0.014	2428	2265	1.597	0.053	0.242	0.300
Had HIV test and received results in past 12 months	0.479	0.009	7871	7585	1.684	0.020	0.460	0.498
Accepting attitudes towards people with HIV	0.223	0.009	7851	7571	1.898	0.040	0.205	0.241
Ever experienced any physical violence since age 15	0.447	0.012	5257	5426	1.737	0.027	0.423	0.471
Ever experienced any sexual violence	0.166	0.008	5257	5426	1.652	0.051	0.149	0.183
Ever experienced any physical or sexual violence by husband/partner	0.457	0.015	3920	3597	1.927	0.034	0.427	0.488
Ever experienced any physical or sexual violence in the last 12 months	0.258	0.012	3920	3597	1.698	0.046	0.234	0.282
Total fertility rate (3 years)	3.733	0.091	21958	21153	1.430	0.024	3.550	3.915
Neonatal mortality rate (last 0-9 years)	21.794	2.208	9760	8983	1.359	0.101	17.379	26.209
Post-neonatal mortality rate (last 0-9 years)	24.683	2.240	9800	9015	1.363	0.091	20.204	29.162
Infant mortality rate (last 0-9 years)	46.477	3.300	9772	8994	1.452	0.071	39.876	53.078
Child mortality rate (last 0-9 years)	27.046	2.344	9647	8868	1.274	0.087	22.358	31.735
Under-five mortality rate (last 0-9 years)	72.266	3.981	9825	9040	1.388	0.055	64.304	80.229
HIV positive	0.210	0.009	7316	6805	1.856	0.042	0.193	0.228

Continued...

Table B.3—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	1.000	0.000	6337	6326	NA	NA	1.000	1.000
Literacy	0.932	0.006	6337	6326	1.935	0.007	0.920	0.944
No education	0.011	0.002	6337	6326	1.368	0.165	0.007	0.014
Secondary or higher education	0.776	0.011	6337	6326	2.144	0.014	0.754	0.799
Never married (in union)	0.510	0.010	6337	6326	1.591	0.020	0.490	0.530
Currently married (in union)	0.440	0.010	6337	6326	1.524	0.022	0.421	0.459
Had first sexual intercourse before age 18	0.383	0.014	3557	3567	1.664	0.035	0.356	0.410
Want no more children	0.323	0.013	2877	2781	1.468	0.040	0.297	0.348
Want to delay birth at least 2 years	0.423	0.014	2877	2781	1.503	0.033	0.395	0.451
Ideal number of children	4.229	0.043	6307	6297	1.685	0.010	4.142	4.315
Had 2+ sexual partners in past 12 months	0.122	0.006	6337	6326	1.423	0.048	0.111	0.134
Abstinence among never married youth (never had sex)	0.449	0.015	2590	2562	1.498	0.033	0.420	0.478
Sexually active in past 12 months among never married youth	0.344	0.013	2590	2562	1.405	0.038	0.318	0.370
Had paid sex in past 12 months	0.045	0.004	6337	6326	1.477	0.085	0.038	0.053
Had HIV test and received results in past 12 months	0.384	0.009	6337	6326	1.504	0.024	0.366	0.403
Accepting attitudes towards people with HIV	0.329	0.012	6325	6309	2.101	0.038	0.304	0.354
HIV positive (15-49)	0.150	0.009	5682	6128	1.810	0.057	0.133	0.167
HIV positive (15-59)	0.157	0.008	6114	6582	1.807	0.053	0.141	0.174
WOMEN and MEN								
HIV positive (15-49)	0.182	0.007	12998	12932	2.194	0.041	0.167	0.197



Table B.4 Sampling errors: Rural sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.000	0.000	8540	8826	NA	NA	0.000	0.000
Literacy	0.543	0.009	8540	8826	1.701	0.017	0.524	0.561
No education	0.127	0.006	8540	8826	1.738	0.049	0.114	0.139
Secondary or higher education	0.273	0.008	8540	8826	1.738	0.031	0.256	0.289
Never married (never in union)	0.218	0.005	8540	8826	1.231	0.025	0.207	0.229
Currently married (in union)	0.669	0.007	8540	8826	1.375	0.010	0.655	0.683
Married before age 20	0.733	0.008	5240	5440	1.277	0.011	0.717	0.748
Had first sexual intercourse before age 18	0.642	0.007	5240	5440	1.128	0.012	0.627	0.657
Currently pregnant	0.100	0.004	8540	8826	1.256	0.041	0.092	0.108
Children ever born	3.619	0.038	8540	8826	1.162	0.010	3.544	3.694
Children surviving	3.181	0.032	8540	8826	1.152	0.010	3.116	3.245
Children ever born to women age 40-49	7.071	0.089	1461	1510	1.233	0.013	6.893	7.249
Currently using any method	0.439	0.010	5624	5905	1.439	0.022	0.420	0.458
Currently using a modern method	0.390	0.010	5624	5905	1.498	0.025	0.370	0.409
Currently using a traditional method	0.050	0.005	5624	5905	1.613	0.094	0.040	0.059
Currently using pill	0.090	0.006	5624	5905	1.509	0.064	0.078	0.102
Currently using IUD	0.006	0.001	5624	5905	1.293	0.218	0.004	0.009
Currently using condoms	0.031	0.003	5624	5905	1.239	0.092	0.025	0.037
Currently using injectables	0.196	0.007	5624	5905	1.391	0.038	0.181	0.210
Currently using female sterilization	0.016	0.002	5624	5905	1.122	0.116	0.013	0.020
Currently using rhythm	0.005	0.001	5624	5905	1.366	0.247	0.003	0.008
Currently using withdrawal	0.038	0.004	5624	5905	1.713	0.115	0.030	0.047
Used public sector source	0.879	0.010	2500	2635	1.545	0.011	0.859	0.899
Want no more children	0.363	0.008	5624	5905	1.325	0.023	0.346	0.380
Want to delay birth at least 2 years	0.422	0.009	5624	5905	1.313	0.020	0.405	0.439
Ideal number of children	5.115	0.035	8127	8388	1.526	0.007	5.045	5.186
Mothers received antenatal care for last birth	0.940	0.005	5568	5796	1.688	0.006	0.929	0.951
Mothers protected against tetanus for last birth	0.793	0.008	5568	5796	1.390	0.009	0.778	0.809
Births with skilled attendant at delivery	0.516	0.013	8459	8809	1.979	0.025	0.491	0.542
Had diarrhea in the last 2 weeks	0.151	0.006	8008	8316	1.396	0.038	0.140	0.163
Treated with ORS	0.619	0.020	1213	1258	1.326	0.032	0.580	0.659
Sought medical treatment for diarrhea	0.665	0.017	1213	1258	1.207	0.026	0.630	0.699
Vaccination card seen	0.822	0.011	1653	1723	1.156	0.013	0.800	0.844
Received BCG vaccination	0.937	0.008	1653	1723	1.273	0.008	0.922	0.952
Received DPT vaccination (3 doses)	0.826	0.013	1653	1723	1.408	0.016	0.799	0.853
Received polio vaccination (3 doses)	0.748	0.014	1653	1723	1.328	0.019	0.720	0.777
Received measles vaccination	0.828	0.012	1653	1723	1.264	0.014	0.804	0.852
Received all vaccinations	0.645	0.015	1653	1723	1.281	0.024	0.615	0.676
Height-for-age (-2SD)	0.421	0.008	7852	8188	1.291	0.018	0.406	0.436
Weight-for-height (-2SD)	0.059	0.003	7852	8188	1.178	0.056	0.052	0.065
Weight-for-age (-2SD)	0.157	0.005	7852	8188	1.134	0.031	0.147	0.167
Body Mass Index (BMI) < 18.5	0.120	0.005	7367	7621	1.283	0.040	0.110	0.130
Has heard about HIV/AIDS	0.991	0.001	8540	8826	1.296	0.001	0.988	0.994
Knows about condoms	0.804	0.008	8540	8826	1.881	0.010	0.788	0.820
Knows about limiting partners	0.912	0.005	8540	8826	1.740	0.006	0.901	0.923
Had 2+ sexual partners in past 12 months	0.012	0.001	8540	8826	1.186	0.116	0.009	0.015
Abstinence among never married youth (never had sex)	0.482	0.014	1791	1779	1.199	0.029	0.454	0.510
Sexually active in past 12 months among never married youth	0.377	0.014	1791	1779	1.237	0.038	0.349	0.405
Had HIV test and received results in past 12 months	0.448	0.009	8540	8826	1.674	0.020	0.430	0.466
Accepting attitudes towards people with HIV	0.156	0.007	8454	8745	1.861	0.047	0.141	0.171
Ever experienced any physical violence since age 15	0.423	0.008	6521	6352	1.378	0.020	0.406	0.440
Ever experienced any sexual violence	0.182	0.007	6521	6352	1.394	0.037	0.168	0.195
Ever experienced any physical or sexual violence by husband/partner	0.460	0.009	5496	4974	1.323	0.019	0.442	0.478
Ever experienced any physical or sexual violence in the last 12 months	0.273	0.008	5496	4974	1.400	0.031	0.256	0.290
Total fertility rate (3 years)	6.555	0.100	23860	24665	1.368	0.015	6.355	6.755
Neonatal mortality rate (last 0-9 years)	26.889	1.685	16401	17087	1.152	0.063	23.520	30.258
Post-neonatal mortality rate (last 0-9 years)	22.367	1.551	16405	17089	1.260	0.069	19.265	25.469
Infant mortality rate (last 0-9 years)	49.256	2.326	16429	17118	1.215	0.047	44.604	53.908
Child mortality rate (last 0-9 years)	37.659	2.071	16172	16849	1.211	0.055	33.517	41.801
Under-five mortality rate (last 0-9 years)	85.060	3.303	16537	17232	1.298	0.039	78.454	91.666
HIV positive	0.099	0.004	8117	7915	1.321	0.044	0.090	0.108

Continued...

Table B.4—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.000	0.000	7193	7235	NA	NA	0.000	0.000
Literacy	0.734	0.007	7193	7235	1.414	0.010	0.720	0.749
No education	0.060	0.005	7193	7235	1.686	0.079	0.050	0.069
Secondary or higher education	0.385	0.009	7193	7235	1.599	0.024	0.367	0.403
Never married (in union)	0.381	0.007	7193	7235	1.142	0.017	0.368	0.394
Currently married (in union)	0.588	0.006	7193	7235	1.106	0.011	0.575	0.601
Had first sexual intercourse before age 18	0.523	0.009	4323	4322	1.158	0.017	0.505	0.541
Want no more children	0.262	0.008	4223	4254	1.168	0.030	0.246	0.278
Want to delay birth at least 2 years	0.486	0.009	4223	4254	1.106	0.018	0.469	0.503
Ideal number of children	5.701	0.047	7119	7157	1.495	0.008	5.606	5.796
Had 2+ sexual partners in past 12 months	0.186	0.006	7193	7235	1.411	0.035	0.173	0.199
Abstinence among never married youth (never had sex)	0.372	0.012	2464	2494	1.208	0.032	0.349	0.396
Sexually active in past 12 months among never married youth	0.471	0.012	2464	2494	1.234	0.026	0.447	0.496
Had paid sex in past 12 months	0.047	0.003	7193	7235	1.352	0.072	0.040	0.053
Had HIV test and received results in past 12 months	0.359	0.008	7193	7235	1.389	0.022	0.343	0.375
Accepting attitudes towards people with HIV	0.222	0.008	7152	7197	1.629	0.036	0.206	0.238
HIV positive (15-49)	0.081	0.005	6768	7012	1.360	0.056	0.072	0.090
HIV positive (15-59)	0.085	0.005	7460	7706	1.421	0.054	0.076	0.095
WOMEN and MEN								
HIV positive (15-49)	0.091	0.004	14885	14927	1.635	0.042	0.083	0.098

Table B.5 Sampling errors: Central sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.283	0.015	1401	1467	1.233	0.053	0.253	0.312
Literacy	0.682	0.020	1401	1467	1.602	0.029	0.642	0.722
No education	0.088	0.012	1401	1467	1.615	0.139	0.063	0.112
Secondary or higher education	0.415	0.023	1401	1467	1.783	0.057	0.368	0.462
Never married (never in union)	0.261	0.013	1401	1467	1.149	0.052	0.234	0.288
Currently married (in union)	0.610	0.017	1401	1467	1.339	0.029	0.575	0.645
Married before age 20	0.707	0.023	814	852	1.435	0.032	0.661	0.753
Had first sexual intercourse before age 18	0.612	0.021	814	852	1.252	0.035	0.569	0.655
Currently pregnant	0.081	0.008	1401	1467	1.086	0.098	0.065	0.097
Children ever born	3.271	0.113	1401	1467	1.393	0.034	3.046	3.496
Children surviving	2.905	0.092	1401	1467	1.296	0.032	2.720	3.089
Children ever born to women age 40-49	6.761	0.261	220	229	1.281	0.039	6.240	7.283
Currently using any method	0.428	0.028	826	895	1.649	0.066	0.371	0.485
Currently using a modern method	0.413	0.027	826	895	1.594	0.066	0.358	0.468
Currently using a traditional method	0.015	0.006	826	895	1.320	0.371	0.004	0.026
Currently using pill	0.110	0.015	826	895	1.358	0.135	0.080	0.139
Currently using IUD	0.002	0.002	826	895	0.992	0.750	0.000	0.005
Currently using condoms	0.015	0.004	826	895	0.961	0.267	0.007	0.024
Currently using injectables	0.235	0.020	826	895	1.339	0.084	0.196	0.275
Currently using female sterilization	0.006	0.003	826	895	1.065	0.494	0.000	0.011
Currently using rhythm	0.003	0.002	826	895	1.095	0.752	0.000	0.006
Currently using withdrawal	0.008	0.003	826	895	1.058	0.409	0.001	0.015
Used public sector source	0.844	0.030	420	441	1.678	0.035	0.784	0.903
Want no more children	0.389	0.023	826	895	1.379	0.060	0.342	0.435
Want to delay birth at least 2 years	0.371	0.024	826	895	1.397	0.063	0.324	0.418
Ideal number of children	4.815	0.076	1320	1369	1.406	0.016	4.664	4.967
Mothers received antenatal care for last birth	0.956	0.012	797	875	1.608	0.012	0.932	0.979
Mothers protected against tetanus for last birth	0.843	0.018	797	875	1.392	0.021	0.807	0.878
Births with skilled attendant at delivery	0.457	0.035	1171	1308	2.054	0.077	0.387	0.527
Had diarrhea in the last 2 weeks	0.134	0.012	1115	1241	1.228	0.092	0.109	0.159
Treated with ORS	0.588	0.048	153	166	1.165	0.082	0.492	0.685
Sought medical treatment for diarrhea	0.579	0.047	153	166	1.133	0.082	0.484	0.673
Vaccination card seen	0.771	0.031	214	246	1.114	0.041	0.708	0.834
Received BCG vaccination	0.892	0.028	214	246	1.341	0.031	0.837	0.947
Received DPT vaccination (3 doses)	0.827	0.037	214	246	1.464	0.045	0.752	0.902
Received polio vaccination (3 doses)	0.735	0.039	214	246	1.326	0.054	0.656	0.813
Received measles vaccination	0.806	0.040	214	246	1.513	0.049	0.726	0.885
Received all vaccinations	0.663	0.046	214	246	1.452	0.069	0.571	0.755
Height-for-age (-2SD)	0.425	0.018	1055	1166	1.095	0.042	0.390	0.461
Weight-for-height (-2SD)	0.046	0.008	1055	1166	1.281	0.182	0.029	0.063
Weight-for-age (-2SD)	0.153	0.011	1055	1166	1.013	0.074	0.131	0.176
Body Mass Index (BMI) < 18.5	0.105	0.010	1243	1289	1.145	0.095	0.085	0.125
Has heard about HIV/AIDS	0.996	0.002	1401	1467	1.359	0.002	0.992	1.001
Knows about condoms	0.838	0.013	1401	1467	1.338	0.016	0.812	0.865
Knows about limiting partners	0.953	0.006	1401	1467	1.117	0.007	0.940	0.965
Had 2+ sexual partners in past 12 months	0.017	0.004	1401	1467	1.042	0.210	0.010	0.025
Abstinence among never married youth (never had sex)	0.526	0.030	359	356	1.131	0.057	0.466	0.586
Sexually active in past 12 months among never married youth	0.318	0.028	359	356	1.126	0.087	0.263	0.374
Had HIV test and received results in past 12 months	0.429	0.021	1401	1467	1.620	0.050	0.386	0.472
Accepting attitudes towards people with HIV	0.132	0.012	1398	1461	1.377	0.095	0.107	0.157
Ever experienced any physical violence since age 15	0.420	0.020	986	1036	1.294	0.048	0.380	0.461
Ever experienced any sexual violence	0.142	0.014	986	1036	1.217	0.095	0.115	0.169
Ever experienced any physical or sexual violence by husband/partner	0.433	0.020	794	785	1.118	0.045	0.394	0.473
Ever experienced any physical or sexual violence in the last 12 months	0.232	0.016	794	785	1.057	0.068	0.200	0.263
Total fertility rate (3 years)	5.867	0.280	3867	4045	1.243	0.048	5.307	6.428
Neonatal mortality rate (last 0-9 years)	24.987	4.054	2262	2512	1.085	0.162	16.879	33.094
Post-neonatal mortality rate (last 0-9 years)	17.732	3.773	2257	2502	1.444	0.213	10.186	25.279
Infant mortality rate (last 0-9 years)	42.719	5.034	2263	2512	1.140	0.118	32.652	52.786
Child mortality rate (last 0-9 years)	38.843	6.658	2198	2439	1.529	0.171	25.528	52.158
Under-five mortality rate (last 0-9 years)	79.902	8.320	2279	2533	1.383	0.104	63.263	96.541
HIV positive	0.148	0.011	1306	1316	1.140	0.076	0.126	0.171

Continued...

Table B.5—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.264	0.015	1088	1153	1.153	0.058	0.234	0.295
Literacy	0.802	0.017	1088	1153	1.373	0.021	0.769	0.835
No education	0.027	0.005	1088	1153	1.012	0.185	0.017	0.037
Secondary or higher education	0.499	0.025	1088	1153	1.630	0.050	0.450	0.549
Never married (in union)	0.449	0.020	1088	1153	1.318	0.044	0.410	0.489
Currently married (in union)	0.522	0.019	1088	1153	1.272	0.037	0.484	0.561
Had first sexual intercourse before age 18	0.391	0.027	593	631	1.353	0.070	0.336	0.445
Want no more children	0.254	0.022	556	602	1.191	0.087	0.210	0.298
Want to delay birth at least 2 years	0.424	0.024	556	602	1.163	0.057	0.376	0.473
Ideal number of children	5.392	0.102	1069	1131	1.278	0.019	5.187	5.596
Had 2+ sexual partners in past 12 months	0.141	0.015	1088	1153	1.448	0.108	0.111	0.172
Abstinence among never married youth (never had sex)	0.388	0.028	447	465	1.195	0.071	0.333	0.444
Sexually active in past 12 months among never married youth	0.419	0.026	447	465	1.110	0.062	0.367	0.471
Had paid sex in past 12 months	0.074	0.009	1088	1153	1.137	0.122	0.056	0.092
Had HIV test and received results in past 12 months	0.301	0.018	1088	1153	1.329	0.061	0.264	0.338
Accepting attitudes towards people with HIV	0.235	0.019	1071	1135	1.458	0.080	0.197	0.273
HIV positive (15-49)	0.098	0.012	1033	1115	1.306	0.123	0.074	0.123
HIV positive (15-59)	0.103	0.012	1132	1220	1.382	0.122	0.078	0.128
WOMEN and MEN								
HIV positive (15-49)	0.125	0.010	2339	2431	1.469	0.080	0.105	0.145

Table B.6 Sampling errors: Copperbelt sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.839	0.012	1770	2836	1.411	0.015	0.815	0.864
Literacy	0.837	0.015	1770	2836	1.722	0.018	0.806	0.867
No education	0.027	0.005	1770	2836	1.266	0.181	0.017	0.037
Secondary or higher education	0.644	0.025	1770	2836	2.220	0.039	0.593	0.695
Never married (never in union)	0.358	0.016	1770	2836	1.377	0.044	0.327	0.390
Currently married (in union)	0.521	0.016	1770	2836	1.311	0.030	0.490	0.552
Married before age 20	0.575	0.026	1031	1634	1.683	0.045	0.523	0.627
Had first sexual intercourse before age 18	0.522	0.025	1031	1634	1.576	0.047	0.473	0.571
Currently pregnant	0.076	0.006	1770	2836	1.008	0.084	0.063	0.088
Children ever born	2.422	0.084	1770	2836	1.419	0.035	2.254	2.591
Children surviving	2.200	0.071	1770	2836	1.334	0.032	2.058	2.343
Children ever born to women age 40-49	5.458	0.201	272	419	1.264	0.037	5.055	5.861
Currently using any method	0.535	0.017	951	1477	1.028	0.031	0.502	0.568
Currently using a modern method	0.508	0.019	951	1477	1.181	0.038	0.469	0.546
Currently using a traditional method	0.027	0.008	951	1477	1.504	0.291	0.011	0.043
Currently using pill	0.146	0.017	951	1477	1.443	0.113	0.113	0.179
Currently using IUD	0.016	0.004	951	1477	0.996	0.251	0.008	0.024
Currently using condoms	0.050	0.007	951	1477	1.057	0.149	0.035	0.065
Currently using injectables	0.183	0.014	951	1477	1.085	0.075	0.155	0.210
Currently using female sterilization	0.028	0.008	951	1477	1.460	0.280	0.012	0.043
Currently using rhythm	0.008	0.003	951	1477	1.105	0.410	0.001	0.014
Currently using withdrawal	0.019	0.007	951	1477	1.564	0.361	0.005	0.033
Used public sector source	0.735	0.027	553	898	1.439	0.037	0.681	0.789
Want no more children	0.412	0.019	951	1477	1.196	0.046	0.374	0.451
Want to delay birth at least 2 years	0.394	0.017	951	1477	1.051	0.042	0.360	0.427
Ideal number of children	4.398	0.074	1715	2747	1.643	0.017	4.249	4.547
Mothers received antenatal care for last birth	0.971	0.008	862	1305	1.312	0.008	0.956	0.987
Mothers protected against tetanus for last birth	0.892	0.014	862	1305	1.295	0.016	0.864	0.920
Births with skilled attendant at delivery	0.810	0.018	1176	1732	1.315	0.022	0.774	0.845
Had diarrhea in the last 2 weeks	0.201	0.016	1106	1634	1.255	0.080	0.169	0.233
Treated with ORS	0.626	0.033	218	328	0.944	0.053	0.560	0.692
Sought medical treatment for diarrhea	0.585	0.037	218	328	1.007	0.063	0.512	0.658
Vaccination card seen	0.743	0.036	227	328	1.187	0.049	0.670	0.816
Received BCG vaccination	0.978	0.011	227	328	1.059	0.011	0.957	1.000
Received DPT vaccination (3 doses)	0.944	0.017	227	328	1.016	0.018	0.910	0.979
Received polio vaccination (3 doses)	0.859	0.027	227	328	1.093	0.031	0.806	0.913
Received measles vaccination	0.912	0.022	227	328	1.118	0.024	0.868	0.956
Received all vaccinations	0.811	0.028	227	328	1.026	0.035	0.754	0.868
Height-for-age (-2SD)	0.362	0.018	1067	1561	1.134	0.050	0.325	0.398
Weight-for-height (-2SD)	0.058	0.009	1067	1561	1.145	0.151	0.040	0.076
Weight-for-age (-2SD)	0.141	0.013	1067	1561	1.195	0.095	0.114	0.167
Body Mass Index (BMI) < 18.5	0.090	0.009	1565	2529	1.218	0.097	0.073	0.108
Has heard about HIV/AIDS	0.997	0.001	1770	2836	0.931	0.001	0.994	0.999
Knows about condoms	0.875	0.012	1770	2836	1.495	0.013	0.851	0.898
Knows about limiting partners	0.939	0.009	1770	2836	1.551	0.009	0.922	0.957
Had 2+ sexual partners in past 12 months	0.030	0.006	1770	2836	1.416	0.191	0.019	0.042
Abstinence among never married youth (never had sex)	0.621	0.029	519	872	1.363	0.047	0.563	0.679
Sexually active in past 12 months among never married youth	0.215	0.025	519	872	1.377	0.116	0.165	0.264
Had HIV test and received results in past 12 months	0.468	0.019	1770	2836	1.613	0.041	0.429	0.506
Accepting attitudes towards people with HIV	0.190	0.014	1762	2826	1.446	0.071	0.163	0.217
Ever experienced any physical violence since age 15	0.482	0.018	1165	2017	1.218	0.037	0.446	0.518
Ever experienced any sexual violence	0.203	0.017	1165	2017	1.409	0.082	0.169	0.236
Ever experienced any physical or sexual violence by husband/partner	0.520	0.026	883	1318	1.531	0.050	0.468	0.571
Ever experienced any physical or sexual violence in the last 12 months	0.278	0.020	883	1318	1.338	0.073	0.238	0.319
Total fertility rate (3 years)	3.965	0.181	4912	7840	1.192	0.046	3.602	4.327
Neonatal mortality rate (last 0-9 years)	20.162	3.528	2323	3421	1.024	0.175	13.105	27.218
Post-neonatal mortality rate (last 0-9 years)	22.203	4.246	2327	3432	1.335	0.191	13.711	30.695
Infant mortality rate (last 0-9 years)	42.365	5.608	2325	3423	1.242	0.132	31.149	53.581
Child mortality rate (last 0-9 years)	21.751	3.742	2278	3372	1.053	0.172	14.268	29.235
Under-five mortality rate (last 0-9 years)	63.195	6.892	2335	3435	1.210	0.109	49.410	76.979
HIV positive	0.200	0.014	1586	2544	1.410	0.071	0.172	0.228

Continued...

Table B.6—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.843	0.013	1488	2395	1.391	0.016	0.817	0.869
Literacy	0.909	0.011	1488	2395	1.486	0.012	0.887	0.932
No education	0.012	0.003	1488	2395	1.027	0.242	0.006	0.018
Secondary or higher education	0.765	0.021	1488	2395	1.937	0.028	0.722	0.807
Never married (in union)	0.538	0.014	1488	2395	1.065	0.026	0.511	0.566
Currently married (in union)	0.407	0.013	1488	2395	1.059	0.033	0.380	0.434
Had first sexual intercourse before age 18	0.373	0.021	802	1283	1.249	0.057	0.330	0.415
Want no more children	0.339	0.027	638	975	1.423	0.079	0.286	0.393
Want to delay birth at least 2 years	0.410	0.024	638	975	1.223	0.058	0.362	0.458
Ideal number of children	4.473	0.090	1476	2375	1.534	0.020	4.294	4.652
Had 2+ sexual partners in past 12 months	0.101	0.009	1488	2395	1.145	0.088	0.083	0.119
Abstinence among never married youth (never had sex)	0.460	0.023	640	1048	1.152	0.049	0.415	0.506
Sexually active in past 12 months among never married youth	0.313	0.021	640	1048	1.138	0.067	0.271	0.355
Had paid sex in past 12 months	0.037	0.007	1488	2395	1.383	0.184	0.023	0.050
Had HIV test and received results in past 12 months	0.405	0.016	1488	2395	1.223	0.038	0.374	0.436
Accepting attitudes towards people with HIV	0.275	0.022	1486	2392	1.925	0.081	0.230	0.320
HIV positive (15-49)	0.162	0.016	1292	2330	1.563	0.099	0.130	0.194
HIV positive (15-59)	0.168	0.016	1405	2528	1.585	0.094	0.137	0.200
WOMEN and MEN								
HIV positive (15-49)	0.182	0.012	2878	4874	1.672	0.066	0.158	0.206

Table B.7 Sampling errors: Eastern sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.146	0.011	2035	1930	1.425	0.076	0.124	0.169
Literacy	0.493	0.019	2035	1930	1.733	0.039	0.454	0.531
No education	0.182	0.016	2035	1930	1.824	0.086	0.151	0.213
Secondary or higher education	0.260	0.016	2035	1930	1.610	0.060	0.228	0.291
Never married (never in union)	0.212	0.013	2035	1930	1.482	0.063	0.185	0.239
Currently married (in union)	0.675	0.016	2035	1930	1.541	0.024	0.643	0.707
Married before age 20	0.787	0.014	1185	1163	1.202	0.018	0.759	0.816
Had first sexual intercourse before age 18	0.608	0.017	1185	1163	1.188	0.028	0.575	0.642
Currently pregnant	0.087	0.008	2035	1930	1.209	0.087	0.072	0.102
Children ever born	3.436	0.072	2035	1930	1.109	0.021	3.293	3.580
Children surviving	2.904	0.053	2035	1930	0.977	0.018	2.798	3.010
Children ever born to women age 40-49	6.889	0.205	303	306	1.261	0.030	6.478	7.299
Currently using any method	0.535	0.016	1274	1304	1.132	0.030	0.504	0.567
Currently using a modern method	0.498	0.017	1274	1304	1.207	0.034	0.464	0.532
Currently using a traditional method	0.037	0.010	1274	1304	1.817	0.259	0.018	0.056
Currently using pill	0.098	0.012	1274	1304	1.436	0.122	0.074	0.122
Currently using IUD	0.008	0.003	1274	1304	1.142	0.353	0.002	0.014
Currently using condoms	0.053	0.009	1274	1304	1.358	0.161	0.036	0.070
Currently using injectables	0.258	0.014	1274	1304	1.115	0.053	0.230	0.285
Currently using female sterilization	0.033	0.006	1274	1304	1.167	0.177	0.021	0.045
Currently using rhythm	0.001	0.001	1274	1304	0.856	0.632	0.000	0.003
Currently using withdrawal	0.034	0.010	1274	1304	1.909	0.285	0.015	0.053
Used public sector source	0.886	0.015	767	726	1.324	0.017	0.856	0.916
Want no more children	0.344	0.015	1274	1304	1.118	0.043	0.314	0.374
Want to delay birth at least 2 years	0.439	0.017	1274	1304	1.187	0.038	0.406	0.472
Ideal number of children	4.636	0.053	1967	1848	1.377	0.011	4.530	4.743
Mothers received antenatal care for last birth	0.955	0.010	1151	1188	1.696	0.011	0.935	0.976
Mothers protected against tetanus for last birth	0.822	0.014	1151	1188	1.227	0.017	0.795	0.849
Births with skilled attendant at delivery	0.650	0.023	1635	1737	1.766	0.036	0.604	0.696
Had diarrhea in the last 2 weeks	0.151	0.014	1512	1603	1.472	0.092	0.123	0.178
Treated with ORS	0.656	0.041	234	241	1.301	0.062	0.574	0.738
Sought medical treatment for diarrhea	0.736	0.038	234	241	1.291	0.051	0.661	0.812
Vaccination card seen	0.844	0.028	311	322	1.341	0.033	0.789	0.899
Received BCG vaccination	0.976	0.011	311	322	1.158	0.011	0.954	0.997
Received DPT vaccination (3 doses)	0.878	0.022	311	322	1.141	0.025	0.835	0.922
Received polio vaccination (3 doses)	0.734	0.032	311	322	1.269	0.043	0.671	0.798
Received measles vaccination	0.864	0.023	311	322	1.140	0.026	0.819	0.910
Received all vaccinations	0.636	0.033	311	322	1.194	0.051	0.571	0.701
Height-for-age (-2SD)	0.433	0.017	1465	1576	1.339	0.040	0.398	0.468
Weight-for-height (-2SD)	0.051	0.007	1465	1576	1.207	0.142	0.036	0.065
Weight-for-age (-2SD)	0.128	0.010	1465	1576	1.144	0.079	0.108	0.149
Body Mass Index (BMI) < 18.5	0.078	0.008	1812	1700	1.269	0.103	0.062	0.095
Has heard about HIV/AIDS	0.994	0.002	2035	1930	1.398	0.002	0.990	0.999
Knows about condoms	0.734	0.023	2035	1930	2.333	0.031	0.689	0.780
Knows about limiting partners	0.861	0.017	2035	1930	2.220	0.020	0.827	0.895
Had 2+ sexual partners in past 12 months	0.009	0.002	2035	1930	0.992	0.229	0.005	0.013
Abstinence among never married youth (never had sex)	0.523	0.036	492	391	1.605	0.069	0.451	0.595
Sexually active in past 12 months among never married youth	0.348	0.031	492	391	1.443	0.089	0.286	0.410
Had HIV test and received results in past 12 months	0.457	0.013	2035	1930	1.189	0.029	0.430	0.483
Accepting attitudes towards people with HIV	0.261	0.026	2026	1919	2.693	0.101	0.208	0.314
Ever experienced any physical violence since age 15	0.341	0.018	1489	1411	1.469	0.053	0.304	0.377
Ever experienced any sexual violence	0.146	0.012	1489	1411	1.283	0.081	0.122	0.169
Ever experienced any physical or sexual violence by husband/partner	0.373	0.020	1214	1084	1.436	0.053	0.333	0.413
Ever experienced any physical or sexual violence in the last 12 months	0.203	0.017	1214	1084	1.504	0.086	0.168	0.238
Total fertility rate (3 years)	5.769	0.232	5704	5414	1.555	0.040	5.304	6.234
Neonatal mortality rate (last 0-9 years)	34.570	3.896	3270	3417	1.114	0.113	26.779	42.362
Post-neonatal mortality rate (last 0-9 years)	33.391	4.119	3287	3440	1.318	0.123	25.153	41.628
Infant mortality rate (last 0-9 years)	67.961	5.508	3279	3429	1.225	0.081	56.944	78.977
Child mortality rate (last 0-9 years)	49.967	5.190	3311	3464	1.330	0.104	39.586	60.347
Under-five mortality rate (last 0-9 years)	114.532	7.336	3307	3456	1.306	0.064	99.860	129.204
HIV positive	0.109	0.009	1925	1732	1.231	0.080	0.091	0.126

Continued...

Table B.7—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.132	0.010	1820	1710	1.221	0.073	0.113	0.152
Literacy	0.663	0.017	1820	1710	1.519	0.025	0.629	0.696
No education	0.117	0.016	1820	1710	2.053	0.132	0.086	0.148
Secondary or higher education	0.338	0.016	1820	1710	1.402	0.046	0.307	0.369
Never married (in union)	0.391	0.014	1820	1710	1.224	0.036	0.363	0.419
Currently married (in union)	0.578	0.014	1820	1710	1.169	0.023	0.551	0.605
Had first sexual intercourse before age 18	0.521	0.018	1064	1003	1.146	0.034	0.485	0.556
Want no more children	0.279	0.016	1002	989	1.097	0.056	0.248	0.310
Want to delay birth at least 2 years	0.485	0.020	1002	989	1.248	0.041	0.446	0.525
Ideal number of children	4.953	0.061	1810	1697	1.318	0.012	4.832	5.074
Had 2+ sexual partners in past 12 months	0.210	0.014	1820	1710	1.478	0.067	0.182	0.238
Abstinence among never married youth (never had sex)	0.316	0.024	653	594	1.307	0.075	0.269	0.364
Sexually active in past 12 months among never married youth	0.510	0.026	653	594	1.349	0.052	0.457	0.563
Had paid sex in past 12 months	0.032	0.005	1820	1710	1.254	0.161	0.022	0.043
Had HIV test and received results in past 12 months	0.367	0.016	1820	1710	1.424	0.044	0.335	0.399
Accepting attitudes towards people with HIV	0.281	0.022	1814	1704	2.066	0.078	0.237	0.324
HIV positive (15-49)	0.077	0.009	1695	1660	1.339	0.113	0.060	0.094
HIV positive (15-59)	0.081	0.009	1829	1799	1.408	0.111	0.063	0.099
WOMEN and MEN								
HIV positive (15-49)	0.093	0.008	3620	3392	1.557	0.081	0.078	0.108



Table B.8 Sampling errors: Luapula sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.215	0.021	1585	1143	2.028	0.098	0.173	0.257
Literacy	0.481	0.021	1585	1143	1.710	0.045	0.438	0.524
No education	0.109	0.014	1585	1143	1.766	0.127	0.081	0.137
Secondary or higher education	0.270	0.019	1585	1143	1.724	0.071	0.232	0.309
Never married (never in union)	0.204	0.014	1585	1143	1.412	0.070	0.175	0.232
Currently married (in union)	0.648	0.019	1585	1143	1.557	0.029	0.610	0.685
Married before age 20	0.726	0.015	1009	752	1.032	0.020	0.697	0.755
Had first sexual intercourse before age 18	0.554	0.018	1009	752	1.150	0.033	0.518	0.590
Currently pregnant	0.114	0.011	1585	1143	1.429	0.100	0.092	0.137
Children ever born	3.632	0.081	1585	1143	1.127	0.022	3.469	3.795
Children surviving	3.182	0.084	1585	1143	1.315	0.026	3.015	3.349
Children ever born to women age 40-49	6.558	0.202	249	196	1.131	0.031	6.154	6.962
Currently using any method	0.345	0.020	986	740	1.326	0.058	0.305	0.385
Currently using a modern method	0.331	0.021	986	740	1.411	0.064	0.288	0.373
Currently using a traditional method	0.014	0.004	986	740	1.156	0.305	0.006	0.023
Currently using pill	0.049	0.007	986	740	1.010	0.142	0.035	0.063
Currently using IUD	0.003	0.001	986	740	0.798	0.464	0.000	0.006
Currently using condoms	0.010	0.003	986	740	0.908	0.282	0.005	0.016
Currently using injectables	0.194	0.019	986	740	1.510	0.098	0.156	0.232
Currently using female sterilization	0.015	0.005	986	740	1.257	0.325	0.005	0.025
Currently using rhythm	0.002	0.002	986	740	1.133	0.813	0.000	0.005
Currently using withdrawal	0.000	0.000	986	740	0.621	1.003	0.000	0.001
Used public sector source	0.887	0.034	419	285	2.151	0.038	0.820	0.954
Want no more children	0.371	0.023	986	740	1.524	0.063	0.324	0.418
Want to delay birth at least 2 years	0.398	0.020	986	740	1.310	0.051	0.357	0.439
Ideal number of children	5.172	0.068	1429	1005	1.298	0.013	5.035	5.308
Mothers received antenatal care for last birth	0.946	0.012	1022	765	1.734	0.013	0.921	0.970
Mothers protected against tetanus for last birth	0.665	0.021	1022	765	1.412	0.031	0.623	0.706
Births with skilled attendant at delivery	0.594	0.034	1559	1189	2.304	0.058	0.526	0.663
Had diarrhea in the last 2 weeks	0.147	0.011	1462	1112	1.163	0.072	0.125	0.168
Treated with ORS	0.725	0.036	218	163	1.152	0.050	0.653	0.797
Sought medical treatment for diarrhea	0.729	0.037	218	163	1.181	0.050	0.656	0.802
Vaccination card seen	0.820	0.030	312	239	1.387	0.036	0.760	0.879
Received BCG vaccination	0.929	0.019	312	239	1.343	0.021	0.891	0.968
Received DPT vaccination (3 doses)	0.792	0.038	312	239	1.641	0.048	0.716	0.868
Received polio vaccination (3 doses)	0.759	0.036	312	239	1.469	0.047	0.688	0.831
Received measles vaccination	0.780	0.033	312	239	1.365	0.042	0.714	0.846
Received all vaccinations	0.595	0.034	312	239	1.228	0.058	0.526	0.664
Height-for-age (-2SD)	0.430	0.024	1391	1076	1.722	0.057	0.381	0.479
Weight-for-height (-2SD)	0.131	0.014	1391	1076	1.470	0.107	0.103	0.159
Weight-for-age (-2SD)	0.212	0.018	1391	1076	1.538	0.083	0.177	0.248
Body Mass Index (BMI) < 18.5	0.111	0.010	1368	965	1.185	0.092	0.090	0.131
Has heard about HIV/AIDS	0.966	0.008	1585	1143	1.688	0.008	0.951	0.982
Knows about condoms	0.852	0.015	1585	1143	1.655	0.017	0.822	0.881
Knows about limiting partners	0.902	0.014	1585	1143	1.871	0.015	0.874	0.930
Had 2+ sexual partners in past 12 months	0.019	0.005	1585	1143	1.338	0.244	0.010	0.028
Abstinence among never married youth (never had sex)	0.511	0.035	353	220	1.319	0.069	0.441	0.581
Sexually active in past 12 months among never married youth	0.338	0.036	353	220	1.417	0.106	0.267	0.410
Had HIV test and received results in past 12 months	0.381	0.018	1585	1143	1.503	0.048	0.344	0.418
Accepting attitudes towards people with HIV	0.094	0.014	1537	1104	1.850	0.147	0.066	0.121
Ever experienced any physical violence since age 15	0.504	0.021	1240	839	1.459	0.041	0.462	0.545
Ever experienced any sexual violence	0.209	0.022	1240	839	1.876	0.104	0.166	0.253
Ever experienced any physical or sexual violence by husband/partner	0.548	0.022	1050	677	1.435	0.040	0.504	0.592
Ever experienced any physical or sexual violence in the last 12 months	0.335	0.022	1050	677	1.537	0.067	0.290	0.380
Total fertility rate (3 years)	6.448	0.231	4480	3244	1.286	0.036	5.985	6.911
Neonatal mortality rate (last 0-9 years)	22.767	4.011	3068	2360	1.275	0.176	14.744	30.790
Post-neonatal mortality rate (last 0-9 years)	32.217	5.105	3070	2358	1.496	0.158	22.006	42.428
Infant mortality rate (last 0-9 years)	54.984	7.399	3072	2362	1.533	0.135	40.186	69.783
Child mortality rate (last 0-9 years)	45.122	5.363	3044	2340	1.246	0.119	34.396	55.849
Under-five mortality rate (last 0-9 years)	97.626	10.772	3096	2380	1.633	0.110	76.082	119.169
HIV positive	0.121	0.011	1510	1025	1.284	0.089	0.099	0.142

Continued...

Table B.8—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.238	0.027	1259	855	2.238	0.113	0.184	0.292
Literacy	0.781	0.019	1259	855	1.616	0.024	0.744	0.819
No education	0.039	0.008	1259	855	1.483	0.208	0.023	0.055
Secondary or higher education	0.427	0.023	1259	855	1.622	0.053	0.382	0.473
Never married (in union)	0.349	0.024	1259	855	1.777	0.068	0.302	0.397
Currently married (in union)	0.624	0.024	1259	855	1.744	0.038	0.577	0.672
Had first sexual intercourse before age 18	0.572	0.022	773	536	1.208	0.038	0.529	0.615
Knows any contraceptive method	0.995	0.003	744	534	1.077	0.003	0.990	1.001
Knows any modern contraceptive method	0.995	0.003	744	534	1.077	0.003	0.990	1.001
Want no more children	0.284	0.027	744	534	1.640	0.096	0.229	0.338
Want to delay birth at least 2 years	0.498	0.024	744	534	1.312	0.048	0.450	0.546
Ideal number of children	5.918	0.116	1237	832	1.472	0.020	5.686	6.150
Had 2+ sexual partners in past 12 months	0.117	0.013	1259	855	1.435	0.111	0.091	0.143
Abstinence among never married youth (never had sex)	0.253	0.028	435	277	1.352	0.112	0.197	0.310
Sexually active in past 12 months among never married youth	0.511	0.035	435	277	1.475	0.069	0.440	0.582
Had paid sex in past 12 months	0.063	0.011	1259	855	1.565	0.170	0.042	0.085
Had HIV test and received results in past 12 months	0.330	0.018	1259	855	1.390	0.056	0.293	0.367
Accepting attitudes towards people with HIV	0.189	0.014	1253	851	1.229	0.072	0.162	0.216
HIV positive (15-49)	0.097	0.010	1181	830	1.185	0.105	0.077	0.118
HIV positive (15-59)	0.102	0.010	1280	900	1.220	0.101	0.082	0.123
WOMEN and MEN								
HIV positive (15-49)	0.110	0.009	2691	1855	1.510	0.083	0.092	0.129

Table B.9 Sampling errors: Lusaka sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.880	0.009	1913	3266	1.157	0.010	0.863	0.897
Literacy	0.801	0.017	1913	3266	1.817	0.021	0.768	0.834
No education	0.049	0.007	1913	3266	1.494	0.150	0.034	0.064
Secondary or higher education	0.625	0.023	1913	3266	2.071	0.037	0.580	0.671
Never married (never in union)	0.326	0.014	1913	3266	1.325	0.044	0.297	0.354
Currently married (in union)	0.545	0.017	1913	3266	1.451	0.030	0.512	0.578
Married before age 20	0.556	0.030	1103	1887	1.977	0.053	0.497	0.615
Had first sexual intercourse before age 18	0.477	0.025	1103	1887	1.689	0.053	0.426	0.528
Currently pregnant	0.077	0.007	1913	3266	1.124	0.089	0.063	0.091
Children ever born	2.243	0.062	1913	3266	1.193	0.028	2.120	2.366
Children surviving	2.039	0.054	1913	3266	1.158	0.027	1.931	2.148
Children ever born to women age 40-49	5.149	0.225	251	397	1.301	0.044	4.699	5.599
Currently using any method	0.578	0.020	1052	1780	1.294	0.034	0.538	0.617
Currently using a modern method	0.547	0.019	1052	1780	1.250	0.035	0.508	0.585
Currently using a traditional method	0.031	0.006	1052	1780	1.205	0.208	0.018	0.044
Currently using pill	0.171	0.014	1052	1780	1.193	0.081	0.143	0.199
Currently using IUD	0.029	0.006	1052	1780	1.241	0.221	0.016	0.042
Currently using condoms	0.053	0.009	1052	1780	1.275	0.167	0.035	0.070
Currently using injectables	0.176	0.012	1052	1780	1.038	0.069	0.151	0.200
Currently using female sterilization	0.020	0.004	1052	1780	0.969	0.208	0.012	0.029
Currently using rhythm	0.008	0.003	1052	1780	1.090	0.365	0.002	0.015
Currently using withdrawal	0.019	0.005	1052	1780	1.199	0.265	0.009	0.029
Used public sector source	0.776	0.023	676	1148	1.411	0.029	0.730	0.821
Want no more children	0.364	0.018	1052	1780	1.218	0.050	0.327	0.400
Want to delay birth at least 2 years	0.402	0.017	1052	1780	1.098	0.041	0.369	0.436
Ideal number of children	4.077	0.059	1903	3250	1.513	0.015	3.958	4.196
Mothers received antenatal care for last birth	0.994	0.003	907	1522	1.080	0.003	0.988	0.999
Mothers protected against tetanus for last birth	0.832	0.019	907	1522	1.497	0.023	0.794	0.869
Births with skilled attendant at delivery	0.889	0.013	1181	1961	1.236	0.014	0.864	0.915
Had diarrhea in the last 2 weeks	0.155	0.013	1124	1855	1.139	0.083	0.129	0.181
Treated with ORS	0.738	0.036	159	287	1.023	0.048	0.666	0.809
Sought medical treatment for diarrhea	0.649	0.037	159	287	0.984	0.056	0.576	0.723
Vaccination card seen	0.790	0.030	221	370	1.097	0.038	0.730	0.851
Received BCG vaccination	0.973	0.013	221	370	1.151	0.013	0.947	0.998
Received DPT vaccination (3 doses)	0.910	0.026	221	370	1.322	0.028	0.859	0.961
Received polio vaccination (3 doses)	0.797	0.027	221	370	0.996	0.034	0.743	0.852
Received measles vaccination	0.876	0.030	221	370	1.344	0.034	0.816	0.936
Received all vaccinations	0.721	0.035	221	370	1.133	0.048	0.652	0.790
Height-for-age (-2SD)	0.357	0.017	1100	1801	1.086	0.047	0.323	0.391
Weight-for-height (-2SD)	0.070	0.010	1100	1801	1.203	0.139	0.050	0.089
Weight-for-age (-2SD)	0.110	0.014	1100	1801	1.388	0.122	0.083	0.137
Body Mass Index (BMI) < 18.5	0.082	0.007	1729	2966	1.062	0.085	0.068	0.096
Has heard about HIV/AIDS	0.998	0.001	1913	3266	1.171	0.001	0.996	1.001
Knows about condoms	0.803	0.015	1913	3266	1.677	0.019	0.772	0.833
Knows about limiting partners	0.913	0.011	1913	3266	1.742	0.012	0.891	0.936
Had 2+ sexual partners in past 12 months	0.014	0.003	1913	3266	1.234	0.236	0.007	0.021
Abstinence among never married youth (never had sex)	0.586	0.027	528	899	1.237	0.045	0.533	0.640
Sexually active in past 12 months among never married youth	0.263	0.024	528	899	1.253	0.091	0.215	0.311
Had HIV test and received results in past 12 months	0.468	0.013	1913	3266	1.171	0.029	0.441	0.494
Accepting attitudes towards people with HIV	0.278	0.017	1910	3261	1.614	0.060	0.245	0.311
Ever experienced any physical violence since age 15	0.416	0.022	1308	2374	1.599	0.052	0.373	0.460
Ever experienced any sexual violence	0.119	0.011	1308	2374	1.246	0.094	0.096	0.141
Ever experienced any physical or sexual violence by husband/partner	0.380	0.025	1022	1642	1.627	0.065	0.330	0.429
Ever experienced any physical or sexual violence in the last 12 months	0.225	0.020	1022	1642	1.523	0.088	0.185	0.265
Total fertility rate (3 years)	3.678	0.147	5357	9163	1.145	0.040	3.383	3.973
Neonatal mortality rate (last 0-9 years)	22.646	4.089	2312	3879	1.241	0.181	14.469	30.823
Post-neonatal mortality rate (last 0-9 years)	19.674	3.353	2311	3878	1.061	0.170	12.968	26.381
Infant mortality rate (last 0-9 years)	42.320	5.706	2315	3885	1.257	0.135	30.907	53.733
Child mortality rate (last 0-9 years)	27.332	3.735	2258	3797	1.031	0.137	19.862	34.802
Under-five mortality rate (last 0-9 years)	68.496	6.532	2330	3907	1.163	0.095	55.431	81.561
HIV positive	0.194	0.016	1792	2931	1.662	0.080	0.163	0.225

Continued...

Table B.9—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.880	0.009	1722	2844	1.126	0.010	0.862	0.897
Literacy	0.932	0.011	1722	2844	1.760	0.012	0.910	0.953
No education	0.017	0.004	1722	2844	1.205	0.221	0.009	0.025
Secondary or higher education	0.752	0.018	1722	2844	1.681	0.023	0.717	0.787
Never married (in union)	0.487	0.018	1722	2844	1.481	0.037	0.451	0.523
Currently married (in union)	0.462	0.017	1722	2844	1.382	0.036	0.429	0.495
Had first sexual intercourse before age 18	0.366	0.023	1021	1679	1.506	0.062	0.320	0.411
Want no more children	0.314	0.018	815	1313	1.084	0.056	0.279	0.349
Want to delay birth at least 2 years	0.423	0.022	815	1313	1.282	0.052	0.379	0.467
Ideal number of children	4.088	0.060	1716	2838	1.235	0.015	3.969	4.208
Had 2+ sexual partners in past 12 months	0.117	0.010	1722	2844	1.278	0.085	0.097	0.137
Abstinence among never married youth (never had sex)	0.508	0.024	630	1052	1.201	0.047	0.460	0.556
Sexually active in past 12 months among never married youth	0.325	0.022	630	1052	1.178	0.068	0.281	0.369
Had paid sex in past 12 months	0.046	0.006	1722	2844	1.163	0.128	0.034	0.058
Had HIV test and received results in past 12 months	0.330	0.014	1722	2844	1.241	0.043	0.302	0.358
Accepting attitudes towards people with HIV	0.379	0.021	1716	2831	1.763	0.054	0.338	0.421
HIV positive (15-49)	0.130	0.013	1564	2752	1.548	0.101	0.103	0.156
HIV positive (15-59)	0.139	0.013	1682	2947	1.520	0.092	0.113	0.164
WOMEN and MEN								
HIV positive (15-49)	0.163	0.013	3356	5683	2.032	0.080	0.137	0.189

Table B.10 Sampling errors: Muchinga sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.217	0.014	1455	868	1.328	0.066	0.188	0.246
Literacy	0.544	0.026	1455	868	2.010	0.048	0.491	0.596
No education	0.098	0.014	1455	868	1.783	0.142	0.070	0.126
Secondary or higher education	0.319	0.023	1455	868	1.885	0.072	0.272	0.365
Never married (never in union)	0.226	0.016	1455	868	1.434	0.070	0.195	0.258
Currently married (in union)	0.662	0.019	1455	868	1.564	0.029	0.623	0.701
Married before age 20	0.760	0.015	845	514	1.010	0.020	0.731	0.790
Had first sexual intercourse before age 18	0.622	0.018	845	514	1.100	0.030	0.586	0.659
Currently pregnant	0.103	0.012	1455	868	1.481	0.115	0.079	0.126
Children ever born	3.482	0.092	1455	868	1.157	0.026	3.298	3.665
Children surviving	3.030	0.079	1455	868	1.173	0.026	2.871	3.188
Children ever born to women age 40-49	7.176	0.206	225	147	1.260	0.029	6.764	7.588
Currently using any method	0.450	0.027	892	575	1.607	0.060	0.397	0.504
Currently using a modern method	0.343	0.026	892	575	1.615	0.075	0.291	0.394
Currently using a traditional method	0.108	0.017	892	575	1.629	0.157	0.074	0.142
Currently using pill	0.075	0.011	892	575	1.251	0.147	0.053	0.097
Currently using IUD	0.005	0.002	892	575	0.997	0.461	0.000	0.010
Currently using condoms	0.039	0.008	892	575	1.204	0.200	0.023	0.055
Currently using injectables	0.145	0.015	892	575	1.264	0.103	0.115	0.174
Currently using female sterilization	0.012	0.004	892	575	1.080	0.326	0.004	0.020
Currently using rhythm	0.009	0.005	892	575	1.678	0.596	0.000	0.019
Currently using withdrawal	0.097	0.017	892	575	1.685	0.173	0.063	0.130
Used public sector source	0.890	0.018	390	214	1.109	0.020	0.854	0.925
Want no more children	0.378	0.016	892	575	1.009	0.043	0.346	0.411
Want to delay birth at least 2 years	0.429	0.015	892	575	0.907	0.035	0.399	0.459
Ideal number of children	4.852	0.085	1408	834	1.511	0.017	4.683	5.022
Mothers received antenatal care for last birth	0.944	0.016	854	544	2.099	0.017	0.911	0.976
Mothers protected against tetanus for last birth	0.844	0.016	854	544	1.269	0.018	0.813	0.875
Births with skilled attendant at delivery	0.567	0.036	1252	815	2.181	0.063	0.496	0.638
Had diarrhea in the last 2 weeks	0.167	0.013	1189	771	1.157	0.078	0.141	0.193
Treated with ORS	0.514	0.048	222	129	1.264	0.093	0.418	0.609
Sought medical treatment for diarrhea	0.582	0.050	222	129	1.360	0.086	0.482	0.682
Vaccination card seen	0.768	0.029	242	158	1.087	0.038	0.710	0.826
Received BCG vaccination	0.955	0.018	242	158	1.389	0.019	0.919	0.991
Received DPT vaccination (3 doses)	0.794	0.036	242	158	1.432	0.046	0.721	0.867
Received polio vaccination (3 doses)	0.721	0.036	242	158	1.273	0.050	0.648	0.794
Received measles vaccination	0.832	0.027	242	158	1.167	0.033	0.778	0.887
Received all vaccinations	0.608	0.037	242	158	1.197	0.061	0.534	0.682
Height-for-age (-2SD)	0.436	0.020	1200	765	1.349	0.046	0.396	0.476
Weight-for-height (-2SD)	0.041	0.005	1200	765	0.927	0.130	0.030	0.052
Weight-for-age (-2SD)	0.156	0.012	1200	765	1.045	0.075	0.132	0.179
Body Mass Index (BMI) < 18.5	0.140	0.014	1286	755	1.419	0.099	0.112	0.167
Has heard about HIV/AIDS	0.991	0.003	1455	868	1.307	0.003	0.984	0.997
Knows about condoms	0.787	0.019	1455	868	1.784	0.024	0.749	0.825
Knows about limiting partners	0.946	0.009	1455	868	1.446	0.009	0.929	0.963
Had 2+ sexual partners in past 12 months	0.009	0.003	1455	868	1.129	0.318	0.003	0.014
Abstinence among never married youth (never had sex)	0.697	0.031	359	187	1.265	0.044	0.635	0.758
Sexually active in past 12 months among never married youth	0.163	0.023	359	187	1.167	0.140	0.118	0.209
Had HIV test and received results in past 12 months	0.420	0.018	1455	868	1.357	0.042	0.385	0.455
Accepting attitudes towards people with HIV	0.132	0.017	1442	861	1.899	0.128	0.098	0.166
Ever experienced any physical violence since age 15	0.434	0.025	1048	597	1.628	0.058	0.384	0.484
Ever experienced any sexual violence	0.217	0.023	1048	597	1.768	0.104	0.172	0.262
Ever experienced any physical or sexual violence by husband/partner	0.495	0.031	855	458	1.793	0.062	0.433	0.556
Ever experienced any physical or sexual violence in the last 12 months	0.330	0.028	855	458	1.752	0.085	0.274	0.387
Total fertility rate (3 years)	6.294	0.236	4040	2412	1.377	0.038	5.821	6.766
Neonatal mortality rate (last 0-9 years)	27.638	3.951	2444	1586	1.169	0.143	19.735	35.541
Post-neonatal mortality rate (last 0-9 years)	22.562	3.575	2448	1587	1.207	0.158	15.412	29.712
Infant mortality rate (last 0-9 years)	50.200	5.721	2450	1592	1.249	0.114	38.759	61.641
Child mortality rate (last 0-9 years)	40.137	4.727	2434	1578	1.100	0.118	30.682	49.591
Under-five mortality rate (last 0-9 years)	88.322	6.290	2464	1601	1.052	0.071	75.742	100.902
HIV positive	0.069	0.008	1378	779	1.208	0.119	0.053	0.086

Continued...

Table B.10—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.216	0.017	1144	680	1.402	0.079	0.182	0.250
Literacy	0.761	0.019	1144	680	1.523	0.025	0.722	0.799
No education	0.023	0.006	1144	680	1.416	0.271	0.011	0.036
Secondary or higher education	0.460	0.024	1144	680	1.647	0.053	0.411	0.508
Never married (in union)	0.388	0.016	1144	680	1.091	0.041	0.356	0.419
Currently married (in union)	0.589	0.016	1144	680	1.076	0.027	0.557	0.620
Had first sexual intercourse before age 18	0.399	0.028	673	408	1.468	0.070	0.344	0.455
Want no more children	0.280	0.017	632	400	0.961	0.061	0.246	0.314
Want to delay birth at least 2 years	0.502	0.019	632	400	0.952	0.038	0.464	0.540
Ideal number of children	5.336	0.099	1139	677	1.383	0.019	5.138	5.533
Had 2+ sexual partners in past 12 months	0.135	0.014	1144	680	1.399	0.105	0.107	0.164
Abstinence among never married youth (never had sex)	0.623	0.032	425	241	1.368	0.052	0.558	0.687
Sexually active in past 12 months among never married youth	0.230	0.025	425	241	1.210	0.107	0.181	0.280
Had paid sex in past 12 months	0.028	0.006	1144	680	1.263	0.220	0.016	0.040
Had HIV test and received results in past 12 months	0.353	0.019	1144	680	1.348	0.054	0.315	0.391
Accepting attitudes towards people with HIV	0.195	0.019	1138	677	1.629	0.098	0.157	0.233
HIV positive (15-49)	0.058	0.010	1075	659	1.381	0.169	0.039	0.078
HIV positive (15-59)	0.062	0.010	1196	737	1.443	0.162	0.042	0.082
WOMEN and MEN								
HIV positive (15-49)	0.064	0.008	2453	1438	1.517	0.117	0.049	0.079

Table B.11 Sampling errors: Northern sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.209	0.014	1580	1200	1.391	0.068	0.181	0.238
Literacy	0.491	0.026	1580	1200	2.082	0.053	0.439	0.544
No education	0.097	0.017	1580	1200	2.287	0.176	0.063	0.131
Secondary or higher education	0.271	0.023	1580	1200	2.090	0.086	0.224	0.318
Never married (never in union)	0.209	0.013	1580	1200	1.310	0.064	0.182	0.235
Currently married (in union)	0.683	0.017	1580	1200	1.410	0.024	0.650	0.716
Married before age 20	0.806	0.016	959	752	1.241	0.020	0.774	0.838
Had first sexual intercourse before age 18	0.638	0.019	959	752	1.239	0.030	0.599	0.676
Currently pregnant	0.104	0.011	1580	1200	1.417	0.105	0.082	0.126
Children ever born	3.803	0.100	1580	1200	1.267	0.026	3.604	4.002
Children surviving	3.277	0.081	1580	1200	1.238	0.025	3.115	3.439
Children ever born to women age 40-49	7.618	0.201	258	209	1.226	0.026	7.216	8.020
Currently using any method	0.482	0.027	1039	820	1.750	0.056	0.428	0.537
Currently using a modern method	0.325	0.027	1039	820	1.870	0.084	0.271	0.380
Currently using a traditional method	0.157	0.021	1039	820	1.853	0.133	0.115	0.199
Currently using pill	0.071	0.012	1039	820	1.471	0.166	0.047	0.094
Currently using IUD	0.008	0.004	1039	820	1.580	0.554	0.000	0.016
Currently using condoms	0.031	0.006	1039	820	1.165	0.203	0.018	0.043
Currently using injectables	0.134	0.016	1039	820	1.490	0.118	0.102	0.165
Currently using female sterilization	0.013	0.004	1039	820	1.213	0.326	0.005	0.022
Currently using rhythm	0.003	0.002	1039	820	0.940	0.540	0.000	0.006
Currently using withdrawal	0.139	0.021	1039	820	1.985	0.153	0.097	0.182
Used public sector source	0.910	0.017	417	295	1.216	0.019	0.876	0.944
Want no more children	0.416	0.018	1039	820	1.148	0.042	0.381	0.451
Want to delay birth at least 2 years	0.424	0.020	1039	820	1.329	0.048	0.383	0.465
Ideal number of children	5.353	0.097	1567	1191	1.731	0.018	5.160	5.546
Mothers received antenatal care for last birth	0.927	0.021	988	803	2.602	0.023	0.884	0.969
Mothers protected against tetanus for last birth	0.815	0.024	988	803	1.973	0.029	0.767	0.863
Births with skilled attendant at delivery	0.453	0.035	1528	1270	2.326	0.077	0.383	0.523
Had diarrhea in the last 2 weeks	0.159	0.014	1439	1203	1.437	0.087	0.131	0.187
Treated with ORS	0.536	0.045	247	191	1.327	0.083	0.446	0.625
Sought medical treatment for diarrhea	0.640	0.048	247	191	1.458	0.074	0.545	0.736
Vaccination card seen	0.819	0.028	287	241	1.266	0.034	0.764	0.875
Received BCG vaccination	0.946	0.013	287	241	1.029	0.014	0.919	0.972
Received DPT vaccination (3 doses)	0.866	0.032	287	241	1.641	0.037	0.802	0.930
Received polio vaccination (3 doses)	0.813	0.035	287	241	1.584	0.044	0.742	0.883
Received measles vaccination	0.877	0.026	287	241	1.387	0.030	0.824	0.929
Received all vaccinations	0.722	0.035	287	241	1.342	0.048	0.653	0.791
Height-for-age (-2SD)	0.485	0.016	1429	1197	1.154	0.033	0.453	0.517
Weight-for-height (-2SD)	0.037	0.006	1429	1197	1.092	0.153	0.025	0.048
Weight-for-age (-2SD)	0.190	0.011	1429	1197	1.020	0.058	0.168	0.212
Body Mass Index (BMI) < 18.5	0.135	0.012	1367	1028	1.315	0.091	0.111	0.159
Has heard about HIV/AIDS	0.995	0.002	1580	1200	1.097	0.002	0.991	0.999
Knows about condoms	0.730	0.025	1580	1200	2.207	0.034	0.680	0.779
Knows about limiting partners	0.935	0.011	1580	1200	1.796	0.012	0.913	0.958
Had 2+ sexual partners in past 12 months	0.011	0.003	1580	1200	1.106	0.265	0.005	0.017
Abstinence among never married youth (never had sex)	0.590	0.036	355	242	1.359	0.060	0.519	0.661
Sexually active in past 12 months among never married youth	0.253	0.027	355	242	1.162	0.106	0.199	0.307
Had HIV test and received results in past 12 months	0.412	0.023	1580	1200	1.888	0.057	0.365	0.459
Accepting attitudes towards people with HIV	0.093	0.009	1573	1194	1.229	0.097	0.075	0.111
Ever experienced any physical violence since age 15	0.532	0.016	1197	864	1.114	0.030	0.500	0.564
Ever experienced any sexual violence	0.158	0.018	1197	864	1.701	0.114	0.122	0.194
Ever experienced any physical or sexual violence by husband/partner	0.547	0.019	1033	699	1.211	0.034	0.509	0.585
Ever experienced any physical or sexual violence in the last 12 months	0.254	0.019	1033	699	1.383	0.074	0.216	0.291
Total fertility rate (3 years)	6.648	0.272	4426	3366	1.548	0.041	6.104	7.192
Neonatal mortality rate (last 0-9 years)	25.263	3.669	2938	2423	1.172	0.145	17.925	32.601
Post-neonatal mortality rate (last 0-9 years)	24.205	3.984	2947	2428	1.352	0.165	16.236	32.174
Infant mortality rate (last 0-9 years)	49.468	5.610	2942	2426	1.286	0.113	38.247	60.689
Child mortality rate (last 0-9 years)	38.552	4.091	2928	2418	1.104	0.106	30.370	46.733
Under-five mortality rate (last 0-9 years)	86.113	7.534	2960	2444	1.368	0.087	71.044	101.181
HIV positive	0.104	0.012	1529	1077	1.493	0.112	0.080	0.127

Continued...

Table B.11—*Continued*

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.221	0.016	1301	929	1.347	0.070	0.190	0.252
Literacy	0.756	0.019	1301	929	1.622	0.026	0.718	0.795
No education	0.040	0.008	1301	929	1.526	0.208	0.023	0.057
Secondary or higher education	0.456	0.026	1301	929	1.878	0.057	0.404	0.508
Never married (in union)	0.341	0.016	1301	929	1.188	0.046	0.310	0.372
Currently married (in union)	0.627	0.017	1301	929	1.275	0.027	0.593	0.662
Had first sexual intercourse before age 18	0.441	0.019	803	588	1.107	0.044	0.403	0.480
Want no more children	0.297	0.022	780	583	1.360	0.075	0.252	0.341
Want to delay birth at least 2 years	0.525	0.025	780	583	1.406	0.048	0.474	0.575
Ideal number of children	5.664	0.185	1285	916	2.472	0.033	5.293	6.035
Had 2+ sexual partners in past 12 months	0.154	0.013	1301	929	1.320	0.086	0.128	0.180
Abstinence among never married youth (never had sex)	0.414	0.027	432	292	1.118	0.064	0.361	0.468
Sexually active in past 12 months among never married youth	0.383	0.027	432	292	1.135	0.069	0.330	0.436
Had paid sex in past 12 months	0.026	0.004	1301	929	1.003	0.169	0.017	0.035
Had HIV test and received results in past 12 months	0.329	0.023	1301	929	1.741	0.069	0.284	0.375
Accepting attitudes towards people with HIV	0.252	0.022	1298	926	1.793	0.086	0.209	0.296
HIV positive (15-49)	0.106	0.013	1247	904	1.477	0.122	0.080	0.131
HIV positive (15-59)	0.105	0.012	1386	1013	1.461	0.115	0.081	0.129
WOMEN and MEN								
HIV positive (15-49)	0.105	0.011	2776	1981	1.899	0.106	0.083	0.127



Table B.12 Sampling errors: North Western sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.281	0.022	1570	713	1.958	0.079	0.237	0.326
Literacy	0.609	0.021	1570	713	1.674	0.034	0.568	0.650
No education	0.114	0.014	1570	713	1.763	0.124	0.086	0.142
Secondary or higher education	0.391	0.024	1570	713	1.986	0.063	0.342	0.440
Never married (never in union)	0.304	0.013	1570	713	1.138	0.043	0.277	0.330
Currently married (in union)	0.571	0.016	1570	713	1.276	0.028	0.539	0.603
Married before age 20	0.659	0.020	885	410	1.283	0.031	0.618	0.700
Had first sexual intercourse before age 18	0.665	0.018	885	410	1.153	0.028	0.628	0.701
Currently pregnant	0.092	0.010	1570	713	1.360	0.108	0.072	0.112
Children ever born	3.246	0.085	1570	713	1.169	0.026	3.077	3.416
Children surviving	2.957	0.081	1570	713	1.241	0.027	2.794	3.119
Children ever born to women age 40-49	6.699	0.212	245	114	1.216	0.032	6.275	7.123
Currently using any method	0.401	0.023	870	407	1.368	0.057	0.355	0.447
Currently using a modern method	0.367	0.024	870	407	1.459	0.065	0.319	0.414
Currently using a traditional method	0.034	0.008	870	407	1.291	0.232	0.018	0.050
Currently using pill	0.047	0.009	870	407	1.230	0.189	0.029	0.064
Currently using IUD	0.001	0.001	870	407	0.700	0.703	0.000	0.003
Currently using condoms	0.023	0.008	870	407	1.557	0.345	0.007	0.039
Currently using injectables	0.209	0.022	870	407	1.618	0.107	0.164	0.254
Currently using female sterilization	0.041	0.010	870	407	1.513	0.248	0.021	0.061
Currently using rhythm	0.009	0.003	870	407	1.016	0.357	0.003	0.016
Currently using withdrawal	0.020	0.006	870	407	1.203	0.288	0.008	0.031
Used public sector source	0.735	0.046	441	194	2.156	0.062	0.643	0.826
Want no more children	0.313	0.020	870	407	1.267	0.064	0.273	0.353
Want to delay birth at least 2 years	0.455	0.019	870	407	1.139	0.042	0.417	0.494
Ideal number of children	5.082	0.079	1539	696	1.501	0.016	4.924	5.241
Mothers received antenatal care for last birth	0.959	0.013	932	443	1.955	0.013	0.934	0.984
Mothers protected against tetanus for last birth	0.858	0.018	932	443	1.627	0.022	0.821	0.895
Births with skilled attendant at delivery	0.703	0.031	1381	670	2.096	0.043	0.642	0.764
Had diarrhea in the last 2 weeks	0.151	0.015	1315	641	1.468	0.097	0.122	0.180
Treated with ORS	0.657	0.041	193	97	1.181	0.062	0.575	0.739
Sought medical treatment for diarrhea	0.695	0.039	193	97	1.197	0.057	0.616	0.773
Vaccination card seen	0.818	0.027	266	132	1.181	0.033	0.764	0.872
Received BCG vaccination	0.971	0.011	266	132	1.058	0.011	0.950	0.992
Received DPT vaccination (3 doses)	0.828	0.030	266	132	1.342	0.036	0.768	0.888
Received polio vaccination (3 doses)	0.776	0.027	266	132	1.078	0.035	0.722	0.829
Received measles vaccination	0.845	0.022	266	132	1.022	0.026	0.801	0.889
Received all vaccinations	0.628	0.030	266	132	1.032	0.047	0.568	0.687
Height-for-age (-2SD)	0.369	0.020	1275	633	1.373	0.054	0.329	0.408
Weight-for-height (-2SD)	0.082	0.009	1275	633	1.162	0.110	0.064	0.100
Weight-for-age (-2SD)	0.138	0.012	1275	633	1.247	0.088	0.114	0.162
Body Mass Index (BMI) < 18.5	0.092	0.011	1386	626	1.394	0.118	0.070	0.114
Has heard about HIV/AIDS	0.996	0.002	1570	713	1.320	0.002	0.991	1.000
Knows about condoms	0.871	0.010	1570	713	1.232	0.012	0.851	0.892
Knows about limiting partners	0.922	0.010	1570	713	1.539	0.011	0.901	0.943
Had 2+ sexual partners in past 12 months	0.011	0.003	1570	713	1.082	0.258	0.005	0.017
Abstinence among never married youth (never had sex)	0.299	0.028	454	196	1.298	0.093	0.243	0.355
Sexually active in past 12 months among never married youth	0.465	0.028	454	196	1.173	0.059	0.410	0.520
Had HIV test and received results in past 12 months	0.493	0.020	1570	713	1.588	0.041	0.453	0.533
Accepting attitudes towards people with HIV	0.155	0.014	1564	710	1.508	0.089	0.127	0.183
Ever experienced any physical violence since age 15	0.353	0.019	1113	525	1.346	0.055	0.315	0.392
Ever experienced any sexual violence	0.155	0.014	1113	525	1.325	0.093	0.127	0.184
Ever experienced any physical or sexual violence by husband/partner	0.385	0.024	860	366	1.449	0.062	0.337	0.434
Ever experienced any physical or sexual violence in the last 12 months	0.236	0.023	860	366	1.570	0.096	0.190	0.282
Total fertility rate (3 years)	6.213	0.270	4382	1991	1.594	0.044	5.673	6.754
Neonatal mortality rate (last 0-9 years)	19.600	2.761	2610	1268	0.958	0.141	14.079	25.122
Post-neonatal mortality rate (last 0-9 years)	19.792	3.365	2615	1271	1.164	0.170	13.061	26.523
Infant mortality rate (last 0-9 years)	39.392	4.685	2615	1271	1.146	0.119	30.022	48.762
Child mortality rate (last 0-9 years)	27.840	4.652	2548	1231	1.372	0.167	18.537	37.143
Under-five mortality rate (last 0-9 years)	66.135	6.559	2627	1277	1.225	0.099	53.018	79.253
HIV positive	0.079	0.009	1494	640	1.337	0.119	0.060	0.097

Continued...

Table B.12—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.276	0.022	1234	557	1.715	0.079	0.232	0.319
Literacy	0.838	0.014	1234	557	1.373	0.017	0.809	0.867
No education	0.048	0.008	1234	557	1.317	0.167	0.032	0.064
Secondary or higher education	0.551	0.024	1234	557	1.720	0.044	0.502	0.600
Never married (in union)	0.426	0.017	1234	557	1.216	0.040	0.391	0.460
Currently married (in union)	0.538	0.016	1234	557	1.135	0.030	0.506	0.570
Had first sexual intercourse before age 18	0.611	0.024	705	319	1.279	0.038	0.564	0.658
Want no more children	0.226	0.017	651	300	1.062	0.077	0.191	0.261
Want to delay birth at least 2 years	0.476	0.022	651	300	1.145	0.047	0.431	0.520
Ideal number of children	5.564	0.100	1227	553	1.472	0.018	5.363	5.764
Had 2+ sexual partners in past 12 months	0.123	0.014	1234	557	1.519	0.115	0.095	0.152
Abstinence among never married youth (never had sex)	0.277	0.024	473	211	1.156	0.086	0.230	0.325
Sexually active in past 12 months among never married youth	0.557	0.029	473	211	1.273	0.052	0.499	0.615
Had paid sex in past 12 months	0.077	0.010	1234	557	1.251	0.123	0.058	0.096
Had HIV test and received results in past 12 months	0.426	0.017	1234	557	1.196	0.040	0.392	0.459
Accepting attitudes towards people with HIV	0.229	0.015	1232	556	1.291	0.068	0.198	0.259
HIV positive (15-49)	0.064	0.011	1126	539	1.525	0.174	0.042	0.086
HIV positive (15-59)	0.061	0.011	1227	589	1.570	0.175	0.040	0.083
WOMEN and MEN								
HIV positive (15-49)	0.072	0.009	2620	1178	1.726	0.121	0.054	0.089

Table B.13 Sampling errors: Southern sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.267	0.024	1732	2007	2.241	0.089	0.220	0.315
Literacy	0.720	0.020	1732	2007	1.869	0.028	0.680	0.760
No education	0.052	0.009	1732	2007	1.593	0.164	0.035	0.069
Secondary or higher education	0.431	0.024	1732	2007	2.029	0.056	0.382	0.479
Never married (never in union)	0.237	0.014	1732	2007	1.358	0.059	0.210	0.265
Currently married (in union)	0.673	0.016	1732	2007	1.432	0.024	0.641	0.705
Married before age 20	0.657	0.022	1020	1200	1.461	0.033	0.614	0.701
Had first sexual intercourse before age 18	0.634	0.020	1020	1200	1.351	0.032	0.593	0.675
Currently pregnant	0.092	0.010	1732	2007	1.390	0.105	0.073	0.111
Children ever born	3.230	0.092	1732	2007	1.356	0.029	3.046	3.414
Children surviving	2.940	0.085	1732	2007	1.375	0.029	2.770	3.110
Children ever born to women age 40-49	6.878	0.249	248	303	1.403	0.036	6.379	7.377
Currently using any method	0.512	0.022	1098	1351	1.430	0.042	0.469	0.555
Currently using a modern method	0.482	0.023	1098	1351	1.523	0.048	0.436	0.528
Currently using a traditional method	0.030	0.007	1098	1351	1.391	0.239	0.016	0.044
Currently using pill	0.154	0.018	1098	1351	1.613	0.114	0.119	0.189
Currently using IUD	0.012	0.004	1098	1351	1.292	0.360	0.003	0.020
Currently using condoms	0.047	0.007	1098	1351	1.084	0.147	0.034	0.061
Currently using injectables	0.203	0.019	1098	1351	1.554	0.093	0.165	0.241
Currently using female sterilization	0.007	0.003	1098	1351	1.112	0.390	0.002	0.013
Currently using rhythm	0.016	0.005	1098	1351	1.355	0.319	0.006	0.027
Currently using withdrawal	0.011	0.004	1098	1351	1.410	0.406	0.002	0.020
Used public sector source	0.822	0.027	638	742	1.746	0.032	0.769	0.875
Want no more children	0.347	0.022	1098	1351	1.534	0.064	0.303	0.391
Want to delay birth at least 2 years	0.424	0.023	1098	1351	1.520	0.053	0.379	0.470
Ideal number of children	4.912	0.094	1717	1990	1.798	0.019	4.724	5.101
Mothers received antenatal care for last birth	0.963	0.007	1039	1263	1.232	0.007	0.949	0.977
Mothers protected against tetanus for last birth	0.769	0.019	1039	1263	1.426	0.024	0.732	0.806
Births with skilled attendant at delivery	0.550	0.029	1488	1842	2.001	0.052	0.493	0.608
Had diarrhea in the last 2 weeks	0.180	0.017	1413	1754	1.619	0.095	0.145	0.214
Treated with ORS	0.647	0.051	249	315	1.580	0.078	0.546	0.748
Sought medical treatment for diarrhea	0.698	0.036	249	315	1.194	0.052	0.626	0.771
Vaccination card seen	0.848	0.023	289	361	1.101	0.027	0.802	0.894
Received BCG vaccination	0.922	0.021	289	361	1.339	0.023	0.880	0.963
Received DPT vaccination (3 doses)	0.833	0.035	289	361	1.584	0.042	0.763	0.902
Received polio vaccination (3 doses)	0.774	0.036	289	361	1.453	0.046	0.702	0.845
Received measles vaccination	0.860	0.029	289	361	1.391	0.033	0.803	0.918
Received all vaccinations	0.690	0.039	289	361	1.436	0.056	0.613	0.768
Height-for-age (-2SD)	0.372	0.017	1425	1777	1.364	0.047	0.337	0.407
Weight-for-height (-2SD)	0.042	0.006	1425	1777	1.232	0.154	0.029	0.055
Weight-for-age (-2SD)	0.131	0.010	1425	1777	1.165	0.080	0.110	0.151
Body Mass Index (BMI) < 18.5	0.094	0.010	1536	1777	1.301	0.103	0.075	0.114
Has heard about HIV/AIDS	0.998	0.001	1732	2007	1.123	0.001	0.995	1.000
Knows about condoms	0.887	0.012	1732	2007	1.596	0.014	0.863	0.911
Knows about limiting partners	0.946	0.007	1732	2007	1.331	0.008	0.932	0.961
Had 2+ sexual partners in past 12 months	0.020	0.004	1732	2007	1.136	0.191	0.012	0.028
Abstinence among never married youth (never had sex)	0.424	0.028	407	427	1.143	0.066	0.368	0.480
Sexually active in past 12 months among never married youth	0.450	0.034	407	427	1.379	0.076	0.382	0.518
Had HIV test and received results in past 12 months	0.520	0.023	1732	2007	1.938	0.045	0.473	0.566
Accepting attitudes towards people with HIV	0.188	0.011	1729	2003	1.120	0.056	0.167	0.209
Ever experienced any physical violence since age 15	0.450	0.020	1234	1427	1.435	0.045	0.409	0.491
Ever experienced any sexual violence	0.233	0.015	1234	1427	1.250	0.065	0.203	0.263
Ever experienced any physical or sexual violence by husband/partner	0.500	0.019	1004	1083	1.212	0.038	0.462	0.539
Ever experienced any physical or sexual violence in the last 12 months	0.353	0.018	1004	1083	1.226	0.052	0.316	0.390
Total fertility rate (3 years)	6.222	0.293	4833	5612	1.460	0.047	5.637	6.808
Neonatal mortality rate (last 0-9 years)	22.870	4.053	2812	3523	1.424	0.177	14.764	30.977
Post-neonatal mortality rate (last 0-9 years)	21.551	2.817	2819	3527	1.074	0.131	15.917	27.185
Infant mortality rate (last 0-9 years)	44.422	4.496	2816	3529	1.211	0.101	35.429	53.414
Child mortality rate (last 0-9 years)	24.789	4.002	2764	3447	1.247	0.161	16.785	32.793
Under-five mortality rate (last 0-9 years)	0.147	0.013	1626	1801	1.431	0.086	0.121	0.172
HIV positive								

Continued...

Table B.13—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.236	0.025	1548	1771	2.317	0.106	0.186	0.286
Literacy	0.813	0.013	1548	1771	1.306	0.016	0.787	0.838
No education	0.017	0.004	1548	1771	1.129	0.222	0.009	0.024
Secondary or higher education	0.496	0.019	1548	1771	1.526	0.039	0.457	0.535
Never married (in union)	0.420	0.010	1548	1771	0.815	0.024	0.399	0.440
Currently married (in union)	0.548	0.010	1548	1771	0.778	0.018	0.528	0.567
Had first sexual intercourse before age 18	0.543	0.018	882	1013	1.080	0.033	0.507	0.580
Want no more children	0.256	0.018	825	970	1.161	0.069	0.221	0.292
Want to delay birth at least 2 years	0.486	0.016	825	970	0.898	0.032	0.455	0.518
Ideal number of children	5.627	0.107	1545	1769	1.432	0.019	5.414	5.841
Had 2+ sexual partners in past 12 months	0.250	0.013	1548	1771	1.214	0.053	0.223	0.277
Abstinence among never married youth (never had sex)	0.385	0.027	588	667	1.344	0.070	0.331	0.439
Sexually active in past 12 months among never married youth	0.462	0.028	588	667	1.364	0.061	0.406	0.518
Had paid sex in past 12 months	0.040	0.007	1548	1771	1.326	0.165	0.027	0.053
Had HIV test and received results in past 12 months	0.435	0.015	1548	1771	1.195	0.035	0.405	0.465
Accepting attitudes towards people with HIV	0.216	0.013	1546	1768	1.257	0.061	0.190	0.242
HIV positive (15-49)	0.110	0.010	1402	1713	1.175	0.090	0.090	0.129
HIV positive (15-59)	0.115	0.010	1517	1849	1.192	0.085	0.095	0.134
WOMEN and MEN								
HIV positive (15-49)	0.128	0.010	3028	3513	1.600	0.076	0.109	0.148

Table B.14 Sampling errors: Western sample, Zambia DHS 2014

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.217	0.020	1370	980	1.794	0.092	0.177	0.257
Literacy	0.658	0.026	1370	980	2.055	0.040	0.605	0.711
No education	0.150	0.024	1370	980	2.516	0.162	0.101	0.199
Secondary or higher education	0.324	0.024	1370	980	1.911	0.075	0.275	0.372
Never married (never in union)	0.333	0.015	1370	980	1.185	0.045	0.303	0.363
Currently married (in union)	0.521	0.018	1370	980	1.344	0.035	0.485	0.557
Married before age 20	0.460	0.021	834	615	1.216	0.046	0.418	0.502
Had first sexual intercourse before age 18	0.754	0.018	834	615	1.223	0.024	0.717	0.790
Currently pregnant	0.081	0.010	1370	980	1.379	0.126	0.060	0.101
Children ever born	3.056	0.078	1370	980	1.121	0.026	2.899	3.213
Children surviving	2.717	0.063	1370	980	1.017	0.023	2.592	2.842
Children ever born to women age 40-49	5.998	0.208	215	163	1.109	0.035	5.583	6.413
Currently using any method	0.331	0.034	661	511	1.861	0.103	0.263	0.400
Currently using a modern method	0.317	0.034	661	511	1.859	0.106	0.250	0.385
Currently using a traditional method	0.014	0.006	661	511	1.247	0.410	0.002	0.025
Currently using pill	0.093	0.016	661	511	1.424	0.173	0.061	0.126
Currently using IUD	0.002	0.001	661	511	0.843	0.751	0.000	0.005
Currently using condoms	0.031	0.007	661	511	1.038	0.225	0.017	0.045
Currently using injectables	0.160	0.025	661	511	1.760	0.157	0.109	0.210
Currently using female sterilization	0.009	0.004	661	511	1.102	0.461	0.001	0.016
Currently using rhythm	0.001	0.001	661	511	0.653	1.002	0.000	0.002
Currently using withdrawal	0.010	0.004	661	511	1.132	0.447	0.001	0.018
Used public sector source	0.841	0.027	404	270	1.491	0.032	0.786	0.895
Want no more children	0.320	0.027	661	511	1.484	0.084	0.266	0.374
Want to delay birth at least 2 years	0.385	0.027	661	511	1.434	0.071	0.331	0.439
Ideal number of children	4.885	0.089	1312	921	1.602	0.018	4.706	5.064
Mothers received antenatal care for last birth	0.900	0.020	801	616	1.904	0.022	0.861	0.940
Mothers protected against tetanus for last birth	0.844	0.015	801	616	1.186	0.018	0.814	0.874
Births with skilled attendant at delivery	0.572	0.031	1086	859	1.833	0.054	0.510	0.634
Had diarrhea in the last 2 weeks	0.138	0.014	1039	821	1.311	0.102	0.110	0.166
Treated with ORS	0.658	0.048	152	113	1.179	0.073	0.562	0.755
Sought medical treatment for diarrhea	0.668	0.052	152	113	1.274	0.078	0.564	0.773
Vaccination card seen	0.802	0.030	211	178	1.167	0.037	0.742	0.862
Received BCG vaccination	0.935	0.024	211	178	1.506	0.026	0.887	0.983
Received DPT vaccination (3 doses)	0.812	0.040	211	178	1.576	0.049	0.732	0.891
Received polio vaccination (3 doses)	0.730	0.042	211	178	1.485	0.058	0.645	0.815
Received measles vaccination	0.761	0.039	211	178	1.417	0.051	0.683	0.839
Received all vaccinations	0.635	0.049	211	178	1.565	0.077	0.537	0.732
Height-for-age (-2SD)	0.362	0.019	1001	777	1.286	0.052	0.324	0.400
Weight-for-height (-2SD)	0.065	0.007	1001	777	0.981	0.114	0.051	0.080
Weight-for-age (-2SD)	0.162	0.016	1001	777	1.395	0.099	0.130	0.194
Body Mass Index (BMI) < 18.5	0.199	0.019	1218	868	1.627	0.094	0.161	0.236
Has heard about HIV/AIDS	0.996	0.002	1370	980	1.325	0.002	0.991	1.000
Knows about condoms	0.856	0.017	1370	980	1.801	0.020	0.822	0.890
Knows about limiting partners	0.920	0.013	1370	980	1.756	0.014	0.894	0.946
Had 2+ sexual partners in past 12 months	0.012	0.003	1370	980	1.073	0.265	0.006	0.018
Abstinence among never married youth (never had sex)	0.185	0.023	393	252	1.173	0.124	0.139	0.231
Sexually active in past 12 months among never married youth	0.642	0.028	393	252	1.147	0.043	0.586	0.698
Had HIV test and received results in past 12 months	0.544	0.025	1370	980	1.881	0.047	0.494	0.595
Accepting attitudes towards people with HIV	0.100	0.012	1364	976	1.507	0.122	0.076	0.125
Ever experienced any physical violence since age 15	0.386	0.018	998	689	1.199	0.048	0.350	0.423
Ever experienced any sexual violence	0.223	0.017	998	689	1.305	0.077	0.189	0.257
Ever experienced any physical or sexual violence by husband/partner	0.476	0.029	701	460	1.513	0.060	0.419	0.533
Ever experienced any physical or sexual violence in the last 12 months	0.271	0.021	701	460	1.225	0.076	0.229	0.312
Total fertility rate (3 years)	5.597	0.224	3817	2733	1.234	0.040	5.149	6.045
Neonatal mortality rate (last 0-9 years)	31.658	7.173	2122	1682	1.399	0.227	17.313	46.004
Post-neonatal mortality rate (last 0-9 years)	12.231	2.507	2124	1682	1.090	0.205	7.217	17.245
Infant mortality rate (last 0-9 years)	43.889	8.494	2124	1683	1.507	0.194	26.902	60.876
Child mortality rate (last 0-9 years)	30.108	5.522	2056	1631	1.294	0.183	19.064	41.153
Under-five mortality rate (last 0-9 years)	72.676	11.776	2135	1694	1.674	0.162	49.123	96.229
HIV positive	0.175	0.015	1287	876	1.440	0.087	0.144	0.205

Continued...

Table B.14—Continued

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
MEN								
Urban residence	0.218	0.023	926	668	1.722	0.107	0.171	0.265
Literacy	0.796	0.024	926	668	1.810	0.030	0.748	0.844
No education	0.074	0.018	926	668	2.115	0.246	0.038	0.111
Secondary or higher education	0.427	0.028	926	668	1.693	0.065	0.372	0.482
Never married (in union)	0.396	0.018	926	668	1.129	0.046	0.360	0.433
Currently married (in union)	0.554	0.020	926	668	1.250	0.037	0.513	0.594
Had first sexual intercourse before age 18	0.674	0.022	564	431	1.137	0.033	0.629	0.719
Want no more children	0.233	0.016	457	370	0.832	0.071	0.200	0.266
Want to delay birth at least 2 years	0.446	0.027	457	370	1.142	0.060	0.392	0.499
Ideal number of children	5.923	0.148	922	666	1.492	0.025	5.627	6.220
Had 2+ sexual partners in past 12 months	0.268	0.018	926	668	1.243	0.068	0.232	0.304
Abstinence among never married youth (never had sex)	0.182	0.026	331	209	1.206	0.141	0.130	0.233
Sexually active in past 12 months among never married youth	0.739	0.029	331	209	1.190	0.039	0.682	0.797
Had paid sex in past 12 months	0.080	0.017	926	668	1.949	0.218	0.045	0.115
Had HIV test and received results in past 12 months	0.468	0.026	926	668	1.609	0.056	0.415	0.521
Accepting attitudes towards people with HIV	0.239	0.026	923	667	1.815	0.107	0.188	0.290
HIV positive (15-49)	0.125	0.014	835	639	1.182	0.109	0.098	0.152
HIV positive (15-59)	0.135	0.014	920	707	1.206	0.101	0.108	0.162
WOMEN and MEN								
HIV positive (15-49)	0.154	0.011	2122	1514	1.449	0.074	0.131	0.176

Table B.15 Sampling errors for adult and maternal mortality rates, Zambia 2013-2014

Variable	Value (R)	Standard Error (SE)	Number of cases		Design Effect (DEFT)	Relative Error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
15-19	2.44	0.32	37953	37435	1.27	0.13	1.79	3.08
20-24	3.97	0.38	41908	41815	1.20	0.10	3.20	4.73
25-29	5.90	0.49	40019	40132	1.25	0.08	4.91	6.89
30-34	10.77	0.73	33840	34265	1.24	0.07	9.32	12.22
35-39	13.65	0.96	24232	24651	1.24	0.07	11.73	15.58
40-44	15.70	1.24	15138	15162	1.20	0.08	13.21	18.18
45-49	17.15	1.77	8557	8586	1.18	0.10	13.60	20.70
Female adult mortality rate (last 0-6 years)	8.04	0.28	201646	202044	1.22	0.04	7.48	8.59
Female $_{35}Q_{15}$ (last 0-6 years)	294	10	201646	202044	1.499	0.033	275	314
Female $_{35}Q_{15}$ (last 0-6 years) (2007)	421	16	86282	87290	1.48	0.039	388	454
15-19	0.10	0.05	37953	37435	0.96	0.49	0.00	0.20
20-24	0.53	0.12	41908	41815	1.09	0.23	0.29	0.78
25-29	0.41	0.11	40019	40132	1.13	0.28	0.18	0.64
30-34	1.52	0.25	33840	34265	1.18	0.16	1.02	2.01
35-39	1.31	0.29	24232	24651	1.25	0.22	0.73	1.89
40-44	0.92	0.25	15138	15162	1.01	0.27	0.43	1.42
45-49	1.18	0.45	8557	8586	1.23	0.38	0.27	2.09
Maternal mortality rate (last 0-6 years)	0.74	0.07	201646	202044	1.16	0.10	0.59	0.88
Maternal mortality ratio (last 0-6 years)	398	38	201646	202044	1.16	0.10	323	474
Maternal mortality ratio (last 0-6 years) (2007)	591	71	86282	87290	1.19	0.12	450	732
15-19	2.79	0.34	37266	36812	1.18	0.12	2.12	3.46
20-24	3.63	0.40	41459	41254	1.29	0.11	2.84	4.42
25-29	4.94	0.44	39941	40401	1.22	0.09	4.06	5.82
30-34	11.71	0.80	33973	34501	1.33	0.07	10.12	13.30
35-39	14.08	1.07	24715	24827	1.34	0.08	11.95	16.22
40-44	21.06	1.60	14978	14964	1.30	0.08	17.86	24.25
45-49	21.61	1.96	8324	8407	1.20	0.09	17.68	25.54
Male adult mortality rate (last 0-6 years)	8.84	0.34	200657	201167	1.28	0.04	8.17	9.51
Male $_{35}Q_{15}$ (last 0-6 years)	330	11	200657	201167	1.603	0.033	308	351
Male $_{35}Q_{15}$ (last 0-6 years) (2007)	415	15	88972	90287	1.286	0.036	385	445





Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Zambia 2013-14

Age	Women		Men		Age	Women		Men	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
0	1,286	3.2	1,357	3.6	36	382	0.9	391	1.0
1	1,339	3.3	1,316	3.4	37	396	1.0	382	1.0
2	1,346	3.3	1,315	3.4	38	465	1.1	403	1.1
3	1,327	3.3	1,343	3.5	39	382	0.9	348	0.9
4	1,404	3.5	1,508	4.0	40	371	0.9	389	1.0
5	1,169	2.9	1,280	3.4	41	325	0.8	339	0.9
6	1,457	3.6	1,470	3.9	42	258	0.6	333	0.9
7	1,455	3.6	1,416	3.7	43	305	0.8	278	0.7
8	1,437	3.5	1,343	3.5	44	250	0.6	246	0.6
9	1,300	3.2	1,315	3.4	45	259	0.6	335	0.9
10	1,332	3.3	1,351	3.5	46	164	0.4	196	0.5
11	1,004	2.5	1,027	2.7	47	183	0.4	147	0.4
12	1,181	2.9	1,106	2.9	48	213	0.5	182	0.5
13	1,442	3.5	1,402	3.7	49	243	0.6	277	0.7
14	1,124	2.8	1,208	3.2	50	235	0.6	194	0.5
15	780	1.9	682	1.8	51	258	0.6	185	0.5
16	784	1.9	808	2.1	52	233	0.6	148	0.4
17	688	1.7	711	1.9	53	227	0.6	153	0.4
18	815	2.0	784	2.1	54	175	0.4	126	0.3
19	736	1.8	701	1.8	55	206	0.5	138	0.4
20	735	1.8	652	1.7	56	168	0.4	133	0.3
21	662	1.6	558	1.5	57	155	0.4	96	0.3
22	681	1.7	526	1.4	58	137	0.3	104	0.3
23	559	1.4	443	1.2	59	100	0.2	77	0.2
24	540	1.3	419	1.1	60	144	0.4	155	0.4
25	591	1.5	426	1.1	61	124	0.3	145	0.4
26	559	1.4	426	1.1	62	118	0.3	149	0.4
27	571	1.4	465	1.2	63	113	0.3	118	0.3
28	624	1.5	405	1.1	64	110	0.3	107	0.3
29	554	1.4	453	1.2	65	141	0.3	124	0.3
30	610	1.5	481	1.3	66	89	0.2	69	0.2
31	513	1.3	418	1.1	67	92	0.2	75	0.2
32	505	1.2	470	1.2	68	111	0.3	87	0.2
33	459	1.1	400	1.0	69	83	0.2	55	0.1
34	457	1.1	402	1.1	70+	901	2.2	728	1.9
35	481	1.2	376	1.0					
Total						40,628	100.0	38,175	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. The total includes two women and three men whose ages are missing.

**Table C.2.1 Age distribution of eligible and interviewed women**

De facto household population of women age 10-54, interviewed women age 15-49; and percent distribution and percentage of eligible women who were interviewed (weighted), by five-year age groups, Zambia 2013-14

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	6,083	na	na	na
15-19	3,803	3,649	22.2	96.0
20-24	3,178	3,040	18.5	95.7
25-29	2,900	2,808	17.1	96.8
30-34	2,544	2,467	15.0	97.0
35-39	2,105	2,021	12.3	96.0
40-44	1,510	1,447	8.8	95.8
45-49	1,061	1,017	6.2	95.9
50-54	1,128	na	na	na
15-49	17,101	16,451	100.0	96.2

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on responses to the Household Questionnaire.  
na = Not applicable

**Table C.2.2 Age distribution of eligible and interviewed men**

De facto household population of men age 10-64, interviewed men age 15-59 and percent of eligible men who were interviewed (weighted), by five-year age groups, Zambia 2013-14

Age group	Household population of men age 10-59	Interviewed men age 15-54		Percentage of eligible men interviewed
		Number	Percentage	
10-14	6,094	na	na	na
15-19	3,686	3,443	22.7	93.4
20-24	2,597	2,390	15.7	92.0
25-29	2,175	1,982	13.1	91.1
30-34	2,170	1,976	13.0	91.1
35-39	1,900	1,690	11.1	88.9
40-44	1,584	1,422	9.4	89.8
45-49	1,136	1,019	6.7	89.7
50-54	807	739	4.9	91.6
55-59	548	515	3.4	94.0
60-64	674	na	na	na
15-59	16,603	15,178	100.0	91.4

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of men and interviewed men are household weights. Age is based on responses to the Household Questionnaire.  
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Zambia 2013-14

Subject	Reference group	Percentage with information missing	Number of cases
<b>Birth date</b>	Births in the 15 years preceding the survey		
Month only		0.92	35,911
Month and year		0.04	35,911
<b>Age at death</b>	Deceased children born in the 15 years preceding the survey	0.04	3,105
<b>Age/date at first union<sup>1</sup></b>	Ever-married women age 15-49	0.26	11,839
	Ever married men age 15-59	0.13	8,774
<b>Respondent's education</b>	All women age 15-49	0.04	16,411
	All men age 15-59	0.06	14,773
<b>Diarrhoea in last 2 weeks</b>	Living children age 0-59 months	1.74	12,634
<b>Anthropometry for children</b>	Living children age 0-59 months from the Household Questionnaire		
Height		5.48	13,517
Weight		4.25	13,517
Height or weight		5.50	13,517
<b>Anthropometry for women</b>	Women age 15-49 from the Household Questionnaire		
Height		4.61	17,101
Weight		4.16	17,101
Height or weight		4.62	17,101

<sup>1</sup> Both year and age are missing.

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living (L), dead (D), and total (T) children (weighted), Zambia 2013-14

Calendar year	Number of births			Percentage with complete birth date <sup>1</sup>			Sex ratio at birth <sup>2</sup>			Calendar year ratio <sup>3</sup>		
	L	D	T	L	D	T	L	D	T	L	D	T
2014	113	2	115	100.0	100.0	100.0	90.6	0.0	94.1	na	na	na
2013	2,284	78	2,361	100.0	100.0	100.0	106.5	121.2	107.0	na	na	na
2012	2,582	115	2,697	100.0	100.0	100.0	100.7	108.0	101.0	107.8	101.2	107.5
2011	2,506	149	2,655	100.0	100.0	100.0	100.5	108.8	100.9	99.5	93.4	99.1
2010	2,457	205	2,661	100.0	100.0	100.0	96.7	119.6	98.3	95.2	117.8	96.6
2009	2,654	198	2,852	100.0	98.5	99.9	108.2	164.2	111.3	111.8	99.3	110.8
2008	2,291	195	2,486	100.0	100.0	100.0	106.4	108.9	106.6	87.5	80.9	87.0
2007	2,582	283	2,865	99.0	95.1	98.6	102.9	129.5	105.2	111.7	140.4	114.0
2006	2,333	209	2,542	98.7	97.5	98.6	89.1	125.3	91.6	98.1	83.2	96.7
2005	2,175	218	2,393	98.6	91.1	97.9	98.2	135.2	101.1	96.9	107.9	97.8
2010-2014	9,941	548	10,489	100.0	100.0	100.0	100.8	115.1	101.5	na	na	na
2005-2009	12,035	1,103	13,138	99.3	96.2	99.0	101.0	131.2	103.2	na	na	na
2000-2004	9,308	1,206	10,515	98.7	94.9	98.2	98.5	113.8	100.1	na	na	na
1995-1999	6,186	1,165	7,350	98.8	93.6	97.9	99.9	101.4	100.2	na	na	na
<1995	6,170	1,495	7,665	98.4	95.7	97.9	99.8	102.2	100.3	na	na	na
All	43,641	5,517	49,158	99.1	95.6	98.7	100.1	111.1	101.3	na	na	na

na = Not applicable

<sup>1</sup> Both year and month of birth given<sup>2</sup>  $(B_m/B_f) \times 100$ , where  $B_m$  and  $B_f$  are the numbers of male and female births, respectively<sup>3</sup>  $[2B_x / (B_{x-1} + B_{x+1})] \times 100$ , where  $B_x$  is the number of births in calendar year  $x$

**Table C.5 Reporting of age at death in days**

Distribution of reported deaths under age 1 month by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Zambia 2013-14

Age at death (days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	105	109	94	87	395
1	58	48	42	40	189
2	39	30	26	17	112
3	18	29	11	14	73
4	11	12	7	11	42
5	11	7	13	4	35
6	5	7	8	5	24
7	24	42	37	35	138
8	3	6	1	1	11
9	4	1	0	2	7
10	0	2	3	0	5
12	0	4	0	0	4
13	0	0	1	1	2
14	26	28	27	24	105
15	1	0	0	2	3
17	1	0	1	1	3
18	0	0	1	0	1
19	0	0	0	1	1
20	0	0	1	0	1
21	14	7	5	15	42
28	0	0	0	2	2
29	0	1	0	0	1
30	0	0	6	1	7
Missing	0	1	0	0	1
Total 0-30	321	334	284	264	1,202
Percentage early neonatal <sup>1</sup>	76.8	73.0	70.8	67.9	72.4

<sup>1</sup> 0-6 days / 0-30 days

**Table C.6 Reporting of age at death in months**

Distribution of reported deaths under age 2 by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods of birth preceding the survey, Zambia 2013-14

Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1 <sup>a</sup>	321	335	284	264	1,203
1	22	28	52	47	149
2	22	33	32	23	111
3	29	38	43	52	161
4	26	25	45	24	120
5	9	33	31	19	92
6	26	33	55	25	140
7	19	20	33	40	112
8	18	39	43	29	128
9	36	29	50	28	144
10	17	11	24	14	66
11	18	13	31	23	85
12	45	51	50	57	204
13	8	7	10	9	34
14	14	15	23	19	71
15	4	12	9	14	40
16	2	9	12	9	32
17	4	12	9	10	35
18	4	15	17	21	58
19	0	5	6	11	22
20	7	6	15	15	43
21	9	5	7	1	22
22	0	3	3	3	9
23	2	6	10	2	20
1 Year	21	37	26	21	106
Total 0-11	563	638	723	588	2,512
Percentage neonatal <sup>1</sup>	57.0	52.5	39.2	44.8	47.9

<sup>a</sup> Includes deaths under 1 month reported in days

<sup>1</sup> Under 1 month / under 1 year

Table C.7 Nutritional status of children based on the NCHS/CDC/WHO International Reference Population

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, based on the NCHS/CDC/WHO International Reference Population, Zambia 2013-14

Background characteristic	Height-for-age <sup>1</sup>			Weight-for-height				Weight-for-age				Number of children
	Percent-age below -3 SD	Percent-age below -2 SD <sup>2</sup>	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD <sup>2</sup>	Percent-age above +2 SD	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD <sup>2</sup>	Percent-age above +2 SD	Mean Z-score (SD)	
<b>Age in months</b>												
<6	1.5	7.6	(0.3)	0.7	3.2	15.1	0.5	0.3	1.1	6.9	0.3	1,031
6-8	5.0	18.6	(0.9)	1.1	5.6	10.1	0.1	1.7	8.0	1.6	(0.6)	574
9-11	11.1	34.0	(1.4)	0.8	8.0	8.0	(0.1)	6.3	25.8	1.5	(1.2)	595
12-17	14.3	39.9	(1.5)	1.4	8.9	4.6	(0.4)	3.6	24.8	1.1	(1.3)	1,289
18-23	20.4	51.1	(1.9)	1.6	7.6	2.8	(0.4)	4.9	26.8	0.9	(1.3)	1,200
24-35	15.3	39.4	(1.6)	1.2	5.3	1.6	(0.4)	4.3	24.8	0.8	(1.3)	2,478
36-47	13.1	35.0	(1.5)	1.0	4.4	1.4	(0.3)	2.5	19.0	0.6	(1.2)	2,503
48-59	11.3	31.9	(1.6)	0.8	3.7	2.1	(0.3)	2.3	17.6	0.5	(1.2)	2,665
<b>Sex</b>												
Male	13.1	35.5	(1.5)	1.1	5.3	3.8	(0.3)	3.4	19.9	1.1	(1.1)	6,213
Female	12.0	32.9	(1.4)	1.0	5.4	4.1	(0.2)	2.8	19.1	1.5	(1.0)	6,123
<b>Birth interval in months<sup>3</sup></b>												
First birth <sup>4</sup>	11.5	34.8	(1.4)	0.8	5.1	4.1	(0.2)	3.0	18.6	1.2	(1.0)	2,265
<24	17.4	40.6	(1.7)	0.6	4.4	3.3	(0.2)	4.4	24.2	0.8	(1.2)	1,361
24-47	12.4	34.4	(1.4)	1.0	5.1	3.9	(0.2)	3.0	19.7	1.5	(1.1)	5,485
48+	10.1	28.3	(1.1)	1.5	6.9	5.0	(0.2)	2.3	16.8	1.5	(0.9)	2,170
<b>Size at birth<sup>5</sup></b>												
Very small	25.7	52.2	(2.0)	1.2	7.9	2.5	(0.5)	10.0	41.2	2.4	(1.7)	182
Small	17.2	45.5	(1.7)	1.1	7.0	3.8	(0.5)	6.4	31.1	0.5	(1.4)	980
Average or larger	11.5	32.5	(1.4)	1.0	5.1	4.1	(0.2)	2.6	17.9	1.4	(1.0)	9,944
Missing	19.1	38.6	(1.5)	0.9	5.7	4.7	(0.3)	3.9	21.1	1.3	(1.2)	171
<b>Mother's interview status</b>												
Interviewed	12.4	34.1	(1.4)	1.0	5.4	4.1	(0.2)	3.0	19.5	1.3	(1.0)	11,281
Not interviewed but in household	13.0	35.0	(2.3)	1.0	4.7	1.6	(1.0)	2.5	20.7	1.7	(1.9)	288
Not interviewed and not in household <sup>5</sup>	15.2	36.0	(1.7)	1.6	5.4	2.3	(0.5)	4.6	20.0	1.1	(1.3)	767
<b>Mother's nutritional status<sup>6</sup></b>												
Thin (BMI<18.5)	16.4	43.7	(1.8)	1.0	6.2	2.3	(0.5)	6.3	32.7	0.1	(1.5)	909
Normal (BMI 18.5-24.9)	12.9	35.2	(1.5)	1.1	5.5	4.1	(0.2)	2.9	19.6	1.2	(1.1)	6,881
Overweight/obese (BMI ≥ 25)	8.5	25.7	(1.1)	0.6	4.7	5.6	(0.0)	1.6	12.3	2.3	(0.7)	2,052
<b>Residence</b>												
Urban	11.4	30.6	(1.3)	1.2	5.5	4.5	(0.2)	2.8	17.0	1.9	(1.0)	4,160
Rural	13.2	36.0	(1.5)	1.0	5.2	3.6	(0.2)	3.3	20.8	1.1	(1.1)	8,176
<b>Province</b>												
Central	14.0	37.4	(1.6)	0.6	4.0	4.4	(0.2)	2.5	20.0	1.6	(1.1)	1,155
Copperbelt	10.5	31.7	(1.4)	1.2	5.0	3.4	(0.3)	3.2	17.6	1.6	(1.1)	1,571
Eastern	12.2	37.6	(1.5)	0.7	4.0	3.9	(0.1)	2.5	17.8	0.8	(1.0)	1,581
Luapula	18.6	37.3	(1.4)	2.8	11.7	3.2	(0.5)	6.1	25.4	1.1	(1.3)	1,074
Lusaka	11.2	29.5	(1.2)	1.1	6.5	5.6	(0.2)	2.2	15.0	2.2	(0.9)	1,812
Muchinga	12.5	35.2	(1.6)	0.6	3.6	3.8	(0.2)	3.8	21.5	0.8	(1.2)	766
Northern	17.4	43.9	(1.8)	0.6	3.8	4.0	(0.2)	4.2	23.9	1.1	(1.2)	1,202
North Western	10.8	31.0	(1.3)	1.9	7.5	4.6	(0.3)	2.0	18.9	1.4	(1.0)	626
Southern	10.1	29.8	(1.4)	0.6	3.4	3.4	(0.2)	2.4	18.3	1.3	(1.1)	1,774
Western	9.9	31.2	(1.4)	1.0	5.9	2.0	(0.4)	3.4	23.5	0.7	(1.2)	775
<b>Mother's education<sup>7</sup></b>												
No education	16.6	39.7	(1.6)	1.1	5.9	3.3	(0.3)	4.9	25.0	0.7	(1.2)	1,304
Primary	13.5	35.9	(1.5)	1.0	5.2	3.8	(0.2)	3.1	20.6	1.2	(1.1)	6,508
Secondary	9.4	30.7	(1.3)	0.9	5.4	4.3	(0.2)	2.3	16.6	1.6	(1.0)	3,337
More than secondary	5.5	14.2	(0.7)	1.4	4.8	7.3	(0.1)	0.9	8.3	4.2	(0.5)	411
<b>Wealth quintile</b>												
Lowest	16.7	40.9	(1.7)	1.2	6.1	3.4	(0.3)	4.6	25.5	0.6	(1.3)	2,954
Second	12.6	35.6	(1.5)	1.1	5.5	3.3	(0.3)	3.2	21.0	1.3	(1.1)	2,811
Middle	12.0	34.5	(1.5)	0.9	4.1	4.1	(0.2)	2.7	18.4	1.2	(1.1)	2,581
Fourth	11.3	32.0	(1.3)	1.4	5.8	4.2	(0.2)	2.9	16.8	1.7	(1.0)	2,152
Highest	8.2	23.5	(1.1)	0.8	5.1	5.1	(0.2)	1.6	12.5	2.1	(0.8)	1,837
Total	12.6	34.2	(1.4)	1.1	5.3	3.9	(0.2)	3.1	19.5	1.3	(1.1)	12,336

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO International Reference Population. Table is based on children with valid dates of birth (month and year) and valid measurements of both height and weight. Total includes 10 children missing information on mother's education.

<sup>1</sup> Recumbent length is measured for children under age 2, or in the few cases when the age of the child is unknown and the child is less than 85cm; standing height is measured for all other children to be consistent with Table 11.1.1.

<sup>2</sup> Includes children who are below -3 standard deviations (SD) from the International Reference Population median

<sup>3</sup> Excludes children whose mothers were not interviewed

<sup>4</sup> First born twins (triplets, etc.) count as first births because they do not have a previous birth interval

<sup>5</sup> Includes children whose mothers are deceased

<sup>6</sup> Excludes children whose mothers were not interviewed, children whose mothers were not weighed and measured, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (body mass index) is presented in Table 11.10.1.

<sup>7</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Children whose mothers are not listed in the Household Questionnaire are excluded.

**Table C.8 Completeness of information on siblings**

Completeness of data on survival status of sisters and brothers reported by interviewed women, age of living siblings and age at death (AD) and years since death (YSD) of dead siblings (unweighted), Zambia 2013-14

	Sisters		Brothers		All siblings	
	Number	Percent	Number	Percent	Number	Percent
<b>All siblings</b>	47,180	100.0	46,621	100.0	93,801	100.0
Living	39,088	82.8	38,586	82.8	77,674	82.8
Dead	8,070	17.1	8,012	17.2	16,082	17.1
Survival status unknown	22	0.0	23	0.0	45	0.0
<b>Living siblings</b>	39,088	100.0	38,586	100.0	77,674	100.0
Age reported	38,989	99.7	38,487	99.7	77,476	99.7
Age missing	99	0.3	99	0.3	198	0.3
<b>Dead siblings</b>	8,070	100.0	8,012	100.0	16,082	100.0
AD and YSD reported	7,976	98.8	7,879	98.3	15,855	98.6
Missing only AD	60	0.7	97	1.2	157	1.0
Missing only YSD	13	0.2	18	0.2	31	0.2
Missing AD and YSD	21	0.3	18	0.2	39	0.2

**Table C.9 Sibship size and sex ratio of siblings**

Mean sibship size and sex ratio of siblings at birth, Zambia 2013-14

Age of respondents	Mean sibship size <sup>1</sup>	Sex ratio of siblings at birth <sup>2</sup>
15-19	6.1	100.8
20-24	6.4	98.9
25-29	6.6	98.9
30-34	6.9	98.8
35-39	7.2	98.9
40-44	7.5	96.6
45-49	7.3	96.5
Total	6.7	98.8

<sup>1</sup> Includes the respondent

<sup>2</sup> Excludes the respondent

# PARTICIPANTS IN THE 2013-14 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY

---

## Appendix **D**

### PROJECT MANAGEMENT TEAM

#### Senior Project Management

John Kalumbi (CSO)  
Christopher Simoonga (MoH)  
Iven Sikanyiti (CSO)  
Sheila S. Mudenda (CSO)

#### Survey Coordinators

Sheila S. Mudenda (CSO)  
Chipalo Kaliki (MoH)

#### Assistant Survey Coordinators

Dorothy S. Kaemba  
Chola N. Daka  
Josephine Chewe

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Dorothy S. Kaemba  
Chola N. Daka  
Josephine Chewe  
Palver Sikanyiti  
Chibesa Musamba  
Nchimunya Nkombo  
Mannix Chalwe  
Sikufele Mubita  
Harriet N. Zimbizi  
Etambuyu Lukonga

#### *University of Zambia Department of Population Studies*

Record J.S. Malungo  
Gloria I. Songolo  
Vesper Chisumpa

#### *Ministry of Health*

Chipalo Kaliki  
Trust Mfunne  
Mildred Tolosi  
Friday Nsalamo

#### *Tropical Diseases Research Centre*

Webster Kasongo  
Evans Betha  
Ngula Kabelenga  
Dennis Ngóna  
Allan Chonde  
Victor Daka

***University of Zambia Teaching Hospital - Virology Laboratory***

Gina Mulundu  
Mekess Kabwe  
Cynthia Mubanga  
Paul Simusiku  
Goodness Ngwele

**SAMPLING SPECIALISTS**

Godwin Sichone  
Batista C. Mwale

**FIELD TEAMS**

**Central Province A**

Moses Mwila	Supervisor
Christine Dindi	Editor
Jane Phiri	Female Interviewer
Twambo H. Musanu	Female Interviewer
Mirriam M. Mwanza	Female Interviewer
Dikson Syakanomba	Male Interviewer
David Siwo	Male Interviewer
Mary Muyembe	HIV Counsellor
Athience Matongo	HIV Counsellor
Cynthia Kafumukache	Laboratory Technician

**Central Province B**

Sikundu Mwanalushi	Supervisor
Suzan Siavwapa	Editor
Elizabeth Mwale	Female Interviewer
Chileshe Chisupa	Female Interviewer
Nowanga Mabuku	Female Interviewer
Borniface Chulu	Male Interviewer
Chris Salanda Zulu	Male Interviewer
Felistus Moonga	HIV Counsellor
Brighton Sekeli	HIV Counsellor
Tiyezye Gondwe	Laboratory Technician

**Copperbelt Province A**

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Christine Mupeta	Female Interviewer
Clara Chalembwa	Female Interviewer
Roydah Mulenga Katuta	Female Interviewer
Julius Kawasha	Male Interviewer
Isaiah Mulenga	Male Interviewer
Joan Manda	HIV Counsellor
Ronald Mubita	HIV Counsellor
Lawrence Mulaisho	Laboratory Technician



### **Copperbelt Province B**

Henry Lukole	Supervisor
Anne Sikalenje	Editor
Mildred Kapelembe	Female Interviewer
Esther Kunda Mubemba	Female Interviewer
Elina Bwalya	Female Interviewer
Alfred Chama	Male Interviewer
Johnson Mulenga	Male Interviewer
Webster Chibesa	HIV Counsellor
Nzobela Kayumba	HIV Counsellor
Kabila C. Mulongoti	Laboratory Technician

### **Copperbelt Province C**

Thomas Shamambo	Supervisor
Chola Chitafu	Editor
Grace Kapandila	Female Interviewer
Tasila Mushanga	Female Interviewer
Nora M. Musefwe	Female Interviewer
Shadreck Sinyangwe	Male Interviewer
Bornaventure Chishimba	Male Interviewer
Mwase Zimba	HIV Counsellor
Charity Nkumbwa	HIV Counsellor
Matildah M. Milambo	Laboratory Technician

### **Copperbelt Province D**

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Christine Mwape	Female Interviewer
Deborah Nayame	Female Interviewer
Arkwright Milupi	Male Interviewer
Arnold Sikanyiti	Male Interviewer
Deborah Mwewa	HIV Counsellor
Lloyd Yeyenga	HIV Counsellor
Peggy Muloweni	Laboratory Technician

### **Eastern Province A**

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Mutale Chulu	Female Interviewer
Onester Zulu	Female Interviewer
Alice Chinyonga	Female Interviewer
Moses Banda	Male Interviewer
Noah Mbewe	Male Interviewer
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Patricia Mwale Phiri	HIV Counsellor
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**Eastern Province B**

Steven Daka	Supervisor
Prosperina Mwanza	Editor
Salome M. Mtonga	Female Interviewer
Temwa Chirwa	Female Interviewer
Matilda Mvula	Female Interviewer
Harry Kanchea	Male Interviewer
James Mulilo	Male Interviewer
Zunga Simbwalanga	HIV Counsellor
Misozi Ziba	HIV Counsellor
Ackson Mkandawire	Laboratory Technician

**Luapula Province A**

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Janet Mabuka	Female Interviewer
Malango Goma	Female Interviewer
Richard Chileshe	Male Interviewer
Anthony Kakwama	Male Interviewer
James Ngosa	HIV Counsellor
Maureen Changala	HIV Counsellor
William Mubanga	Laboratory Technician

**Luapula Province B**

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Nema Mwangonda	Female Interviewer
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**Lusaka Province A**

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Violet Mwanza	Female Interviewer
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John Mulewa	Male Interviewer
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### **Southern Province B**

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Natalie La Roche	Report Production Specialist









2013 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY  
HOUSEHOLD QUESTIONNAIRE  
WITH HIV/AIDS

MINISTRY OF HEALTH/CENTRAL STATISTICAL OFFICE

IDENTIFICATION																			
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NAME OF HOUSEHOLD HEAD _____																			
CLUSTER NUMBER .....																			
HOUSEHOLD NUMBER .....																			
PROVINCE .....																			
RURAL/URBAN (RURAL = 1, URBAN = 2) .....																			
LUSAKA = 1/ OTHER CITY = 2/TOWN = 3/VILLAGE = 4 .....																			

INTERVIEWER VISITS																				
	1	2	3	FINAL VISIT																
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TIME	_____	_____																		
*RESULT CODES: 1 COMPLETED 2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT 3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME 4 POSTPONED 5 REFUSED 6 DWELLING VACANT OR ADDRESS NOT A DWELLING 7 DWELLING DESTROYED 8 DWELLING NOT FOUND 9 OTHER _____ (SPECIFY)				TOTAL PERSONS IN HOUSEHOLD <table border="1"><tr><td></td><td></td></tr></table>  TOTAL ELIGIBLE WOMEN <table border="1"><tr><td></td><td></td></tr></table>  TOTAL ELIGIBLE MEN <table border="1"><tr><td></td><td></td></tr></table>  LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE <table border="1"><tr><td></td><td></td></tr></table>																
**LANGUAGE OF QUESTIONNAIRE: <table border="1"><tr><td>0</td><td>1</td></tr></table> LANGUAGE OF INTERVIEW: <table border="1"><tr><td></td><td></td></tr></table> NATIVE LANGUAGE OF RESPONDENT <table border="1"><tr><td></td><td></td></tr></table>				0	1					TRANSLATOR USED (YES = 1, NO = 2) <table border="1"><tr><td></td><td></td></tr></table>										
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**LANGUAGE CODES: 01 ENGLISH 03 KAONDE 05 LUNDA 07 NYANJA 09 OTHER 02 BEMBA 04 LOZI 06 LUVALE 08 TONGA																				
SUPERVISOR NAME _____ DATE _____ <table border="1"><tr><td></td><td></td><td></td></tr></table>					FIELD EDITOR NAME _____ DATE _____ <table border="1"><tr><td></td><td></td><td></td></tr></table>					OFFICE EDITOR <table border="1"><tr><td></td><td></td></tr></table>										
				KEYED BY <table border="1"><tr><td></td><td></td></tr></table>																

## Introduction and Consent

Hello. My name is \_\_\_\_\_. I am working with the Ministry of Health in collaboration with Central Statistical Office (CSO). We are conducting a survey about health all over Zambia. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 20 to 30 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on this card.

### GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?  
May I begin the interview now?

Signature of interviewer: \_\_\_\_\_ Date: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED . . . . . 1  
↓  
RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . . . 2 → END

# HOUSEHOLD SCHEDULE

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	IF AGE 15 OR OLDER	ELIGIBILITY		
							MARITAL STATUS			
	<p>Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.</p> <p>AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE.</p> <p>THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.</p>	<p>What is the relationship of (NAME) to the head of the household?</p> <p>SEE CODES BELOW.</p>	<p>Is (NAME) male or female?</p>	<p>Does (NAME) usually live here?</p>	<p>Did (NAME) stay here last night?</p>	<p>How old is (NAME)?</p> <p>IF 95 OR MORE RECORD 95</p>	<p>What is (NAME'S) current marital status?</p> <p>1 = MARRIED/ COHABITING/ LIVING TOGETHER 2 = DIVORCED 3 = SEPARATED 4 = WIDOWED 5 = NEVER-MARRIED</p>	<p>CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49</p>	<p>CIRCLE LINE NUMBER OF ALL MEN AGE 15-59</p>	<p>CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5</p>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
01		<input type="text"/>	M F 1 2	Y N 1 2	Y N 1 2	IN YEARS <input type="text"/>	<input type="text"/>	01	01	01
02		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	02	02	02
03		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	03	03	03
04		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	04	04	04
05		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	05	05	05
06		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	06	06	06
07		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	07	07	07
08		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	08	08	08
09		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	09	09	09
10		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	10	10	10

## CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

(2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed?

YES ☐ → ADD TO TABLE NO ☐

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?

YES ☐ → ADD TO TABLE NO ☐

2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed?

YES ☐ → ADD TO TABLE NO ☐

01 = HEAD  
02 = WIFE OR HUSBAND  
03 = CO-WIFE  
04 = SON OR DAUGHTER  
05 = SON-IN-LAW OR DAUGHTER-IN-LAW  
06 = GRANDCHILD  
07 = PARENT

08 = PARENT-IN-LAW  
09 = BROTHER OR SISTER  
10 = NIECE/NEPHEW BY BLOOD  
11 = NIECE/NEPHEW BY MARRIAGE  
12 = OTHER RELATIVE  
13 = ADOPTED/FOSTER/STEPCHILD  
14 = NOT RELATED  
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS		IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGISTRATION
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night?  IF YES: What is her name? RECORD MOTHER'S LINE NUMBER.  IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night?  IF YES: What is his name? RECORD FATHER'S LINE NUMBER.  IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended?  SEE CODES BELOW.  What is the highest grade (NAME) completed at that level?  SEE CODES BELOW.	Did (NAME) attend school at any time during the 2013 school year?	During this/that school year, what level and grade [is/was] (NAME) attending?  SEE CODES BELOW.	Does (NAME) have a birth certificate?  IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority?  1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
01	Y N DK 1 2 8 ↓ GO TO 14	<input type="text"/>	Y N DK 1 2 8 ↓ GO TO 16	<input type="text"/>	Y N 1 2 ↓ NEXT LINE	LEVEL GRADE <input type="text"/> <input type="text"/>	Y N 1 2 ↓ NEXT LINE	LEVEL GRADE <input type="text"/> <input type="text"/>	<input type="text"/>
02	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
03	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
04	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
05	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
06	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
07	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
08	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
09	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
10	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>

#### CODES FOR Qs. 17 AND 19: EDUCATION

##### LEVEL

0 = NURSERY/

KINDERGATERN

1 = PRIMARY

2 = SECONDARY

3 = HIGHER

8 = DON'T KNOW

##### GRADE

00 = LESS THAN 1 YEAR COMPLETED

(USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19)

98 = DON'T KNOW

						IF AGE 15 OR OLDER				
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE	AGE	MARITAL STATUS	ELIGIBILITY			
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.  AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE.  THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household?  SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)?  IF 95 OR MORE RECORD 95'	What is (NAME'S) current marital status?  1 = MARRIED/ COHABITING/ LIVING TOGETHER 2 = DIVORCED 3 = SEPARATED 4 = WIDOWED 5 = NEVER-MARRIED  PUT AN * FOR THE LINE NUMBER OF THE WOMAN SELECTED FOR DOMESTIC VIOLENCE	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49  CIRCLE LINE NUMBER OF ALL MEN AGE 15-59  CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
11		<input type="text"/>	M F 1 2	Y N 1 2	Y N 1 2	IN YEARS <input type="text"/>	<input type="text"/>	11	11	11
12		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	12	12	12
13		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	13	13	13
14		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	14	14	14
15		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	15	15	15
16		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	16	16	16
17		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	17	17	17
18		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	18	18	18
19		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	19	19	19
20		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	20	20	20

TICK HERE IF CONTINUATION SHEET USED ☐

**CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD**

(2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed?

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- 08 = PARENT-IN-LAW  
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	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS		IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGISTRATION
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	12	13	14	15	(16)	(17)	(18)	(19)	(20)
11	Y N DK 1 2 8 ↓ GO TO 14	<input type="text"/>	Y N DK 1 2 8 ↓ GO TO 16	<input type="text"/>	Y N 1 2 ↓ NEXT LINE	LEVEL GRADE <input type="text"/> <input type="text"/>	Y N 1 2 ↓ NEXT LINE	LEVEL GRADE <input type="text"/> <input type="text"/>	<input type="text"/>
12	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
13	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
14	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
15	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
16	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
17	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
18	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
19	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>
20	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/> <input type="text"/>	<input type="text"/>

#### CODES FOR Qs. 17 AND 19: EDUCATION

**LEVEL**  
0 = NURSERY/  
KINDERGARTEN  
1 = PRIMARY  
2 = SECONDARY  
3 = HIGHER  
8 = DON'T KNOW

**GRADE**  
00 = LESS THAN 1 YEAR COMPLETED  
(USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19)  
98 = DON'T KNOW



Q21.

## TABLE FOR SELECTION OF WOMEN FOR THE DOMESTIC VIOLENCE QUESTIONS

LOOK AT THE LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN (COLUMN 9) IN THE HOUSEHOLD SCHEDULE. THIS IS THE COLUMN NUMBER YOU SHOULD GO TO. FOLLOW THE SELECTED ROW AND COLUMN TO THE CELL WHERE THEY MEET AND CIRCLE THE NUMBER IN THE CELL. THIS IS THE NUMBER OF THE WOMAN SELECTED FOR THE DOMESTIC VIOLENCE QUESTIONS FROM THE LIST OF ELIGIBLE WOMEN IN COLUMN 9 OF THE HOUSEHOLD SCHEDULE. WRITE THE NAME AND LINE NUMBER OF THE SELECTED WOMAN IN THE SPACE BELOW THE TABLE.

**EXAMPLE:** THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER IS '716' AND THE HOUSEHOLD SCHEDULE COLUMN 9 SHOWS THAT THERE ARE THREE ELIGIBLE WOMEN AGE 15-49 IN THE HOUSEHOLD (LINE NUMBERS 02, 04, AND 05). SINCE THE LAST DIGIT OF THE HOUSEHOLD SERIAL NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('2') AND CIRCLE THE NUMBER. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE SECOND WOMAN WHO IS ELIGIBLE FOR THE WOMAN'S INTERVIEW (LINE NUMBER '04' IN THIS EXAMPLE). WRITE HER NAME AND LINE NUMBER IN THE SPACE BELOW THE TABLE.

LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN AGE 15-49 IN HOUSEHOLD SCHEDULE COLUMN 9							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

NAME OF SELECTED WOMAN \_\_\_\_\_

HH LINE NUMBER OF SELECTED WOMAN .....

--	--

# HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less than monthly, or never?	DAILY ..... 1 WEEKLY ..... 2 MONTHLY ..... 3 LESS THAN MONTHLY ..... 4 NEVER ..... 5	
102	What is the <u>main</u> source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING ..... 11 PIPED TO YARD/PLOT ..... 12 PUBLIC TAP/STANDPIPE ..... 13 TUBE WELL OR BOREHOLE ..... 21 DUG WELL PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32 WATER FROM SPRING PROTECTED SPRING ..... 41 UNPROTECTED SPRING ..... 42 RAINWATER ..... 51 TANKER TRUCK ..... 61 CART WITH SMALL TANK ..... 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) ..... 81 BOTTLED WATER ..... 91  OTHER ..... 96 (SPECIFY)	<div>→ 105</div> <div>→ 105</div>
103	Where is that water source located?	IN OWN DWELLING ..... 1 IN OWN YARD/PLOT ..... 2 ELSEWHERE ..... 3	<div>→ 105</div>
104	How long does it take to go there, get water, and come back?	MINUTES ..... <div><div></div><div></div><div></div></div> ON PREMISES ..... 996 DON'T KNOW ..... 998	
105	Do you do anything to the water to make it safer to drink?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<div>→ 106A</div>
106	What do you usually do to make the water safer to drink?  Anything else?  RECORD ALL MENTIONED.	BOIL ..... A ADD BLEACH/CHLORINE/COLORIN ..... B STRAIN THROUGH A CLOTH ..... C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC.) ..... D SOLAR DISINFECTION ..... E LET IT STAND AND SETTLE ..... F OTHER ..... X (SPECIFY) DON'T KNOW ..... Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
106A	How do you store your drinking water?	CLOSED CONTAINER/JERRY CAN . . . . . 1 OPEN CONTAINER/BUCKET . . . . . 2 DOES NOT STORE WATER . . . . . 3 OTHER _____ 6 (SPECIFY)	
107	What kind of toilet facility do members of your household usually use?	FLUSH OR POUR FLUSH TOILET FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELS. . . . . 14 FLUSH, DON'T KNOW WHERE. . . . . 15 PIT LATRINE VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/ OPEN PIT . . . . . 23 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 HANGING TOILET/HANGING LATRINE . . . . . 51 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 110
108	Do you share this toilet facility with other households?	YES . . . . . 1 NO . . . . . 2	→ 110
109	How many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . <div><div>0</div><div></div></div> 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW . . . . . 98	
110	Does your household have:	<div><div>YES</div><div>NO</div></div> Electricity? ELECTRICITY . . . . . 1 2 A radio? RADIO . . . . . 1 2 A television? TELEVISION . . . . . 1 2 A mobile telephone? MOBILE TELEPHONE . . . . . 1 2 A non-mobile telephone? NON-MOBILE TELEPHONE . . . . . 1 2 A refrigerator? REFRIGERATOR . . . . . 1 2 A bed? BED . . . . . 1 2 A Chair? CHAIR . . . . . 1 2 A Table? TABLE . . . . . 1 2 A Cupboard? CUPBOARD . . . . . 1 2 A Sofa? SOFA . . . . . 1 2 A Clock? CLOCK . . . . . 1 2 A fan? FAN . . . . . 1 2 A sewing machine? SEWING MACHINE . . . . . 1 2 A Cassette player? CASSETTE PLAYER . . . . . 1 2 A plough? PLOUGH . . . . . 1 2 A grain grinder? GRAIN GRINDER . . . . . 1 2 A VCR/DVD? VCR/DVD . . . . . 1 2 A tractor? TRACTOR . . . . . 1 2 A Hammer mill? HAMMER MILL . . . . . 1 2 A computer? COMPUTER . . . . . 1 2 Internet? INTERNET . . . . . 1 2 A Microwave? MICROWAVE . . . . . 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	What type of fuel does your household mainly use for cooking?	ELECTRICITY ..... 01 SOLAR POWER ..... 02 LIQUID PROPANE GAS (LPG) ..... 03 NATURAL GAS ..... 04 BIOGAS ..... 05 KEROSENE ..... 06 COAL, LIGNITE ..... 07 CHARCOAL ..... 08 WOOD ..... 09 STRAW/SHRUBS/GRASS ..... 10 AGRICULTURAL CROP ..... 11 ANIMAL DUNG ..... 12 NO FOOD COOKED IN HOUSEHOLD ..... 95 OTHER _____ 96 (SPECIFY)	→ 114
112	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE ..... 1 IN A SEPARATE BUILDING ..... 2 OUTDOORS ..... 3 OTHER _____ 6 (SPECIFY)	→ 114
113	Do you have a separate room which is used as a kitchen?	YES ..... 1 NO ..... 2	
114	MAIN MATERIAL OF THE FLOOR.  RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND ..... 11 DUNG ..... 12 RUDIMENTARY FLOOR WOOD PLANKS ..... 21 PALM/BAMBOO/LEEDS ..... 22 FINISHED FLOOR PARQUET OR POLISHED WOOD ..... 31 VINYL (PVC) OR ASPHALT STRIPS ..... 32 CERAMIC/TERRAZZO TILES ..... 33 CONCRETE CEMENT ..... 34 CARPET ..... 35 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
115	MAIN MATERIAL OF THE ROOF.  RECORD OBSERVATION.	NATURAL ROOFING NO ROOF ..... 11 THATCH/PALM LEAF ..... 12 RUDIMENTARY ROOFING RUSTIC MAT ..... 21 PALM/BAMBOO ..... 22 WOOD PLANKS ..... 23 CARDBOARD ..... 24 FINISHED ROOFING METAL/IRON SHEETS ..... 31 WOOD ..... 32 CALAMINE/CEMENT FIBRE (ASBESTOS) ..... 33 CERAMIC TILES/HARVEY TILES ... 34 CEMENT ..... 35 ROOFING SHINGLES ..... 36 MUD TILES ..... 37 OTHER ..... 96 	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
120	How much lima, acres, or hectares of agricultural land do members of this household own?	LIMA ..... 1 <input type="text"/> <input type="text"/> <input type="text"/> ACRES ..... 2 <input type="text"/> <input type="text"/> <input type="text"/> HECTARES ..... 3 <input type="text"/> <input type="text"/> <input type="text"/> 95 OR MORE HECTARES ..... 995 DON'T KNOW ..... 998	
121	Does this household own any livestock, herds, other farm animals, or poultry?	YES ..... 1 NO ..... 2	→ 123
122	How many of the following animals does this household own? IF NONE, ENTER '00'. IF MORE THAN 95, ENTER '95'. IF UNKNOWN, ENTER '98'.  Traditional cattle?  Dairy cattle?  Beef cattle?  Horses, donkeys, or mules?  Goats?  Sheep?  Pigs?  Chickens?  Rabbits/Other Poultry?  Other Livestock?	TRADITIONAL CATTLE ..... <input type="text"/> <input type="text"/> DAIRY ..... <input type="text"/> <input type="text"/> BEEF ..... <input type="text"/> <input type="text"/> HORSES/DONKEYS/MULES .... <input type="text"/> <input type="text"/> GOATS ..... <input type="text"/> <input type="text"/> SHEEP ..... <input type="text"/> <input type="text"/> PIGS ..... <input type="text"/> <input type="text"/> CHICKENS ..... <input type="text"/> <input type="text"/> RABBITS/OTHER POULTRY .... <input type="text"/> <input type="text"/> OTHER LIVESTOCK ..... <input type="text"/> <input type="text"/>	
123	Does any member of this household have a bank account?	YES ..... 1 NO ..... 2	
124	At any time in the past 12 months, has anyone come into your dwelling to spray the interior walls against mosquitoes?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 126
125	Who sprayed the dwelling?	GOVERNMENT WORKER/PROGR/ ..... A PRIVATE COMPANY ..... B NON GOVERNMENTAL ORGANISATION (NGO) ..... C OTHER ..... X (SPECIFY) DON'T KNOW ..... Y	
126	Does your household have any mosquito nets that can be used while sleeping?	YES ..... 1 NO ..... 2	→ 136
127	How many mosquito nets does your household have?  IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS ..... <input type="text"/>	

		NET #1	NET #2	NET #3
128	<p>ASK THE RESPONDENT TO SHOW YOU ALL THE NETS IN THE HOUSEHOLD</p> <p>IF MORE THAN 3 NETS, USE ADDITIONAL QUESTIONNAIRE(S).</p>	<p>OBSERVED ..... 1</p> <p>NOT OBSERVED ... 2</p>	<p>OBSERVED ..... 1</p> <p>NOT OBSERVED ... 2</p>	<p>OBSERVED ..... 1</p> <p>NOT OBSERVED ... 2</p>
129	<p>How many months ago did your household get the mosquito net?</p> <p>IF LESS THAN ONE MONTH AGO, RECORD '00'.</p>	<p>MONTHS     <input type="text"/> <input type="text"/></p> <p>AGO ...</p> <p>MORE THAN 36 MONTHS AGO ... 95</p> <p>NOT SURE ..... 98</p>	<p>MONTHS     <input type="text"/> <input type="text"/></p> <p>AGO ...</p> <p>MORE THAN 36 MONTHS AGO ... 95</p> <p>NOT SURE ..... 98</p>	<p>MONTHS     <input type="text"/> <input type="text"/></p> <p>AGO ...</p> <p>MORE THAN 36 MONTHS AGO ... 95</p> <p>NOT SURE ..... 98</p>
130	<p>OBSERVE OR ASK THE BRAND/TYPE OF MOSQUITO NET.</p> <p>IF BRAND IS UNKNOWN AND YOU CANNOT OBSERVE THE NET, SHOW PICTURES OF TYPICAL NET TYPES/BRANDS TO RESPONDENT.</p>	<p>LONG-LASTING INSECTICIDE-TREATED NET (LLIN)</p> <p>PermaNET ..... 11</p> <p>OLICET ..... 12</p> <p>OTHER/ DK BRAND ... 16</p> <p>(SKIP TO 133) ←</p> <p>OTHER BRAND ... 96</p> <p>DK BRAND ..... 98</p>	<p>LONG-LASTING INSECTICIDE-TREATED NET (LLIN)</p> <p>PermaNET ..... 11</p> <p>OLICET ..... 12</p> <p>OTHER/ DK BRAND ... 16</p> <p>(SKIP TO 133) ←</p> <p>OTHER BRAND ... 96</p> <p>DK BRAND ..... 98</p>	<p>LONG-LASTING INSECTICIDE-TREATED NET (LLIN)</p> <p>PermaNET ..... 11</p> <p>OLICET ..... 12</p> <p>OTHER/ DK BRAND ... 16</p> <p>(SKIP TO 133) ←</p> <p>OTHER BRAND ... 96</p> <p>DK BRAND ..... 98</p>
131	<p>Since you got the net, was it ever soaked or dipped in a liquid to kill or repel mosquitoes?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 133) ←</p> <p>NOT SURE ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 133) ←</p> <p>NOT SURE ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 133) ←</p> <p>NOT SURE ..... 8</p>
132	<p>How many months ago was the net last soaked or dipped?</p> <p>IF LESS THAN ONE MONTH AGO, RECORD '00'.</p>	<p>MONTHS     <input type="text"/> <input type="text"/></p> <p>AGO ...</p> <p>MORE THAN 24 MONTHS AGO ... 95</p> <p>NOT SURE ..... 98</p>	<p>MONTHS     <input type="text"/> <input type="text"/></p> <p>AGO ...</p> <p>MORE THAN 24 MONTHS AGO ... 95</p> <p>NOT SURE ..... 98</p>	<p>MONTHS     <input type="text"/> <input type="text"/></p> <p>AGO ...</p> <p>MORE THAN 24 MONTHS AGO ... 95</p> <p>NOT SURE ..... 98</p>
133	<p>Did anyone sleep under this mosquito net last night?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 135) ←</p> <p>NOT SURE ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 135) ←</p> <p>NOT SURE ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 135) ←</p> <p>NOT SURE ..... 8</p>

		NET #1	NET #2	NET #3
134	<p>Who slept under this mosquito net last night?</p> <p>RECORD THE PERSON'S NAME AND LINE NUMBER FROM THE HOUSEHOLD SCHEDULE.</p>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>
		NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>
		NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>
		NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>
		NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>	NAME _____ LINE NO. .... <input type="text"/> <input type="text"/>
135		GO BACK TO 128 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 136.	GO BACK TO 128 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 136.	GO TO 128 IN FIRST COLUMN OF A NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO 136.
136	Please show me where members of your household most often wash their hands.	OBSERVED ..... 1 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT ..... 2 NOT OBSERVED, NO PERMISSION TO SEE ..... 3 NOT OBSERVED, OTHER REASON ..... 4 (SKIP TO 139) ←		
137	OBSERVATION ONLY:  OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING.	WATER IS AVAILABLE ..... 1 WATER IS NOT AVAILABLE ..... 2		
138	OBSERVATION ONLY:  OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) ..... A ASH, MUD, SAND ..... B NONE ..... C		
139	ASK RESPONDENT FOR A TEASPOONFUL OF COOKING SALT.  TEST SALT FOR IODINE.	IODINE PRESENT ..... 1 NO IODINE ..... 2  NO SALT IN HOUSEHOLD ..... 3 SALT NOT TESTED ..... 6 (SPECIFY REASON)		



WEIGHT AND HEIGHT MEASUREMENT FOR CHILDREN AGE 0-5

201	CHECK COLUMN 11 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 IN QUESTION 202. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
202	LINE NUMBER FROM COLUMN 11  NAME FROM COLUMN 2	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
204	CHECK 203: CHILD BORN IN JANUARY 2008 OR LATER?	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 209) ←	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 209) ←	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 209) ←
205	WEIGHT IN KILOGRAMS	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996
206	HEIGHT IN CENTIMETRES	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED ..... 3	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED ..... 3	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED ..... 3
208	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 209.			

		CHILD 4	CHILD 5	CHILD 6
202	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME .....	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME .....	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME .....
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
204	CHECK 203: CHILD BORN IN JANUARY 2008 OR LATER?	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 209) ←	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 209) ←	YES ..... 1 NO ..... 2 (GO TO 203 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, GO TO 209) ←
205	WEIGHT IN KILOGRAMS	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996
206	HEIGHT IN CENTIMETRES	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED ..... 3	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED ..... 3	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED ..... 3
208	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 209.			

WEIGHT, HEIGHT, AND HIV TESTING FOR WOMEN AGE 15-49

209	CHECK COLUMN 9 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 210. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
210	LINE NUMBER FROM COLUMN 9  NAME FROM COLUMN 2	LINE NUMBER <input type="text"/> <input type="text"/>  NAME _____	LINE NUMBER <input type="text"/> <input type="text"/>  NAME _____	LINE NUMBER <input type="text"/> <input type="text"/>  NAME _____
211	WEIGHT IN KILOGRAMS	KG. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996	KG. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996	KG. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996
212	HEIGHT IN CENTIMETRES	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996
213	AGE: CHECK COLUMN 7.	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 220) ↙	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 220) ↙	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 220) ↙
214	MARITAL STATUS: CHECK COLUMN 8.	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 220) ↙	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 220) ↙	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 220) ↙
215	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>
216	ASK CONSENT FOR DBS COLLECTION FROM PARENT/ OTHER ADULT IDENTIFIED IN 215 RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	<p>As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that causes AIDS. AIDS is a very serious illness. The HIV test is being done to see how big the AIDS problem is in Zambia.</p> <p>For the HIV test, we need a few drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached so we will not be able to tell you the test results. No one else will be able to know (NAME OF ADOLESCENT)'s test results either. I will provide her with a list of [nearby] facilities offering counselling and testing for HIV. I will also give her a voucher for free services that can be used at any of these facilities.</p> <p>Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF ADOLESCENT) to give blood on a paper card for the HIV test?</p>		
217	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 252)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 252)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 252)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
218	ASK CONSENT FOR RAPID HIV TEST FROM PARENT/ OTHER ADULT IDENTIFIED IN 215 RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	<p>If you want (NAME OF ADOLESCENT) to know her HIV status, I can do a rapid test for her and I can tell her the result. The rapid test is simple and accurate. It takes about 30 minutes.</p> <p>For the HIV test, we need a few (more) drops of blood from a finger. The blood will be from the same finger prick used to collected blood on the card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. I will use two tests to determine the HIV result. I will tell her the result of the tests</p> <p>Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF ADOLESCENT) to give blood for the HIV rapid test?</p>		
219	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2 _____ (SIGN)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2 _____ (SIGN)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2 _____ (SIGN)
220	ASK CONSENT FOR DBS COLLECTION FROM RESPONDENT	<p>As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that causes AIDS. AIDS is a very serious illness. The HIV test is being done to see how big the AIDS problem is in Zambia.</p> <p>For the HIV test, we need a few drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached so we will not be able to tell you the test results. No one else will be able to know your test results either. I will provide you with a list of [nearby] facilities offering counselling and testing for HIV. I will also give you a voucher for free services that can be used at any of these facilities.</p> <p>Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you give blood on a paper card for the HIV test?</p>		
221	CIRCLE THE APPROPRIATE CODE, SIGN YOUR NAME, AND ENTER YOUR INTERVIEWER NUMBER.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; margin-top: 5px;"></div> (IF REFUSED, GO TO 252)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; margin-top: 5px;"></div> (IF REFUSED, GO TO 252)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; margin-top: 5px;"></div> (IF REFUSED, GO TO 252)
222	CHECK 219 PARENTAL CONSENT FOR RAPID HIV TEST	CODE 1 OR BLANK ..... 1 CODE 2 ..... 2 (GO TO 227)	CODE 1 OR BLANK ..... 1 CODE 2 ..... 2 (GO TO 227)	CODE 1 OR BLANK ..... 1 CODE 2 ..... 2 (GO TO 227)
223	ASK CONSENT FOR RAPID HIV TEST FROM RESPONDENT	<p>If you want to know your HIV status, I can do a rapid test and I can tell you the result. The rapid test is simple and accurate. It takes about 30 minutes.</p> <p>For the HIV test, we need a few (more) drops of blood from a finger. The blood will be from the same finger prick used to collected blood on the card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. I will use two tests to determine the HIV result. I will tell you the result of the tests right away.</p> <p>Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you give blood for the rapid HIV test?</p>		
224	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME, AND ENTER YOUR INTERVIEWER NUMBER.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; margin-top: 5px;"></div>	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; margin-top: 5px;"></div>	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; margin-top: 5px;"></div>

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
225	AGE: CHECK COLUMN 7.	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 229) ←	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 229) ←	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 229) ←
226	MARITAL STATUS: CHECK COLUMN 8.	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 229) ←	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 229) ←	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 229) ←
227	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/OTHER ADULT IDENTIFIED IN 215 AS RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	<p>We ask you to allow the Ministry of Health to store part of the blood sample on the card at the laboratory for additional tests or research. It is likely that the samples will be used for additional HIV testing in a laboratory. We are not certain about what other additional tests might be done.</p> <p>The blood sample will not have any name or other data attached that could identify (NAME OF ADOLESCENT). You do not have to agree. If you do not want the blood sample stored for additional testing (NAME OF ADOLESCENT) can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?</p>		
228	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 231)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 231)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 231)
229	ASK CONSENT FOR ADDITIONAL TESTING FROM RESPONDENT.	<p>We ask you to allow the Ministry of Health to store part of the blood sample on the card at the laboratory for additional tests or research. It is likely that the samples will be used for additional HIV testing in a laboratory. We are not certain about what other additional tests might be done.</p> <p>The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?</p>		
230	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF GRANTED, GO TO 232)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF GRANTED, GO TO 232)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF GRANTED, GO TO 232)
231	ADDITIONAL TESTS	CHECK 228 AND 230: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER.	CHECK 228 AND 230: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER.	CHECK 228 AND 230: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER.
232	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH VCT AND TEST(S)			
233	BAR CODE LABEL FOR FILTER PAPER	<div style="border: 1px dashed black; padding: 10px; text-align: center;">           PUT THE 1ST BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	<div style="border: 1px dashed black; padding: 10px; text-align: center;">           PUT THE 1ST BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	<div style="border: 1px dashed black; padding: 10px; text-align: center;">           PUT THE 1ST BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
234	RECORD THE RESULT CODE OF THE HOME-BASED HIV TESTING	TESTED ..... 1 NOT PRESENT ..... 2 PARENT REFUSED ..... 3 RESPONDENT REFUSED ..... 4 OTHER ..... 6 (GO TO 252) ←	TESTED ..... 1 NOT PRESENT ..... 2 PARENT REFUSED ..... 3 RESPONDENT REFUSED ..... 4 OTHER ..... 6 (GO TO 252) ←	TESTED ..... 1 NOT PRESENT ..... 2 PARENT REFUSED ..... 3 RESPONDENT REFUSED ..... 4 OTHER ..... 6 (GO TO 252) ←
235	RECORD RESULT OF THE DETERMINE HIV RDT	DETERMINE REACTIVE ..... 1 DETERMINE NON-REACTIVE ..... 2 INVALID ..... 3 OTHER ..... 6	DETERMINE REACTIVE ..... 1 DETERMINE NON-REACTIVE ..... 2 INVALID ..... 3 OTHER ..... 6	DETERMINE REACTIVE ..... 1 DETERMINE NON-REACTIVE ..... 2 INVALID ..... 3 OTHER ..... 6
235A	RECORD RESULT OF THE UNIGOLD HIV RDT	UNIGOLD REACTIVE ..... 1 UNIGOLD NON-REACTIVE ..... 2 INVALID ..... 3 OTHER ..... 6	UNIGOLD REACTIVE ..... 1 UNIGOLD NON-REACTIVE ..... 2 INVALID ..... 3 OTHER ..... 6	UNIGOLD REACTIVE ..... 1 UNIGOLD NON-REACTIVE ..... 2 INVALID ..... 3 OTHER ..... 6
236	CHECK 235 DETERMINE RESULT	CODE 1 ..... 1 (GO TO 237) ← ANY OTHER CODE ..... 2	CODE 1 ..... 1 (GO TO 237) ← ANY OTHER CODE ..... 2	CODE 1 ..... 1 (GO TO 237) ← ANY OTHER CODE ..... 2
236A	CHECK 235A UNIGOLD RESULT	CODE 1 ..... 1 ANY OTHER CODE ..... 2 (GO TO 252) ←	CODE 1 ..... 1 ANY OTHER CODE ..... 2 (GO TO 252) ←	CODE 1 ..... 1 ANY OTHER CODE ..... 2 (GO TO 252) ←
237	AGE: CHECK COLUMN 7.	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 241) ←	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 241) ←	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 241) ←
238	MARITAL STATUS: CHECK COLUMN 8.	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 241) ←	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 241) ←	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 241) ←
239	ASK CONSENT FOR VENOUS BLOOD COLLECTION FROM PARENT/ OTHER ADULT IDENTIFIED IN 215 RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	<p>We would like to collect more blood from (NAME OF ADOLESCENT) to do additional testing. The additional tests will see how many CD4 cells (NAME OF ADOLESCENT) has. CD4 cells help a person stay healthy. We will use the same blood in a central laboratory to test for new HIV infections.</p> <p>If you agree, we would like to draw a little bit of blood from (NAME OF ADOLESCENT)'s arm. We will take about a teaspoon of blood. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached to the tests. We will return to the household to tell (NAME OF ADOLESCENT) the CD4 test results. No one else will be able to know (NAME OF ADOLESCENT)'s test results.</p> <p>Do you have any questions?            You can say yes to the test, or you can say no. It is up to you to decide.            Will you allow (NAME OF ADOLESCENT) to give blood from her arm for the tests?</p>		
240	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 252)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 252)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 252)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
241	ASK CONSENT FOR VENOUS BLOOD COLLECTION FROM RESPONDENT	<p>We would like to collect more blood from your to do additional testing. The additional tests will see how many CD4 cells you have. CD4 cells help a person stay healthy. We will use the same blood in a central laboratory to test for new HIV infections.</p> <p>If you agree, we would like to draw a little bit of blood from your arm. We will take about a teaspoon of blood. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached to the tests. We will return to the household to tell you the CD4 test results. No one else will be able to know your test results.</p> <p>Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you give blood from your arm for the tests?</p>		
242	CIRCLE THE APPROPRIATE CODE, SIGN YOUR NAME, AND ENTER YOUR INTERVIEWER NUMBER.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> (IF REFUSED, GO TO 252)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> (IF REFUSED, GO TO 252)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> (IF REFUSED, GO TO 252)
243	AGE: CHECK COLUMN 7.	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 247)	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 247)	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 247)
244	MARITAL STATUS: CHECK COLUMN 8.	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 247)	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 247)	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 247)
245	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/OTHER ADULT IDENTIFIED IN 215 AS RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	<p>We ask you to allow the Ministry of Health to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done.</p> <p>The blood sample will not have any name or other data attached that could identify (NAME OF ADOLESCENT). You do not have to agree. If you do not want the blood sample stored for additional testing (NAME OF ADOLESCENT) can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?</p>		
246	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 249)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 249)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 249)
247	ASK CONSENT FOR ADDITIONAL TESTING FROM RESPONDENT.	<p>We ask you to allow the Ministry of Health to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done.</p> <p>The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?</p>		
248	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF GRANTED, GO TO 250)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF GRANTED, GO TO 250)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF GRANTED, GO TO 250)

		WOMAN 1	WOMAN 2	WOMAN 3																																																
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____																																																
249	ADDITIONAL TESTS	CHECK 246 AND 248: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE TRANSMITTAL FORM.	CHECK 246 AND 248: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE TRANSMITTAL FORM.	CHECK 246 AND 248: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE TRANSMITTAL FORM.																																																
250	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE VENOUS BLOOD COLLECTION IF CONSENT HAS BEEN OBTAINED AND PROCEED.																																																			
251	BAR CODE LABEL FOR BLOOD TUBE	<div style="border: 1px dashed black; padding: 5px; text-align: center;">           PUT THE 4th BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 5th BAR CODE LABEL ON THE RESPONDENT'S BLOOD TUBE AND THE 6TH ON THE TRANSMITTAL FORM. PUT THE 7TH LABEL ON THE CD4 RESULT FORM.	<div style="border: 1px dashed black; padding: 5px; text-align: center;">           PUT THE 4th BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 5th BAR CODE LABEL ON THE RESPONDENT'S BLOOD TUBE AND THE 6TH ON THE TRANSMITTAL FORM. PUT THE 7TH LABEL ON THE CD4 RESULT FORM.	<div style="border: 1px dashed black; padding: 5px; text-align: center;">           PUT THE 4th BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 5th BAR CODE LABEL ON THE RESPONDENT'S BLOOD TUBE AND THE 6TH ON THE TRANSMITTAL FORM. PUT THE 7TH LABEL ON THE CD4 RESULT FORM.																																																
251A	RECORD THE DATE OF THE VENOUS BLOOD COLLECTION	DAY ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTH ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>																	DAY ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTH ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>																	DAY ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTH ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>																
251B	RECORD THE TIME OF THE VENOUS BLOOD COLLECTION	HOUR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									HOUR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									HOUR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																																
252	GO BACK TO 211 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, GO TO 253.																																																			



## HIV TESTING FOR MEN AGE 15-59

253	CHECK COLUMN 10 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE MEN IN 254. IF THERE ARE MORE THAN THREE MEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		MAN 1	MAN 2	MAN 3
254	LINE NUMBER FROM COLUMN 10 NAME FROM COLUMN 2	LINE NUMBER <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER <input type="text"/> <input type="text"/> NAME _____
257	AGE: CHECK COLUMN 7.	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 264) ←	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 264) ←	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 264) ←
258	MARITAL STATUS: CHECK COLUMN 8.	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 264) ←	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 264) ←	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 264) ←
259	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>
260	ASK CONSENT FOR DBS COLLECTION FROM PARENT/ OTHER ADULT IDENTIFIED IN 259 RESPONSIBLE FOR NEVER IN UNION MEN AGE 15-17.	<p>As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that causes AIDS. AIDS is a very serious illness. The HIV test is being done to see how big the AIDS problem is in Zambia.</p> <p>For the HIV test, we need a few drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached so we will not be able to tell you the test results. No one else will be able to know (NAME OF ADOLESCENT)'s test results either. I will provide him with a list of [nearby] facilities offering counselling and testing for HIV. I will also give him a voucher for free services that can be used at any of these facilities.</p> <p>Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF ADOLESCENT) to give blood on a paper card for the HIV test?</p>		
261	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 296)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 296)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 296)

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
262	ASK CONSENT FOR RAPID HIV TEST FROM PARENT/ OTHER ADULT IDENTIFIED IN 259 RESPONSIBLE FOR NEVER IN UNION MEN AGE 15-17.	<p>If you want (NAME OF ADOLESCENT) to know his HIV status, I can do a rapid test for him and I can tell him the result. The rapid test is simple and accurate. It takes about 30 minutes.</p> <p>For the HIV test, we need a few (more) drops of blood from a finger. The blood will be from the same finger prick used to collected blood on the card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. I will use two tests to determine the HIV result. I will tell him the result of the tests</p> <p>Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF ADOLESCENT) to give blood for the HIV rapid test?</p>		
263	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN)
264	ASK CONSENT FOR DBS COLLECTION FROM RESPONDENT	<p>As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that causes AIDS. AIDS is a very serious illness. The HIV test is being done to see how big the AIDS problem is in Zambia.</p> <p>For the HIV test, we need a few drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached so we will not be able to tell you the test results. No one else will be able to know your test results either. I will provide you with a list of [nearby] facilities offering counselling and testing for HIV. I will also give you a voucher for free services that can be used at any of these facilities.</p> <p>Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you give blood on a paper card for the HIV test?</p>		
265	CIRCLE THE APPROPRIATE CODE, SIGN YOUR NAME, AND ENTER YOUR INTERVIEWER NUMBER.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div> (IF REFUSED, GO TO 296)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div> (IF REFUSED, GO TO 296)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div> (IF REFUSED, GO TO 296)
266	CHECK 263 PARENTAL CONSENT FOR RAPID HIV TEST	CODE 1 OR BLANK ..... 1 CODE 2 ..... 2 (GO TO 271)	CODE 1 OR BLANK ..... 1 CODE 2 ..... 2 (GO TO 271)	CODE 1 OR BLANK ..... 1 CODE 2 ..... 2 (GO TO 271)
267	ASK CONSENT FOR RAPID HIV TEST FROM RESPONDENT	<p>If you want to know your HIV status, I can do a rapid test and I can tell you the result. The rapid test is simple and accurate. It takes about 30 minutes.</p> <p>For the HIV test, we need a few (more) drops of blood from a finger. The blood will be from the same finger prick used to collected blood on the card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. I will use two tests to determine the HIV result. I will tell you the result of the tests right away.</p> <p>Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you give blood for the rapid HIV test?</p>		
268	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME, AND ENTER YOUR INTERVIEWER NUMBER.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div>	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div>	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div>

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
269	AGE: CHECK COLUMN 7.	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 273) ↙	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 273) ↙	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 273) ↙
270	MARITAL STATUS: CHECK COLUMN 8.	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 273) ↙	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 273) ↙	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 273) ↙
271	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/OTHER ADULT IDENTIFIED IN 259 AS RESPONSIBLE FOR NEVER IN UNION MEN AGE 15-17.	<p>We ask you to allow the Ministry of Health to store part of the blood sample on the card at the laboratory for additional tests or research. It is likely that the samples will be used for additional HIV testing in a laboratory. We are not certain about what other additional tests might be done.</p> <p>The blood sample will not have any name or other data attached that could identify (NAME OF ADOLESCENT). You do not have to agree. If you do not want the blood sample stored for additional testing (NAME OF ADOLESCENT) can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?</p>		
272	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 275)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 275)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 275)
273	ASK CONSENT FOR ADDITIONAL TESTING FROM RESPONDENT.	<p>We ask you to allow the Ministry of Health to store part of the blood sample on the card at the laboratory for additional tests or research. It is likely that the samples will be used for additional HIV testing in a laboratory. We are not certain about what other additional tests might be done.</p> <p>The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?</p>		
274	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF GRANTED, GO TO 276)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF GRANTED, GO TO 276)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF GRANTED, GO TO 276)
275	ADDITIONAL TESTS	CHECK 272 AND 274: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER.	CHECK 272 AND 274: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER.	CHECK 272 AND 274: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER.
276	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH VCT AND TEST(S)			
277	BAR CODE LABEL FOR FILTER PAPER	<div style="border: 1px dashed black; padding: 5px; text-align: center;">           PUT THE 1ST BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	<div style="border: 1px dashed black; padding: 5px; text-align: center;">           PUT THE 1ST BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	<div style="border: 1px dashed black; padding: 5px; text-align: center;">           PUT THE 1ST BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
278	RECORD THE RESULT CODE OF THE HOME-BASED HIV TESTING	TESTED ..... 1 NOT PRESENT ..... 2 PARENT REFUSED ..... 3 RESPONDENT REFUSED ..... 4 OTHER ..... 6  (GO TO 296) ←	TESTED ..... 1 NOT PRESENT ..... 2 PARENT REFUSED ..... 3 RESPONDENT REFUSED ..... 4 OTHER ..... 6  (GO TO 296) ←	TESTED ..... 1 NOT PRESENT ..... 2 PARENT REFUSED ..... 3 RESPONDENT REFUSED ..... 4 OTHER ..... 6  (GO TO 296) ←
279	RECORD RESULT OF THE DETERMINE HIV RDT	DETERMINE REACTIVE ..... 1 DETERMINE NON-REACTIVE ... 2 INVALID ..... 3 OTHER ..... 6	DETERMINE REACTIVE ..... 1 DETERMINE NON-REACTIVE ... 2 INVALID ..... 3 OTHER ..... 6	DETERMINE REACTIVE ..... 1 DETERMINE NON-REACTIVE ... 2 INVALID ..... 3 OTHER ..... 6
279A	RECORD RESULT OF THE UNIGOLD HIV RDT	UNIGOLD REACTIVE ..... 1 UNIGOLD NON-REACTIVE ..... 2 INVALID ..... 3 OTHER ..... 6	UNIGOLD REACTIVE ..... 1 UNIGOLD NON-REACTIVE ..... 2 INVALID ..... 3 OTHER ..... 6	UNIGOLD REACTIVE ..... 1 UNIGOLD NON-REACTIVE ..... 2 INVALID ..... 3 OTHER ..... 6
280	CHECK 279 DETERMINE RESULT	CODE 1 ..... 1 (GO TO 281) ← ANY OTHER CODE ..... 2	CODE 1 ..... 1 (GO TO 281) ← ANY OTHER CODE ..... 2	CODE 1 ..... 1 (GO TO 281) ← ANY OTHER CODE ..... 2
280A	CHECK 279A UNIGOLD RESULT	CODE 1 ..... 1 ANY OTHER CODE ..... 2 (GO TO 296) ←	CODE 1 ..... 1 ANY OTHER CODE ..... 2 (GO TO 296) ←	CODE 1 ..... 1 ANY OTHER CODE ..... 2 (GO TO 296) ←
281	AGE: CHECK COLUMN 7.	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 285) ←	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 285) ←	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 285) ←
282	MARITAL STATUS: CHECK COLUMN 8.	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 285) ←	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 285) ←	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 285) ←
283	ASK CONSENT FOR VENOUS BLOOD COLLECTION FROM PARENT/ OTHER ADULT IDENTIFIED IN 259 RESPONSIBLE FOR NEVER IN UNION MEN AGE 15-17.	<p>We would like to collect more blood from (NAME OF ADOLESCENT) to do additional testing. The additional tests will see how many CD4 cells (NAME OF ADOLESCENT) has. CD4 cells help a person stay healthy. We will use the same blood in a central laboratory to test for new HIV infections.</p> <p>If you agree, we would like to draw a little bit of blood from (NAME OF ADOLESCENT)'s arm. We will take about a teaspoon of blood. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached to the tests. We will return to the household to tell (NAME OF ADOLESCENT) the CD4 test results. No one else will be able to know (NAME OF ADOLESCENT)'s test results.</p> <p>Do you have any questions?            You can say yes to the test, or you can say no. It is up to you to decide.            Will you allow (NAME OF ADOLESCENT) to give blood from his arm for the tests?</p>		
284	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2  _____ (SIGN)  (IF REFUSED, GO TO 296)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2  _____ (SIGN)  (IF REFUSED, GO TO 296)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ..... 2 ADULT REFUSED ..... 2  _____ (SIGN)  (IF REFUSED, GO TO 296)

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
285	ASK CONSENT FOR VENOUS BLOOD COLLECTION FROM RESPONDENT	<p>We would like to collect more blood from your to do additional testing. The additional tests will see how many CD4 cells you have. CD4 cells help a person stay healthy. We will use the same blood in a central laboratory to test for new HIV infections.</p> <p>If you agree, we would like to draw a little bit of blood from your arm. We will take about a teaspoon of blood. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached to the tests. We will return to the household to tell you the CD4 test results. No one else will be able to know your test results.</p> <p>Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you give blood from your arm for the tests?</p>		
286	CIRCLE THE APPROPRIATE CODE, SIGN YOUR NAME, AND ENTER YOUR INTERVIEWER NUMBER.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2  _____ (SIGN)  <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> (IF REFUSED, GO TO 296)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2  _____ (SIGN)  <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> (IF REFUSED, GO TO 296)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2  _____ (SIGN)  <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> (IF REFUSED, GO TO 296)
287	AGE: CHECK COLUMN 7.	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 291) ↙	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 291) ↙	15-17 YEARS ..... 1 18-59 YEARS ..... 2 (GO TO 291) ↙
288	MARITAL STATUS: CHECK COLUMN 8.	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 291) ↙	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 291) ↙	CODE 5 (NEVER MARRIED) ... 1 OTHER ..... 2 (GO TO 291) ↙
289	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/OTHER ADULT IDENTIFIED IN 259 AS RESPONSIBLE FOR NEVER IN UNION MEN AGE 15-17.	<p>We ask you to allow the Ministry of Health to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done.</p> <p>The blood sample will not have any name or other data attached that could identify (NAME OF ADOLESCENT). You do not have to agree. If you do not want the blood sample stored for additional testing (NAME OF ADOLESCENT) can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?</p>		
290	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2  _____ (SIGN)  (IF REFUSED, GO TO 293)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2  _____ (SIGN)  (IF REFUSED, GO TO 293)	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2  _____ (SIGN)  (IF REFUSED, GO TO 293)
291	ASK CONSENT FOR ADDITIONAL TESTING FROM RESPONDENT.	<p>We ask you to allow the Ministry of Health to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done.</p> <p>The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?</p>		
292	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2  _____ (SIGN)  (IF GRANTED, GO TO 294)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2  _____ (SIGN)  (IF GRANTED, GO TO 294)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2  _____ (SIGN)  (IF GRANTED, GO TO 294)

		MAN 1	MAN 2	MAN 3																																																
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____																																																
293	ADDITIONAL TESTS	CHECK 290 AND 292: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE TRANSMITTAL FORM.	CHECK 290 AND 292: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE TRANSMITTAL FORM.	CHECK 290 AND 292: IF CONSENT HAS NOT BEEN GRANTED WRITE "NO ADDITIONAL TEST" ON THE TRANSMITTAL FORM.																																																
294	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE VENOUS BLOOD COLLECTION IF CONSENT HAS BEEN OBTAINED AND PROCEED.																																																			
295	BAR CODE LABEL FOR BLOOD TUBE	<div style="border: 1px dashed black; padding: 5px; text-align: center;">           PUT THE 4th BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 5th BAR CODE LABEL ON THE RESPONDENT'S BLOOD TUBE AND THE 6TH ON THE TRANSMITTAL FORM. PUT THE 7TH LABEL ON THE CD4 RESULT FORM.	<div style="border: 1px dashed black; padding: 5px; text-align: center;">           PUT THE 4th BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 5th BAR CODE LABEL ON THE RESPONDENT'S BLOOD TUBE AND THE 6TH ON THE TRANSMITTAL FORM. PUT THE 7TH LABEL ON THE CD4 RESULT FORM.	<div style="border: 1px dashed black; padding: 5px; text-align: center;">           PUT THE 4th BAR CODE LABEL HERE.         </div> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996 PUT THE 5th BAR CODE LABEL ON THE RESPONDENT'S BLOOD TUBE AND THE 6TH ON THE TRANSMITTAL FORM. PUT THE 7TH LABEL ON THE CD4 RESULT FORM.																																																
295A	RECORD THE DATE OF THE VENOUS BLOOD COLLECTION	DAY ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTH ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>																	DAY ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTH ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>																	DAY ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTH ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>																
295B	RECORD THE TIME OF THE VENOUS BLOOD COLLECTION	HOUR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									HOUR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									HOUR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																																
296	GO BACK TO 257 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE MEN, END INTERVIEW.																																																			

2013 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY  
WOMAN'S QUESTIONNAIRE  
WITH HIV/AIDS

MINISTRY OF HEALTH/CENTRAL STATISTICAL OFFICE

IDENTIFICATION				
LOCALITY NAME _____  NAME OF HOUSEHOLD HEAD _____  CLUSTER NUMBER .....  HOUSEHOLD NUMBER .....  PROVINCE .....  RURAL/URBAN (RURAL = 1, URBAN = 2) .....  LUSAKA=1, OTHER CITY=2, TOWN=3, VILLAGE=4 .....  NAME AND LINE NUMBER OF WOMAN _____  IS WOMAN SELECTED FOR QUESTIONS ON DOMESTIC VIOLENCE (SECTION 12)? (YES=1, NO=2)	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div>			
INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div>
INTERVIEWER'S NAME	_____	_____	_____	MONTH <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div>
RESULT*	_____	_____	_____	YEAR <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div>
NEXT VISIT: DATE	_____	_____	_____	INT. NUMBER <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div>
TIME	_____	_____	_____	RESULT <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div>
*RESULT CODES: 1 COMPLETED      4 REFUSED 2 NOT AT HOME      5 PARTLY COMPLETED      7 OTHER _____ 3 POSTPONED      6 INCAPACITATED      (SPECIFY)				
**LANGUAGE OF QUESTIONNAIRE: <div style="border: 1px solid black; padding: 2px; display: inline-block;">01</div> LANGUAGE OF INTERVIEW: <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 20px; height: 20px;"></div> NATIVE LANGUAGE OF RESPONDENT <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 20px; height: 20px;"></div>				TRANSLATOR USED (YES = 1, NO = 2) <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 10px;"></div>
**LANGUAGE CODES: 01 ENGLISH    03 KAONDE    05 LUNDA    07 NYANJA    09 OTHER 02 BEMBA    04 LOZI    06 LUVALE    08 TONGA				
SUPERVISOR	FIELD EDITOR		OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		_____	_____
DATE _____	DATE _____		_____	_____

## SECTION 1. RESPONDENT'S BACKGROUND

## Introduction and Consent

Hello. My name is \_\_\_\_\_. I am working with the Ministry of Health in collaboration with Central Statistical Office (CSO). We are conducting a survey about health all over Zambia. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions? May I begin the interview now?

SIGNATURE OF INTERVIEWER: \_\_\_\_\_ DATE: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED... 1    RESPONDENT DOES NOT AGREE TO BE INTERVIEWED... 2 → END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR ..... <input type="text"/> <input type="text"/> MINUTES ..... <input type="text"/> <input type="text"/>	
102	In what month and year were you born?	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... 9998	
103	How old were you at your last birthday?	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
	COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.		
104	Have you ever attended school?	YES ..... 1 NO ..... 2	→ 108
105	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY ..... 1 SECONDARY ..... 2 HIGHER ..... 3	
106	What is the highest grade you completed at that level?	GRADE ..... <input type="text"/> <input type="text"/>	
107	CHECK 105:  PRIMARY <input type="checkbox"/> SECONDARY OR HIGHER <input type="checkbox"/>		→ 110



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
108	<p>Now I would like you to read this sentence to me.</p> <p>SHOW CARD TO RESPONDENT.</p> <p>IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?</p>	<p>CANNOT READ AT ALL ..... 1</p> <p>ABLE TO READ ONLY PARTS OF SENTENCE ..... 2</p> <p>ABLE TO READ WHOLE SENTENCE .. 3</p> <p>NO CARD WITH REQUIRED LANGUAGE ..... 4 (SPECIFY LANGUAGE)</p> <p>BLIND/VISUALLY IMPAIRED ..... 5</p>	
109	<p>CHECK 108:</p> <p>CODE '2', '3' OR '4' <input type="checkbox"/> CIRCLED</p> <p>CODE '1' OR '5' CIRCLED <input type="checkbox"/></p> <p>→ 111</p>		
110	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	<p>ALMOST EVERY DAY ..... 1</p> <p>AT LEAST ONCE A WEEK ..... 2</p> <p>LESS THAN ONCE A WEEK ..... 3</p> <p>NOT AT ALL ..... 4</p>	
111	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	<p>ALMOST EVERY DAY ..... 1</p> <p>AT LEAST ONCE A WEEK ..... 2</p> <p>LESS THAN ONCE A WEEK ..... 3</p> <p>NOT AT ALL ..... 4</p>	
112	Do you watch television almost every day, at least once a week, less than once a week or not at all?	<p>ALMOST EVERY DAY ..... 1</p> <p>AT LEAST ONCE A WEEK ..... 2</p> <p>LESS THAN ONCE A WEEK ..... 3</p> <p>NOT AT ALL ..... 4</p>	
113	What is your religion?	<p>CATHOLIC ..... 1</p> <p>PROTESTANT..... 2</p> <p>MUSLIM..... 3</p> <p>OTHER ..... 6 (SPECIFY)</p>	
114	What tribe do you belong to?	<input type="text"/>	
114A	<p>How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?</p> <p>IF LESS THAN ONE YEAR, RECORD '00' YEARS.</p>	<p>YEARS ..... <input type="text"/></p> <p>ALWAYS ..... 95</p> <p>VISITOR ..... 96</p>	→ 115
114B	Just before you moved here, did you live in Lusaka, another city, in a town, or in a village?	<p>LUSAKA ..... 1</p> <p>OTHER CITY ..... 2</p> <p>TOWN ..... 3</p> <p>VILLAGE ..... 4</p>	
115	In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away?	<p>NUMBER OF TRIPS ..... <input type="text"/></p> <p>NONE ..... 00</p>	→ 201
116	In the last 12 months, have you been away from your home community for more than one month at a time?	<p>YES ..... 1</p> <p>NO ..... 2</p>	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES ..... 1 NO ..... 2	→ 206								
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES ..... 1 NO ..... 2	→ 204								
203	How many sons live with you?  And how many daughters live with you?  IF NONE, RECORD '00'.	SONS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>  DAUGHTERS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES ..... 1 NO ..... 2	→ 206								
205	How many sons are alive but do not live with you?  And how many daughters are alive but do not live with you?  IF NONE, RECORD '00'.	SONS ELSEWHERE ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>  DAUGHTERS ELSEWHERE ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
206	Have you ever given birth to a boy or girl who was born alive but later died?  IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES ..... 1 NO ..... 2	→ 208								
207	How many boys have died?  And how many girls have died?  IF NONE, RECORD '00'.	BOYS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>  GIRLS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table>									
209	CHECK 208:  Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct?  YES <input type="checkbox"/> NO <input type="checkbox"/> → PROBE AND CORRECT 201-208 AS NECESSARY.										
210	CHECK 208:  ONE OR MORE BIRTHS <input type="checkbox"/> NO BIRTHS <input type="checkbox"/> → 226										

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.  
 RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.  
 (IF THERE ARE MORE THAN 12 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING FROM THE SECOND ROW).

212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE:	219 IF ALIVE:	220 IF DEAD:	221
What name was given to your (first/next) baby?  RECORD NAME  BIRTH HISTORY NUMBER	Is (NAME) a boy or a girl?	Were any of these births twins?	In what month and year was (NAME) born?  PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at his/her last birthday?  RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD).	How old was (NAME) when he/she died?  IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	BOY 1 GIRL 2	SING 1 MULT 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1 NO ... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES ... 1 NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (NEXT BIRTH)	DAYS ... 1 MONTHS 2 YEARS .. 3	
02	BOY 1 GIRL 2	SING 1 MULT 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1 NO ... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES ... 1 NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 MONTHS 2 YEARS .. 3	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↙ BIRTH
03	BOY 1 GIRL 2	SING 1 MULT 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1 NO ... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES ... 1 NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 MONTHS 2 YEARS .. 3	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↙ BIRTH
04	BOY 1 GIRL 2	SING 1 MULT 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1 NO ... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES ... 1 NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 MONTHS 2 YEARS .. 3	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↙ BIRTH
05	BOY 1 GIRL 2	SING 1 MULT 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1 NO ... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES ... 1 NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 MONTHS 2 YEARS .. 3	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↙ BIRTH
06	BOY 1 GIRL 2	SING 1 MULT 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1 NO ... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES ... 1 NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 MONTHS 2 YEARS .. 3	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↙ BIRTH
07	BOY 1 GIRL 2	SING 1 MULT 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1 NO ... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES ... 1 NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 MONTHS 2 YEARS .. 3	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↙ BIRTH

212	213	214	215	216	217	218	219	220	221
What name was given to your next baby?  RECORD NAME  BIRTH HISTORY NUMBER	Is (NAME) a boy or a girl?	Were any of these births twins?	In what month and year was (NAME) born?  PROBE: What is his/her birthday?	Is (NAME) still alive?	IF ALIVE: How old was (NAME) at his/her last birthday?  RECORD AGE IN COMPLETED YEARS.	IF ALIVE: Is (NAME) living with you?	IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD).	IF DEAD: How old was (NAME) when he/she died?  IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
08	BOY 1  GIRL 2	SING 1  MULT 2	MONTH <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1  NO ... 2 ↓ 220	AGE IN YEARS  <input type="text"/> <input type="text"/>	YES ... 1  NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↘ BIRTH
09	BOY 1  GIRL 2	SING 1  MULT 2	MONTH <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1  NO ... 2 ↓ 220	AGE IN YEARS  <input type="text"/> <input type="text"/>	YES ... 1  NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↘ BIRTH
10	BOY 1  GIRL 2	SING 1  MULT 2	MONTH <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1  NO ... 2 ↓ 220	AGE IN YEARS  <input type="text"/> <input type="text"/>	YES ... 1  NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↘ BIRTH
11	BOY 1  GIRL 2	SING 1  MULT 2	MONTH <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1  NO ... 2 ↓ 220	AGE IN YEARS  <input type="text"/> <input type="text"/>	YES ... 1  NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↘ BIRTH
12	BOY 1  GIRL 2	SING 1  MULT 2	MONTH <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES .. 1  NO ... 2 ↓ 220	AGE IN YEARS  <input type="text"/> <input type="text"/>	YES ... 1  NO .... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS ... 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD ↙ BIRTH NO ..... 2 NEXT ↘ BIRTH
222	Have you had any live births since the birth of (NAME OF LAST BIRTH)? IF YES, RECORD BIRTH(S) IN TABLE.					YES ..... 1 NO ..... 2			
223	COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:  NUMBERS ARE SAME <input type="checkbox"/> NUMBERS ARE DIFFERENT <input type="checkbox"/> → (PROBE AND RECONCILE)								
224	CHECK 215  ENTER THE NUMBER OF BIRTHS IN 2008 OR LATER.					NUMBER OF BIRTHS ..... <input type="text"/> NONE ..... 0 → 226			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	<b>C</b> FOR EACH BIRTH SINCE JANUARY 2008, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES ..... 1 NO ..... 2 UNSURE ..... 8	<input type="checkbox"/> → 230
227	How many months pregnant are you?  RECORD NUMBER OF COMPLETED MONTHS.  <b>C</b> ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS ..... <input type="text"/> <input type="text"/>	
228	When you got pregnant, did you want to get pregnant at that time?	YES ..... 1 NO ..... 2	→ 230
229	Did you want to have a baby later on or did you not want any (more) children?	LATER ..... 1 NO MORE ..... 2	
230	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES ..... 1 NO ..... 2	→ 238
231	When did the last such pregnancy end?	MONTH ..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
232	CHECK 231:  LAST PREGNANCY ENDED IN <input type="checkbox"/> JAN. 2008 OR LATER LAST PREGNANCY ENDED BEFORE <input type="checkbox"/> JAN. 2008		→ 238
233	How many months pregnant were you when the last such pregnancy ended?  <b>C</b> RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.	MONTHS ..... <input type="text"/> <input type="text"/>	
234	Since January 2008, have you had any other pregnancies that did not result in a live birth?	YES ..... 1 NO ..... 2	→ 236
235	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 2008.  <b>C</b> ENTER 'T' IN THE CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.		
236	Did you have any miscarriages, abortions or stillbirths that ended before 2008?	YES ..... 1 NO ..... 2	→ 238
237	When did the last such pregnancy that terminated before 2008 end?	MONTH ..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
238	<p>When did your last menstrual period start?</p> <p>_____</p> <p>(DATE DD/MM/YYYY, IF GIVEN)</p>	<p>DAYS AGO ..... 1</p> <p>WEEKS AGO ..... 2</p> <p>MONTHS AGO ..... 3</p> <p>YEARS AGO ..... 4</p> <p>IN MENOPAUSE/ HAS HAD HYSTERECTOMY ... 994</p> <p>BEFORE LAST BIRTH ..... 995</p> <p>NEVER MENSTRUATED ..... 996</p>	<div> <div></div> <div></div> <div></div> <div></div> </div>
239	<p>From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	<div> <div></div> <div>→ 301</div> </div>
240	<p>Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?</p>	<p>JUST BEFORE HER PERIOD BEGINS ..... 1</p> <p>DURING HER PERIOD ..... 2</p> <p>RIGHT AFTER HER PERIOD HAS ENDED ..... 3</p> <p>HALFWAY BETWEEN TWO PERIODS ..... 4</p> <p>OTHER ..... 6</p> <p>(SPECIFY)</p> <p>DON'T KNOW ..... 8</p>	

### SECTION 3. CONTRACEPTION

301	<p>Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy.</p> <p>Have you ever heard of (METHOD)?</p>		
01	<b>Female Sterilization.</b> PROBE: Women can have an operation to avoid having any more children.	YES ..... 1 NO ..... 2	
02	<b>Male Sterilization.</b> PROBE: Men can have an operation to avoid having any more children.	YES ..... 1 NO ..... 2	
03	<b>IUD.</b> PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES ..... 1 NO ..... 2	
04	<b>Injectables.</b> PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES ..... 1 NO ..... 2	
05	<b>Implants.</b> PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES ..... 1 NO ..... 2	
06	<b>Pill.</b> PROBE: Women can take a pill every day to avoid becoming pregnant.	YES ..... 1 NO ..... 2	
07	<b>Male Condom.</b> PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES ..... 1 NO ..... 2	
08	<b>Female Condom.</b> PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES ..... 1 NO ..... 2	
09	<b>Standard Days Methods (Cycle Beads).</b> PROBE: A woman uses string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse	YES ..... 1 NO ..... 2	
10	<b>LACTATIONAL AMENORRHEA METHOD (LAM).</b>	YES ..... 1 NO ..... 2	
11	<b>Rhythm Method.</b> PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES ..... 1 NO ..... 2	
12	<b>Withdrawal.</b> PROBE: Men can be careful and pull out before climax.	YES ..... 1 NO ..... 2	
13	<b>Emergency Contraception.</b> PROBE: As an emergency measure after unprotected sexual intercourse, women can take special pills at any time within three days to prevent pregnancy.	YES ..... 1  NO ..... 2	
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES ..... 1  <div style="border-bottom: 1px solid black; text-align: center; margin: 5px 0;">(SPECIFY)</div> <div style="border-bottom: 1px solid black; text-align: center; margin: 5px 0;">(SPECIFY)</div> NO ..... 2	

302	CHECK 226:		
	NOT PREGNANT OR UNSURE <input type="checkbox"/>	PREGNANT <input type="checkbox"/>	→ 311
303	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES ..... 1 NO ..... 2	→ 311
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Which method are you using?  CIRCLE ALL MENTIONED.  IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD ON LIST.	FEMALE STERILIZATION ..... A MALE STERILIZATION ..... B IUD ..... C INJECTABLES ..... D IMPLANTS ..... E PILL ..... F MALE CONDOM ..... G FEMALE CONDOM ..... H DIAPHRAGM ..... I FOAM/JELLY ..... J STANDARD DAYS METHOD ..... K LACTATIONAL AMEN. METHOD ..... L RHYTHM METHOD ..... M WITHDRAWAL ..... N OTHER MODERN METHOD ..... X OTHER TRADITIONAL METHOD ..... Y	→ 307 → 308A → 308A → 305 → 306 → 308A
304A	What name of injectables are you using?  ASK TO SEE THE CLINIC CARD IF RESPONDENT DOES NOT KNOW THE NAME OF BRAND.	NORIGYNON (2 MONTHS) ..... 1 NORISTERAT (2 MONTHS) ..... 2 DEPO PROVERA (3 MONTHS) ..... 3 OTHER ..... 6 (SPECIFY)	→ 308A
305	What is the brand name of the pills you are using?  ASK TO SEE THE PACKAGE IF RESPONDENT DOES NOT REMEMBER NAME OF BRAND.	SAFE PLAN ..... 01 MICROGYNON. .... 02 MICROLUT ..... 03 EUGYNON ..... 04 LOGYNON ..... 05 NORDETTE ..... 06 ORALCON F ..... 07 OTHER ..... 96 (SPECIFY) DON'T KNOW ..... 98	→ 308A
306	What is the brand name of the condoms you are using?  ASK TO SEE THE PACKAGE IF RESPONDENT DOES NOT REMEMBER NAME OF BRAND.	MAXIMUM CLASSIC ..... 01 MAXIMUM SCENTED ..... 02 ROUGH RIDER ..... 03 DUREX ..... 04 CARE FEMALE CONDOM ..... 05 FEMIDOM ..... 06 REALITY ..... 07 PUBLIC SECTOR: UNBRANDED (WHITE COLOUR FOIL) . 08 OTHER ..... 96 (SPECIFY) DON'T KNOW ..... 98	→ 308A



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP												
307	<p>In what facility did the sterilization take place?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL ..... 11</p> <p>GOVT. HEALTH CENTER/POST ... 12</p> <p>MOBILE HOSPITAL/CLINIC ..... 13</p> <p>FAMILY PLANNING CLINIC ..... 14</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER ..... 15</p> <p>OTHER PUBLIC</p> <p>SECTOR ..... 16</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC ..... 21</p> <p>MISSION HOSPITAL/CLINIC ..... 22</p> <p>PHARMACY ..... 23</p> <p>PRIVATE DOCTOR ..... 24</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER ..... 25</p> <p>MOBILE HOSPITAL/CLINIC ..... 26</p> <p>OTHER PRIVATE MEDICAL</p> <p>SECTOR ..... 27</p> <p>(SPECIFY)</p> <p>OTHER ..... 96</p> <p>(SPECIFY)</p> <p>DON'T KNOW ..... 98</p>													
308	In what month and year was the sterilization performed?														
308A	<p>Since what month and year have you been using (CURRENT METHOD) without stopping?</p> <p>PROBE: For how long have you been using (CURRENT METHOD) now without stopping?</p>	<p>MONTH ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>YEAR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table></p>													
309	<p>CHECK 308/308A, 215 AND 231:</p> <p>ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308/308A</p> <p>GO BACK TO 308/308A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).</p>	<p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p>													
310	<p>CHECK 308/308A:</p> <p>YEAR IS 2008 OR LATER <input type="checkbox"/></p> <p>YEAR IS 2007 OR EARLIER <input type="checkbox"/></p> <p><b>C</b> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.</p> <p><b>C</b> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2008.</p> <p>THEN SKIP TO → 322</p>														

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
311	<p>I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years.</p> <p>USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2008. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.</p> <p><b>C</b> IN COLUMN 1, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <ul style="list-style-type: none"> <li>* When was the last time you used a method? Which method was that?</li> <li>* When did you start using that method? How long after the birth of (NAME)?</li> <li>* How long did you use the method then?</li> </ul> <p>IN COLUMN 2, ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1.</p> <p>ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <ul style="list-style-type: none"> <li>* Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason?</li> <li>* IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER '0' IN EACH SUCH MONTH IN COLUMN 1.</li> </ul>		
312	<p>CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH</p> <p>NO METHOD USED <input type="checkbox"/> ANY METHOD USED <input type="checkbox"/></p>		314
313	<p>Have you ever used anything or tried in any way to delay or avoid getting pregnant?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	324
314	<p>CHECK 304:</p> <p>CIRCLE METHOD CODE:</p> <p>IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.</p>	<p>NO CODE CIRCLED ..... 00</p> <p>FEMALE STERILIZATION ..... 01</p> <p>MALE STERILIZATION ..... 02</p> <p>IUD ..... 03</p> <p>INJECTABLES ..... 04</p> <p>IMPLANTS ..... 05</p> <p>PILL ..... 06</p> <p>MALE CONDOM ..... 07</p> <p>FEMALE CONDOM ..... 08</p> <p>DIAPHRAGM ..... 09</p> <p>FOAM/JELLY ..... 10</p> <p>STANDARD DAYS METHOD ..... 11</p> <p>LACTATIONAL AMEN. METHOD ..... 12</p> <p>RHYTHM METHOD ..... 13</p> <p>WITHDRAWAL ..... 14</p> <p>OTHER MODERN METHOD ..... 95</p> <p>OTHER TRADITIONAL METHOD ..... 96</p>	<p>324</p> <p>317A</p> <p>326</p> <p>315A</p> <p>326</p>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
315	You first started using (CURRENT METHOD) in (DATE FROM 308/308A). Where did you get it at that time?	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 11 GOVT. HEALTH CENTER/POST ... 12 MOBILE HOSPITAL/CLINIC ..... 13 FAMILY PLANNING CLINIC ..... 14 COMMUNITY BASED AGENT/FIELDWORKER ..... 15 OTHER PUBLIC SECTOR ..... 16 (SPECIFY)	
315A	Where did you learn to use the standard days/lactational amenorrhea/rhythm method?  PROBE TO IDENTIFY THE TYPE OF SOURCE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)	PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... 21 MISSION HOSPITAL/CLINIC ..... 22 PHARMACY ..... 23 PRIVATE DOCTOR ..... 24 COMMUNITY BASED AGENT/FIELDWORKER ..... 25 MOBILE HOSPITAL/CLINIC ..... 26 OTHER PRIVATE MEDICAL SECTOR ..... 27 (SPECIFY)  OTHER SOURCE SHOP ..... 31 CHURCH ..... 32 FRIENDS/RELATIVES ..... 33  OTHER ..... 96 (SPECIFY)	
316	CHECK 304:  CIRCLE METHOD CODE:  IF MORE THAN ONE METHOD CODE CIRCLED IN 304 CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD ..... 03 INJECTABLES ..... 04 IMPLANTS ..... 05 PILL ..... 06 MALE CONDOM ..... 07 FEMALE CONDOM ..... 08 DIAPHRAGM ..... 09 FOAM/JELLY ..... 10 STANDARD DAYS METHOD ..... 11 LACTATIONAL AMEN. METHOD ..... 12 RHYTHM METHOD ..... 13	→ 323 → 320 → 326
317	At that time, were you told about side effects or problems you might have with the method?	YES ..... 1 NO ..... 2	→ 319
317A	When you got sterilized, were you told about side effects or problems you might have with the method?		
318	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES ..... 1 NO ..... 2	→ 320

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
319	Were you told what to do if you experienced side effects or problems?	YES ..... 1 NO ..... 2	
320	CHECK 317:  <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> CODE '1' CIRCLED <input type="checkbox"/> </div> <div style="text-align: center;"> CODE '1' NOT <input type="checkbox"/> CIRCLED </div> </div> <div style="display: flex; justify-content: space-between;"> <div>At that time, were you told about other methods of family planning that you could use?</div> <div>When you obtained (CURRENT METHOD FROM 314) from (SOURCE OF METHOD FROM 307 OR 315), were you told about other methods of family planning that you could use?</div> </div>	YES ..... 1 NO ..... 2	→ 322
321	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES ..... 1 NO ..... 2	
322	CHECK 304:  CIRCLE METHOD CODE:  IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION ..... 01 MALE STERILIZATION ..... 02 IUD ..... 03 INJECTABLES ..... 04 IMPLANTS ..... 05 PILL ..... 06 MALE CONDOM ..... 07 FEMALE CONDOM ..... 08 DIAPHRAGM ..... 09 FOAM/JELLY ..... 10 STANDARD DAYS METHOD ..... 11 LACTATIONAL AMEN. METHOD ..... 12 RHYTHM METHOD ..... 13 WITHDRAWAL ..... 14 OTHER MODERN METHOD ..... 95 OTHER TRADITIONAL METHOD ..... 96	→ 326           → 326
323	Where did you obtain (CURRENT METHOD) the last time?  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 11 GOVT. HEALTH CENTER/POST ... 12 MOBILE HOSPITAL/CLINIC ..... 13 FAMILY PLANNING CLINIC ..... 14 COMMUNITY BASED AGENT/FIELDWORKER ..... 15 OTHER PUBLIC SECTOR ..... 16 (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... 21 MISSION HOSPITAL/CLINIC ..... 22 PHARMACY ..... 23 PRIVATE DOCTOR ..... 24 COMMUNITY BASED AGENT/FIELDWORKER ..... 25 MOBILE HOSPITAL/CLINIC ..... 26 OTHER PRIVATE MEDICAL SECTOR ..... 27 (SPECIFY)  OTHER SOURCE SHOP ..... 31 CHURCH ..... 32 FRIENDS/RELATIVES ..... 33  OTHER ..... 96 (SPECIFY)	→ 326

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
324	Do you know of a place where you can obtain a method of family planning?	YES ..... 1 NO ..... 2	→ 326
325	Where is that?  Any other place?  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____  (NAME OF PLACE(S))    _____  (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTER/POST ... B MOBILE HOSPITAL/CLINIC ..... C FAMILY PLANNING CLINIC ..... D COMMUNITY BASED AGENT/FIELDWORKER ..... E OTHER PUBLIC SECTOR ..... F (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... G MISSION HOSPITAL/CLINIC ..... H PHARMACY ..... I PRIVATE DOCTOR ..... J COMMUNITY BASED AGENT/FIELDWORKER ..... K MOBILE HOSPITAL/CLINIC ..... L OTHER PRIVATE MEDICAL SECTOR ..... M (SPECIFY)  OTHER SOURCE SHOP ..... N CHURCH ..... O FRIENDS/RELATIVES ..... P  OTHER ..... X (SPECIFY)	
326	In the last 12 months, were you visited by a fieldworker who talked to you about family planning?	YES ..... 1 NO ..... 2	
327	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES ..... 1 NO ..... 2	→ 401
328	Did any staff member at the health facility speak to you about family planning methods?	YES ..... 1 NO ..... 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE & BREASTFEEDING

401	CHECK 224:	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">             ONE OR MORE BIRTHS IN 2008 OR LATER             <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px auto;"></div> </div> <div style="text-align: center;">             NO BIRTHS IN 2008 OR LATER             <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px auto;"></div> </div> </div>	→ 461A	
402	<p>CHECK 215: ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2008 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).</p> <p>Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately.)</p>			
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY	LAST BIRTH BIRTH HISTORY NUMBER <div style="display: inline-block; border: 1px solid black; width: 30px; height: 20px; margin-left: 5px;"></div>	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER <div style="display: inline-block; border: 1px solid black; width: 30px; height: 20px; margin-left: 5px;"></div>	SECOND-FROM-LAST BIRTH BIRTH HISTORY NUMBER <div style="display: inline-block; border: 1px solid black; width: 30px; height: 20px; margin-left: 5px;"></div>
404	FROM 212 AND 216	NAME _____  LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>	NAME _____  LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>	NAME _____  LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES ..... 1 (SKIP TO 408) ← NO ..... 2	YES ..... 1 (SKIP TO 430) ← NO ..... 2	YES ..... 1 (SKIP TO 430) ← NO ..... 2
406	Did you want to have a baby later on, or did you not want any (more) children?	LATER ..... 1 NO MORE ..... 2 (SKIP TO 408) ←	LATER ..... 1 NO MORE ..... 2 (SKIP TO 430) ←	LATER ..... 1 NO MORE ..... 2 (SKIP TO 430) ←
407	How much longer would you have liked to wait?	MONTHS ..1 <div style="display: inline-block; border: 1px solid black; width: 30px; height: 20px; margin-left: 5px;"></div> YEARS ..2 <div style="display: inline-block; border: 1px solid black; width: 30px; height: 20px; margin-left: 5px;"></div> DON'T KNOW ... 998	MONTHS ..1 <div style="display: inline-block; border: 1px solid black; width: 30px; height: 20px; margin-left: 5px;"></div> YEARS ..2 <div style="display: inline-block; border: 1px solid black; width: 30px; height: 20px; margin-left: 5px;"></div> DON'T KNOW ... 998	MONTHS ..1 <div style="display: inline-block; border: 1px solid black; width: 30px; height: 20px; margin-left: 5px;"></div> YEARS ..2 <div style="display: inline-block; border: 1px solid black; width: 30px; height: 20px; margin-left: 5px;"></div> DON'T KNOW ... 998
408	Did you see anyone for antenatal care for this pregnancy?	YES ..... 1 NO ..... 2 (SKIP TO 415) ←		
409	Whom did you see?  Anyone else?   PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	HEALTH PERSONNEL DOCTOR ..... A CLINICAL OFFICER B NURSE/MIDWIFE ... C  OTHER PERSON TRADITIONAL BIRTH ATTENDANT .. D COMMUNITY HEALTH WORKER ..... E  OTHER _____ X (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
410	<p>Where did you receive antenatal care for this pregnancy?</p> <p>Anywhere else?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p>HOME</p> <p>YOUR HOME ... A</p> <p>OTHER HOME ... B</p> <p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL . C</p> <p>GOVT. HEALTH CENTER/POST. D</p> <p>MOBILE HOSPITAL/CLINIC ..... E</p> <p>OTHER PUBLIC SECTOR _____ F</p> <p>(SPECIFY)</p> <p>PRIVATE MED. SECTOR</p> <p>PVT. HOSPITAL/CLINIC ..... G</p> <p>MISSION HOSPITAL/CLINIC ..... H</p> <p>OTHER PRIVATE MED. SECTOR _____ I</p> <p>(SPECIFY)</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>		
411	<p>How many months pregnant were you when you first received antenatal care for this pregnancy?</p> <p>MONTHS ... <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>			
412	<p>How many times did you receive antenatal care during this pregnancy?</p> <p>NUMBER OF TIMES . <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>			
413	<p>As part of your antenatal care during this pregnancy, were any of the following done at least once?</p> <p>YES NO</p> <p>Were you weighed? WEIGHT ... 1 2</p> <p>Was your blood pressure measured? BP ..... 1 2</p> <p>Did you give a urine sample? URINE ..... 1 2</p> <p>Did you give a blood sample? BLOOD ... 1 2</p>			
413A	<p>During this pregnancy were you offered counselling and testing for the virus that causes AIDS?</p> <p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>			
414	<p>During (any of) your antenatal care visit(s), were you told about things to look out for that might suggest problems with the pregnancy?</p> <p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>			
414A	<p>Did you discuss a birth preparedness plan with a health provider?</p> <p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 415) ←</p>			

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
414B	Did the birth preparedness plan include a discussion about:  Where you will deliver the baby?  What you will do if a complication arises?  Who will be there to help you during birth?	<div>YES NO</div> <div>DELIVERY . 1 2</div> <div>COMPLICA- TION ... 1 2</div> <div>HELP ..... 1 2</div>		
414C	Did you use the birth plan?	<div>YES ..... 1</div> <div>NO ..... 2</div>		
415	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	<div>YES ..... 1</div> <div>NO ..... 2</div> <div>(SKIP TO 418) ←</div> <div>DON'T KNOW ..... 8</div>		
416	During this pregnancy, how many times did you get this tetanus injection?	<div>TIMES ..... <input type="text"/></div> <div>DON'T KNOW ..... 8</div>		
417	CHECK 416:	<div>2 OR MORE TIMES <input type="checkbox"/></div> <div>OTHER <input type="checkbox"/></div> <div>(SKIP TO 421) ↓</div>		
418	At any time before this pregnancy, did you receive any tetanus injections?	<div>YES ..... 1</div> <div>NO ..... 2</div> <div>(SKIP TO 421) ←</div> <div>DON'T KNOW .... 8</div>		
419	Before this pregnancy, how many other times did you receive a tetanus injection?  IF 7 OR MORE TIMES, RECORD '7'.	<div>TIMES ..... <input type="text"/></div> <div>DON'T KNOW ..... 8</div>		
420	How many years ago did you receive the last tetanus injection before this pregnancy?	<div>YEARS AGO ..... <input type="text"/></div>		
421	During this pregnancy, were you given or did you buy any iron tablets or iron syrup?  SHOW TABLETS/SYRUP.	<div>YES ..... 1</div> <div>NO ..... 2</div> <div>(SKIP TO 423) ←</div> <div>DON'T KNOW ..... 8</div>		
422	During the whole pregnancy, for how many days did you take the tablets or syrup?  IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	<div>DAYS . <input type="text"/></div> <div>DON'T KNOW .... 998</div>		
423	During this pregnancy, did you take any drug for intestinal worms?	<div>YES ..... 1</div> <div>NO ..... 2</div> <div>DON'T KNOW ..... 8</div>		



NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____		
424	During this pregnancy, did you take any drugs to keep you from getting malaria?	YES ..... 1 NO ..... 2 (SKIP TO 430) ← DON'T KNOW ..... 8				
425	What drugs did you take?  RECORD ALL MENTIONED. IF TYPE OF DRUG IS NOT DETERMINED, SHOW TYPICAL ANTIMALARIAL DRUGS TO RESPONDENT.	SP/FANSIDAR ..... A CHLOROQUINE .... B  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z				
426	CHECK 425:  DRUGS TAKEN FOR MALARIA PREVENTION.	CODE 'A' CIRCLED <input type="checkbox"/> CODE 'A' NOT CIRCLED <input type="checkbox"/> (SKIP TO 430) ←				
427	How many times did you take (SP/Fansidar) during this pregnancy?	TIMES ..... <input type="text"/>				
428	CHECK 409:  ANTENATAL CARE FROM HEALTH PERSONNEL DURING THIS PREGNANCY	CODE 'A', 'B' OR 'C' CIRCLED <input type="checkbox"/> OTHER <input type="checkbox"/> (SKIP TO 430) ←				
429	Did you get the (SP/Fansidar) during any antenatal care visit, during another visit to a health facility or from another source?	ANTENATAL VISIT ... 1 ANOTHER FACILITY VISIT ..... 2 OTHER SOURCE ... 6				
430	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small?	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8			VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8
431	Was (NAME) weighed at birth?	YES ..... 1 NO ..... 2 (SKIP TO 433) ← DON'T KNOW ..... 8			YES ..... 1 NO ..... 2 (SKIP TO 433) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 433) ← DON'T KNOW ..... 8
432	How much did (NAME) weigh?  RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>  KG FROM RECALL 2 <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>  DON'T KNOW ... 99998			KG FROM CARD 1 <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>  KG FROM RECALL 2 <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>  DON'T KNOW ... 99998	KG FROM CARD 1 <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>  KG FROM RECALL 2 <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>  DON'T KNOW ... 99998

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____																		
433	<p>Who assisted with the delivery of (NAME)?</p> <p>Anyone else?</p> <p>PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED.</p> <p>IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.</p>	<p>HEALTH PERSONNEL</p> <p>DOCTOR ..... A</p> <p>CLINICAL OFFICE.. B</p> <p>NURSE/MIDWIFE.. C</p> <p>OTHER PERSON</p> <p>TRADITIONAL BIRTH ATTENDANT .. D</p> <p>RELATIVE/FRIEND . E</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p> <p>NO ONE ASSISTED . Y</p>	<p>HEALTH PERSONNEL</p> <p>DOCTOR ..... A</p> <p>CLINICAL OFFICE.. B</p> <p>NURSE/MIDWIFE.. C</p> <p>OTHER PERSON</p> <p>TRADITIONAL BIRTH ATTENDANT .. D</p> <p>RELATIVE/FRIEND . E</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p> <p>NO ONE ASSISTED . Y</p>	<p>HEALTH PERSONNEL</p> <p>DOCTOR ..... A</p> <p>CLINICAL OFFICE.. B</p> <p>NURSE/MIDWIFE.. C</p> <p>OTHER PERSON</p> <p>TRADITIONAL BIRTH ATTENDANT .. D</p> <p>RELATIVE/FRIEND . E</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p> <p>NO ONE ASSISTED . Y</p>																		
434	<p>Where did you give birth to (NAME)?</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____ (NAME OF PLACE - LAST BIRTH)</p> <p>_____ (NAME OF PLACE - NEXT TO LAST)</p> <p>_____ (NAME OF PLACE SECOND FROM - LAST BIRTH)</p>	<p>HOME</p> <p>YOUR HOME ... 11</p> <p>(SKIP TO 437A) ←</p> <p>OTHER HOME ... 12</p> <p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL . 21</p> <p>GOVT. HEALTH CENTER/POST . 22</p> <p>OTHER PUBLIC SECTOR _____ 26</p> <p>(SPECIFY)</p> <p>PRIVATE MED. SECTOR</p> <p>PVT. HOSPITAL/CLINIC ..... 31</p> <p>MISSION HOSPITAL/CLINIC ..... 32</p> <p>OTHER PRIVATE SECTOR _____ 36</p> <p>(SPECIFY)</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p> <p>(SKIP TO 437A) ←</p>	<p>HOME</p> <p>YOUR HOME ... 11</p> <p>(SKIP TO 448) ←</p> <p>OTHER HOME ... 12</p> <p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL . 21</p> <p>GOVT. HEALTH CENTER/POST . 22</p> <p>OTHER PUBLIC SECTOR _____ 26</p> <p>(SPECIFY)</p> <p>PRIVATE MED. SECTOR</p> <p>PVT. HOSPITAL/CLINIC ..... 31</p> <p>MISSION HOSPITAL/CLINIC ..... 32</p> <p>OTHER PRIVATE SECTOR _____ 36</p> <p>(SPECIFY)</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p> <p>(SKIP TO 448) ←</p>	<p>HOME</p> <p>YOUR HOME ... 11</p> <p>(SKIP TO 448) ←</p> <p>OTHER HOME ... 12</p> <p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL . 21</p> <p>GOVT. HEALTH CENTER/POST . 22</p> <p>OTHER PUBLIC SECTOR _____ 26</p> <p>(SPECIFY)</p> <p>PRIVATE MED. SECTOR</p> <p>PVT. HOSPITAL/CLINIC ..... 31</p> <p>MISSION HOSPITAL/CLINIC ..... 32</p> <p>OTHER PRIVATE SECTOR _____ 36</p> <p>(SPECIFY)</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p> <p>(SKIP TO 448) ←</p>																		
434A	<p>How long after (NAME) was delivered did you stay there?</p> <p>IF LESS THAN ONE DAY, RECORD HOURS.</p> <p>IF LESS THAN ONE WEEK, RECORD DAYS.</p>	<p>HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>WEEKS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>DON'T KNOW ..... 998</p>																				
435	<p>Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>																		
436	<p>I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?</p>	<p>YES ..... 1</p> <p>(SKIP TO 439) ←</p> <p>NO ..... 2</p>																				

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____																		
437	Did anyone check on your health after you left the facility?	YES ..... 1 (SKIP TO 439) ← NO ..... 2 (SKIP TO 442) ←																				
437A	Why didn't you deliver in a health facility?  PROBE: Any other reason?  RECORD ALL MENTIONED.	COST TOO MUCH . . . A FACILITY NOT OPEN . B TOO FAR/ NO TRANS- PORTATION . . . C DON'T TRUST FACILITY/POOR QUALITY SERVICE. D NO FEMALE PROVID- ER AT FACILITY . . E HUSBAND/FAMILY DID NOT ALLOW . . F SHORT LABOUR . . G NOT NECESSARY . . H NOT CUSTOMARY . . I OTHER _____ (SPECIFY) X																				
438	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES ..... 1 NO ..... 2 (SKIP TO 442) ←																				
439	Who checked on your health at that time?  PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR ..... 11 CLINICAL OFFICER 12 NURSE/MIDWIFE . 13  OTHER PERSON TRADITIONAL BIRTH ATTENDANT . 21 COMMUNITY/VILLAGE HEALTH WORKER . . . 22  OTHER _____ 96 (SPECIFY)																				
440	How long after delivery did the first check take place?  IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW . . . 998																				
442	In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on his/her health?	YES ..... 1 NO ..... 2 (SKIP TO 446) ← DON'T KNOW . . . . 8																				

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
443	<p>How many hours, days or weeks after the birth of (NAME) did the first check take place?</p> <p>IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.</p>	<p>HRS AFTER BIRTH .. 1 <input type="text"/> <input type="text"/></p> <p>DAYS AFTER BIRTH .. 2 <input type="text"/> <input type="text"/></p> <p>WKS AFTER BIRTH .. 3 <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ... 998</p>		
444	<p>Who checked on (NAME)'s health at that time?</p> <p>PROBE FOR MOST QUALIFIED PERSON.</p>	<p>HEALTH PERSONNEL DOCTOR ..... 11 CLINICAL OFFICER 12 NURSE/MIDWIFE . 13</p> <p>OTHER PERSON TRADITIONAL BIRTH ATTENDANT . 21 COMMUNITY/VILLAGE HEALTH WORKER ... 22</p> <p>OTHER _____ 96 (SPECIFY)</p>		
445	<p>Where did this first check of (NAME) take place?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____ (NAME OF PLACE)</p>	<p>HOME YOUR HOME ... 11 OTHER HOME ... 12</p> <p>PUBLIC SECTOR GOVT. HOSPITAL . 21 GOVT. HEALTH CENTER/POST. 22 MOBILE HOSPITAL/CLINIC ..... 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY)</p> <p>PRIVATE MED. SECTOR PVT. HOSPITAL/CLINIC ..... 31 MISSION HOSPITAL/CLINIC ..... 32 OTHER PRIVATE SECTOR _____ 36 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p>		
446	<p>In the first two months after delivery, did you receive a vitamin A dose like (this/any of these)?</p> <p>SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
447	Has your menstrual period returned since the birth of (NAME)?	YES ..... 1 (SKIP TO 449) ← NO ..... 2 (SKIP TO 450) ←		
448	Did your period return between the birth of (NAME) and your next pregnancy?			
449	For how many months after the birth of (NAME) did you not have a period?	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98
450	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREG- PREGNANT NANT <input type="checkbox"/> OR <input type="checkbox"/> UNSURE (SKIP TO 452) ←		
451	Have you had sexual intercourse since the birth of (NAME)?	YES ..... 1 NO ..... 2 (SKIP TO 453) ←		
452	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98		
453	Did you ever breastfeed (NAME)?	YES ..... 1 (SKIP TO 455) ← NO ..... 2	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
454	CHECK 404: IS CHILD LIVING?	LIVING DEAD <input type="checkbox"/> <input type="checkbox"/> (SKIP TO 460) (GO BACK TO 405 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 461A)		
455	How long after birth did you first put (NAME) to the breast?  IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY ... 000  HOURS 1 <input type="text"/> <input type="text"/> DAYS 2 <input type="text"/> <input type="text"/>		
456	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES ..... 1 NO ..... 2 (SKIP TO 458) ←		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
457	What was (NAME) given to drink?  Anything else?  RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) . . . A PLAIN WATER . . . B SUGAR OR GLUCOSE WATER . . . C GRIPPE WATER . . . D SUGAR-SALT-WATER SOLUTION . . . . . E FRUIT JUICE . . . . . F INFANT FORMULA . . . G TEA/INFUSIONS . . . H COFFEE . . . . . I HONEY . . . . . J OTHER _____ X (SPECIFY)		
458	CHECK 404:  IS CHILD LIVING?	LIVING <input type="checkbox"/> ↓ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 461A)		
459	Are you still breastfeeding (NAME)?	YES . . . . . 1 (SKIP TO 460) ← NO . . . . . 2		
459A	For how many months did you breastfeed (NAME)?	MONTHS . . . <input type="text"/> <input type="text"/>  DON'T KNOW . . . 98	MONTHS . . . <input type="text"/> <input type="text"/> STILL BF . . . . . 95 NEVER BF . . . . . 97 DON'T KNOW . . . 98	MONTHS . . . <input type="text"/> <input type="text"/> STILL BF . . . . . 95 NEVER BF . . . . . 97 DON'T KNOW . . . 98
460	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . 8
461		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 461A.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 461A.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 461A.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
461A	<p>Sometimes a woman can have a problem of constant leakage of urine or stool from her vagina during the day and night. This problem usually occurs after a difficult childbirth, but may also occur after a sexual assault or after pelvic surgery.</p> <p>Have you ever experienced a constant leakage of urine or stool from your vagina during the day and night?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 461D
461B	Have you ever heard of this problem?	<p>YES ..... 1</p> <p>NO ..... 2</p>	
461C	<p>CHECK 224:</p> <p>ONE OR MORE BIRTHS IN 2008 OR LATER <input type="checkbox"/></p> <p>NO BIRTHS IN 2008 OR LATER <input type="checkbox"/></p>		<p>→ 501</p> <p>→ 556</p>
461D	Did this problem start after you delivered a baby or had a stillbirth?	<p>AFTER DELIVERED BABY ..... 1</p> <p>AFTER HAD STILLBIRTH ..... 2</p> <p>NEITHER ..... 3</p>	→ 461F
461E	Did this problem start after a normal labor and delivery, or after a very difficult labor and delivery?	<p>NORMAL LABOR/DELIVERY ..... 1</p> <p>VERY DIFFICULT LABOR/DELIVERY . 2</p>	→ 461G
461F	What do you think caused this problem?	<p>SEXUAL ASSAULT ..... 1</p> <p>PELVIC SURGERY ..... 2</p> <p>OTHER ..... 6</p> <p>(SPECIFY)</p> <p>DON'T KNOW ..... 8</p>	→ 461H
461G	How many days after (CAUSE OF PROBLEM FROM 461C OR 461E) did the leakage start?	<p>NUMBER OF DAYS AFTER DELIVERY/OTHER EVENT <input type="text"/></p> <p>(ENTER 90 IF 90 DAYS OR MORE)</p>	
461H	Have you sought treatment for this condition?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 461K
461I	<p>Why have you not sought treatment?</p> <p>PROBE AND RECORD ALL MENTIONED.</p>	<p>DO NOT KNOW CAN BE FIXED ..... A</p> <p>DO NOT KNOW WHERE TO GO ..... B</p> <p>TOO EXPENSIVE ..... C</p> <p>TOO FAR ..... D</p> <p>POOR QUALITY OF CARE ..... E</p> <p>COULD NOT GET PERMISSION ..... F</p> <p>EMBARRASSMENT ..... G</p> <p>PROBLEM DISAPPEARED ..... H</p> <p>OTHER ..... X</p> <p>(SPECIFY)</p>	

461J	CHECK 224:		
	ONE OR MORE BIRTHS IN 2008 OR LATER	<input type="checkbox"/>	→ 501
	NO BIRTHS IN 2008 OR LATER	<input type="checkbox"/>	→ 556
461K	From whom did you last seek treatment?	HEALTH PROFESSIONAL DOCTOR ..... 1 NURSE/MIDWIFE ..... 2 OTHER PERSON COMMUNITY/VILLAGE HEALTH WORKER ..... 3  OTHER ..... 6 (SPECIFY)	
461L	Did you have an operation to fix the problem?	YES ..... 1 NO ..... 2	
461M	Did the treatment stop the leakage completely?  IF NO: Did the treatment reduce the leakage?	YES, STOPPED COMPLETELY ..... 1 NOT STOPPED BUT REDUCED ..... 2 NOT STOPPED AT ALL ..... 3 DID NOT RECEIVE TREATMENT ..... 4	
461N	CHECK 224:		
	ONE OR MORE BIRTHS IN 2008 OR LATER	<input type="checkbox"/>	→ 501
	NO BIRTHS IN 2008 OR LATER	<input type="checkbox"/>	→ 556



**SECTION 5. CHILD IMMUNIZATION AND HEALTH AND CHILD'S AND WOMAN'S NUTRITION**

501	ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2008 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).													
502	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY	LAST BIRTH BIRTH HISTORY NUMBER ..... <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span>			NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER ..... <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span>			SECOND-FROM-LAST BIRTH BIRTH HISTORY NUMBER ..... <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span>						
503	FROM 212 AND 216	NAME _____  LIVING <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span> DEAD <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span> (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 553)			NAME _____  LIVING <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span> DEAD <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span> (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 553)			NAME _____  LIVING <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span> DEAD <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span> (GO TO 503 IN NEXT- TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 553)						
504	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it please?	YES, SEEN ..... 1 (SKIP TO 506) ← YES, NOT SEEN ..... 2 (SKIP TO 509) ← NO CARD ..... 3			YES, SEEN ..... 1 (SKIP TO 506) ← YES, NOT SEEN ..... 2 (SKIP TO 509) ← NO CARD ..... 3			YES, SEEN ..... 1 (SKIP TO 506) ← YES, NOT SEEN ..... 2 (SKIP TO 509) ← NO CARD ..... 3						
505	Did you ever have a vaccination card for (NAME)?	YES ..... 1 (SKIP TO 509) ← NO ..... 2			YES ..... 1 (SKIP TO 509) ← NO ..... 2			YES ..... 1 (SKIP TO 509) ← NO ..... 2						
506	(1) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD. (2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED. (3) IF MORE THAN TWO VITAMIN 'A' DOSES, RECORD DATES FOR MOST RECENT AND SECOND MOST RECENT DOSES.													
		LAST BIRTH DAY MONTH YEAR			NEXT-TO-LAST BIRTH DAY MONTH YEAR			SECOND-FROM-LAST BIRTH DAY MONTH YEAR						
BCG		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	BCG		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	BCG		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
OPV 0		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	OPV 0		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	OPV 0		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
OPV 1		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	OPV1		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	OPV1		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
OPV 2		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	OPV2		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	OPV2		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
OPV 3		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	OPV3		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	OPV3		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
OPV 4		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	OPV4		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	OPV4		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
DPT-HepB+Hib 1		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	DHH1		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	DHH1		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
DPT-HepB+Hib 2		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	DHH2		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	DHH2		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
DPT-HepB+Hib 3		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	DHH3		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	DHH3		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
MEASLES		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	MEA		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	MEA		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
VITAMIN A1 (MOST RECENT)		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	VIT A1		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	VIT A1		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
VITAMIN A2 (2nd MOST RECENT)		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	VIT A2		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	VIT A2		<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
507	CHECK 506:	BCG TO MEASLES ALL RECORDED  <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span> (GO TO 511)			BCG TO MEASLES ALL RECORDED  <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span> (GO TO 511)			BCG TO MEASLES ALL RECORDED  <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span> (GO TO 511)			OTHER  <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; vertical-align: middle;"></span> (GO TO 511)			

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
508	Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in a national immunization day campaign?  RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-4, DHH 1-3 AND/OR MEASLES VACCINES.	YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO ..... 2 (SKIP TO 511) DON'T KNOW ..... 8	YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO ..... 2 (SKIP TO 511) DON'T KNOW ..... 8	YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO ..... 2 (SKIP TO 511) DON'T KNOW ..... 8
509	Did (NAME) ever have any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization day campaign?	YES ..... 1 NO ..... 2 (SKIP TO 511) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 511) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 511) DON'T KNOW ..... 8
510	Please tell me if (NAME) received any of the following vaccinations:			
510A	A BCG vaccination against tuberculosis, that is, an injection in the arm that usually causes a scar?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
510B	Polio vaccine, that is, drops in the mouth?	YES ..... 1 NO ..... 2 (SKIP TO 510E) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 510E) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 510E) DON'T KNOW ..... 8
510C	Was the first polio vaccine received in the first two weeks after birth or later?	FIRST 2 WEEKS ... 1 LATER ..... 2	FIRST 2 WEEKS ... 1 LATER ..... 2	FIRST 2 WEEKS ... 1 LATER ..... 2
510D	How many times was the polio vaccine received?	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>
510E	A DPT-HepB+Hib vaccination, that is, an injection given in the thigh sometimes at the same time as polio drops?	YES ..... 1 NO ..... 2 (SKIP TO 510G) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 510G) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 510G) DON'T KNOW ..... 8
510F	How many times was a DPT-HepB+Hib vaccination received?	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>
510G	A measles injection or that is, a shot in the arm at the age of 9 months or older - to prevent him/her from getting measles?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
511	Within the last six months, was (NAME) given a vitamin A dose like (this/any of these)?  SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
512	In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like (this/any of these)?  SHOW COMMON TYPES OF PILLS/SPRINKLES/SYRUPS.	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
513	Was (NAME) given any drug for intestinal worms in the last six months?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
514	Has (NAME) had diarrhoea in the last 2 weeks?	YES ..... 1 NO ..... 2 (SKIP TO 525) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 525) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 525) ← DON'T KNOW ..... 8
515	Was there any blood in the stools?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
516	Now I would like to know how much (NAME) was given to drink during the diarrhoea (including breastmilk).  Was he/she given less than usual to drink, about the same amount, or more than usual to drink?  IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK . 5 DON'T KNOW ..... 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK . 5 DON'T KNOW ..... 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK . 5 DON'T KNOW ..... 8
517	When (NAME) had diarrhoea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat?  IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD ... 5 NEVER GAVE FOOD . 6 DON'T KNOW ..... 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD ... 5 NEVER GAVE FOOD . 6 DON'T KNOW ..... 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD ... 5 NEVER GAVE FOOD . 6 DON'T KNOW ..... 8
518	Did you seek advice or treatment for the diarrhoea from any source?	YES ..... 1 NO ..... 2 (SKIP TO 521B) ←	YES ..... 1 NO ..... 2 (SKIP TO 521B) ←	YES ..... 1 NO ..... 2 (SKIP TO 521B) ←

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
519	<p>Where did you seek advice or treatment?</p> <p>Anywhere else?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____ (NAME OF PLACE - LAST BIRTH)</p> <p>_____ (NAME OF PLACE - NEXT TO LAST)</p> <p>_____ (NAME OF PLACE SECOND FROM - LAST BIRTH)</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL . A</p> <p>GOVT HEALTH CENTER/POST . B</p> <p>MOBILE HOSPITAL/CLINIC . . . . . C</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . D</p> <p>OTHER PUBLIC SECTOR _____ F (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PVT. HOSPITAL/CLINIC . . . . . G</p> <p>MISSION HOSPITAL/CLINIC . . . . . H</p> <p>PHARMACY . . . . . I</p> <p>PVT. DOCTOR . . . . . J</p> <p>MOBILE HOSPITAL/CLINIC . . . . . K</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . L</p> <p>OTHER PRIVATE SECTOR _____ M (SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP . . . . . N</p> <p>TRADITIONAL PRACTITIONER . O</p> <p>MARKET . . . . . P</p> <p>OTHER _____ X (SPECIFY)</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL . A</p> <p>GOVT HEALTH CENTER/POST . B</p> <p>MOBILE HOSPITAL/CLINIC . . . . . C</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . D</p> <p>OTHER PUBLIC SECTOR _____ F (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PVT. HOSPITAL/CLINIC . . . . . G</p> <p>MISSION HOSPITAL/CLINIC . . . . . H</p> <p>PHARMACY . . . . . I</p> <p>PVT. DOCTOR . . . . . J</p> <p>MOBILE HOSPITAL/CLINIC . . . . . K</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . L</p> <p>OTHER PRIVATE SECTOR _____ M (SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP . . . . . N</p> <p>TRADITIONAL PRACTITIONER . O</p> <p>MARKET . . . . . P</p> <p>OTHER _____ X (SPECIFY)</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL . A</p> <p>GOVT HEALTH CENTER/POST . B</p> <p>MOBILE HOSPITAL/CLINIC . . . . . C</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . D</p> <p>OTHER PUBLIC SECTOR _____ F (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PVT. HOSPITAL/CLINIC . . . . . G</p> <p>MISSION HOSPITAL/CLINIC . . . . . H</p> <p>PHARMACY . . . . . I</p> <p>PVT. DOCTOR . . . . . J</p> <p>MOBILE HOSPITAL/CLINIC . . . . . K</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . L</p> <p>OTHER PRIVATE SECTOR _____ M (SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP . . . . . N</p> <p>TRADITIONAL PRACTITIONER . O</p> <p>MARKET . . . . . P</p> <p>OTHER _____ X (SPECIFY)</p>
520	CHECK 519:	<p>TWO OR ONLY</p> <p><input type="checkbox"/> MORE ONE <input type="checkbox"/></p> <p>CODES CODE</p> <p>CIRCLED CIRCLED</p> <p>↓ (SKIP TO 521A) ←</p>	<p>TWO OR ONLY</p> <p><input type="checkbox"/> MORE ONE <input type="checkbox"/></p> <p>CODES CODE</p> <p>CIRCLED CIRCLED</p> <p>↓ (SKIP TO 521A) ←</p>	<p>TWO OR ONLY</p> <p><input type="checkbox"/> MORE ONE <input type="checkbox"/></p> <p>CODES CODE</p> <p>CIRCLED CIRCLED</p> <p>↓ (SKIP TO 521A) ←</p>
521	<p>Where did you first seek advice or treatment?</p> <p>USE LETTER CODE FROM 519.</p>	FIRST PLACE . . . <input type="checkbox"/>	FIRST PLACE . . . <input type="checkbox"/>	FIRST PLACE . . . <input type="checkbox"/>
521A	<p>How many days after the diarrhoea began did you first seek advice or treatment for (NAME)?</p> <p>IF THE SAME DAY, RECORD '00'.</p>	DAYS . . . . . <input type="text"/> <input type="text"/>	DAYS . . . . . <input type="text"/> <input type="text"/>	DAYS . . . . . <input type="text"/> <input type="text"/>
521B	Does (NAME) still have diarrhoea?	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
522	Was he/she given any of the following to drink at any time since he/she started having the diarrhoea:  a) A fluid made from a special packet called ORS packet?  b) Homemade fluid?	<p>YES NO DK</p> <p>FLUID FROM ORS PKT . . 1 2 8</p> <p>HOMEMADE FLUID . . . 1 2 8</p>	<p>YES NO DK</p> <p>FLUID FROM ORS PKT . . 1 2 8</p> <p>HOMEMADE FLUID . . . 1 2 8</p>	<p>YES NO DK</p> <p>FLUID FROM ORS PKT . . 1 2 8</p> <p>HOMEMADE FLUID . . . 1 2 8</p>
523	Was anything (else) given to treat the diarrhoea?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 525) ←</p> <p>DON'T KNOW ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 525) ←</p> <p>DON'T KNOW ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 525) ←</p> <p>DON'T KNOW ..... 8</p>
524	What (else) was given to treat the diarrhoea?  Anything else?  RECORD ALL TREATMENTS GIVEN.	<p>PILL OR SYRUP</p> <p>ANTIBIOTIC ..... A</p> <p>ANTIMOTILITY . . B</p> <p>OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY) . . . C</p> <p>UNKNOWN PILL OR SYRUP . . . D</p> <p>INJECTION</p> <p>ANTIBIOTIC ..... E</p> <p>NON-ANTIBIOTIC . F</p> <p>UNKNOWN INJECTION . . . G</p> <p>(IV) INTRAVENOUS . H</p> <p>HOME REMEDY/ HERBAL MED-ICINE ..... I</p> <p>OTHER _____ X (SPECIFY)</p>	<p>PILL OR SYRUP</p> <p>ANTIBIOTIC ..... A</p> <p>ANTIMOTILITY . . B</p> <p>OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY) . . . C</p> <p>UNKNOWN PILL OR SYRUP . . . D</p> <p>INJECTION</p> <p>ANTIBIOTIC ..... E</p> <p>NON-ANTIBIOTIC . F</p> <p>UNKNOWN INJECTION . . . G</p> <p>(IV) INTRAVENOUS . H</p> <p>HOME REMEDY/ HERBAL MED-ICINE ..... I</p> <p>OTHER _____ X (SPECIFY)</p>	<p>PILL OR SYRUP</p> <p>ANTIBIOTIC ..... A</p> <p>ANTIMOTILITY . . B</p> <p>OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY) . . . C</p> <p>UNKNOWN PILL OR SYRUP . . . D</p> <p>INJECTION</p> <p>ANTIBIOTIC ..... E</p> <p>NON-ANTIBIOTIC . F</p> <p>UNKNOWN INJECTION . . . G</p> <p>(IV) INTRAVENOUS . H</p> <p>HOME REMEDY/ HERBAL MED-ICINE ..... I</p> <p>OTHER _____ X (SPECIFY)</p>
525	Has (NAME) been ill with a fever at any time in the last 2 weeks?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 527) ←</p> <p>DON'T KNOW ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 527) ←</p> <p>DON'T KNOW ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 527) ←</p> <p>DON'T KNOW ..... 8</p>
526	At any time during the illness, did (NAME) have blood taken from his/her finger or heel for testing?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>
527	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 530) ←</p> <p>DON'T KNOW ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 530) ←</p> <p>DON'T KNOW ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 530) ←</p> <p>DON'T KNOW ..... 8</p>
528	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficult breathing?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 531) ←</p> <p>DON'T KNOW ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 531) ←</p> <p>DON'T KNOW ..... 8</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 531) ←</p> <p>DON'T KNOW ..... 8</p>

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
529	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY ... 1 NOSE ONLY ..... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) _____ DON'T KNOW ..... 8 (SKIP TO 531) ←	CHEST ONLY ... 1 NOSE ONLY ..... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) _____ DON'T KNOW ..... 8 (SKIP TO 531) ←	CHEST ONLY ... 1 NOSE ONLY ..... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) _____ DON'T KNOW ..... 8 (SKIP TO 531) ←
530	CHECK 525: HAD FEVER?	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> ↓ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> ↓ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> ↓ (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553)
531	Now I would like to know how much (NAME) was given to drink (including breastmilk) during the illness with a (fever/cough).  Was he/she given less than usual to drink, about the same amount, or more than usual to drink?  IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK . 5 DON'T KNOW ..... 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK . 5 DON'T KNOW ..... 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK . 5 DON'T KNOW ..... 8
532	When (NAME) had a (fever/cough), was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat?  IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD ... 5 NEVER GAVE FOOD. 6 DON'T KNOW ..... 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD ... 5 NEVER GAVE FOOD. 6 DON'T KNOW ..... 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD ... 5 NEVER GAVE FOOD. 6 DON'T KNOW ..... 8
533	Did you seek advice or treatment for the illness from any source?	YES ..... 1 NO ..... 2 (SKIP TO 536B) ←	YES ..... 1 NO ..... 2 (SKIP TO 536B) ←	YES ..... 1 NO ..... 2 (SKIP TO 536B) ←

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
534	<p>Where did you seek advice or treatment?</p> <p>Anywhere else?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____ (NAME OF PLACE - LAST BIRTH)</p> <p>_____ (NAME OF PLACE - NEXT TO LAST)</p> <p>_____ (NAME OF PLACE SECOND FROM - LAST BIRTH)</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL . A</p> <p>GOVT HEALTH CENTER/POS1 . B</p> <p>MOBILE HOSPITAL/CLINIC . . . . . C</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . D</p> <p>OTHER PUBLIC SECTOR _____ F (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PVT. HOSPITAL/CLINIC . . . . . G</p> <p>MISSION HOSPITAL/CLINIC . . . . . H</p> <p>PHARMACY . . . . . I</p> <p>PVT. DOCTOR . . . . . J</p> <p>MOBILE HOSPITAL/CLINIC . . . . . K</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . L</p> <p>OTHER PRIVATE SECTOR _____ M (SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP . . . . . N</p> <p>TRADITIONAL PRACTITIONER . O</p> <p>MARKET . . . . . P</p> <p>OTHER _____ X (SPECIFY)</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL . A</p> <p>GOVT HEALTH CENTER/POS1 . B</p> <p>MOBILE HOSPITAL/CLINIC . . . . . C</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . D</p> <p>OTHER PUBLIC SECTOR _____ F (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PVT. HOSPITAL/CLINIC . . . . . G</p> <p>MISSION HOSPITAL/CLINIC . . . . . H</p> <p>PHARMACY . . . . . I</p> <p>PVT. DOCTOR . . . . . J</p> <p>MOBILE HOSPITAL/CLINIC . . . . . K</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . L</p> <p>OTHER PRIVATE SECTOR _____ M (SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP . . . . . N</p> <p>TRADITIONAL PRACTITIONER . O</p> <p>MARKET . . . . . P</p> <p>OTHER _____ X (SPECIFY)</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL . A</p> <p>GOVT HEALTH CENTER/POS1 . B</p> <p>MOBILE HOSPITAL/CLINIC . . . . . C</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . D</p> <p>OTHER PUBLIC SECTOR _____ F (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PVT. HOSPITAL/CLINIC . . . . . G</p> <p>MISSION HOSPITAL/CLINIC . . . . . H</p> <p>PHARMACY . . . . . I</p> <p>PVT. DOCTOR . . . . . J</p> <p>MOBILE HOSPITAL/CLINIC . . . . . K</p> <p>COMMUNITY BASED AGENT/ FIELDWORKER . L</p> <p>OTHER PRIVATE SECTOR _____ M (SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP . . . . . N</p> <p>TRADITIONAL PRACTITIONER . O</p> <p>MARKET . . . . . P</p> <p>OTHER _____ X (SPECIFY)</p>
535	CHECK 534:	<p>TWO OR ONLY</p> <p><input type="checkbox"/> MORE ONE <input type="checkbox"/></p> <p>CODES CODE</p> <p>CIRCLED CIRCLED</p> <p>↓ (SKIP TO 536A) ←</p>	<p>TWO OR ONLY</p> <p><input type="checkbox"/> MORE ONE <input type="checkbox"/></p> <p>CODES CODE</p> <p>CIRCLED CIRCLED</p> <p>↓ (SKIP TO 536A) ←</p>	<p>TWO OR ONLY</p> <p><input type="checkbox"/> MORE ONE <input type="checkbox"/></p> <p>CODES CODE</p> <p>CIRCLED CIRCLED</p> <p>↓ (SKIP TO 536A) ←</p>
536	<p>Where did you first seek advice or treatment?</p> <p>USE LETTER CODE FROM 534.</p>	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>
536A	<p>How many days after the illness began did you first seek advice or treatment for (NAME)?</p> <p>IF THE SAME DAY, RECORD '00'.</p>	DAYS ..... <input type="text"/> <input type="text"/>	DAYS ..... <input type="text"/> <input type="text"/>	DAYS ..... <input type="text"/> <input type="text"/>
536B	Is (NAME) still sick with a (fever/ cough)?	<p>FEVER . . . . . A</p> <p>COUGH . . . . . B</p> <p>NO, NEITHER . . . . . C</p> <p>DON'T KNOW . . . . . Z</p>	<p>FEVER . . . . . A</p> <p>COUGH . . . . . B</p> <p>NO, NEITHER . . . . . C</p> <p>DON'T KNOW . . . . . Z</p>	<p>FEVER . . . . . A</p> <p>COUGH . . . . . B</p> <p>NO, NEITHER . . . . . C</p> <p>DON'T KNOW . . . . . Z</p>

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
537	At any time during the illness, did (NAME) take any drugs for the illness?	YES ..... 1 NO ..... 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW ..... 8
538	What drugs did (NAME) take?  Any other drugs?  RECORD ALL MENTIONED.	ANTIMALARIAL DRUGS SP/FANSIDAR ... A CHLOROQUINE . B AMODIAQUINE . C QUININE ..... D COARTEM/ACT . E ARTEMETHER... F ASUNATE/ ARTESUNATE . G ARTEETHER ... H OTHER ANTI-MALARIAL _____ I (SPECIFY)  ANTIBIOTIC DRUGS PILL/SYRUP ... J INJECTION ... K  OTHER DRUGS ASPRIN ..... L PARACETAMOL (PANADOL) .... M ACETA- MINOPHEN ... N IBUPROFEN ... O  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	ANTIMALARIAL DRUGS SP/FANSIDAR ... A CHLOROQUINE . B AMODIAQUINE . C QUININE ..... D COARTEM/ACT . E ARTEMETHER... F ASUNATE/ ARTESUNATE . G ARTEETHER ... H OTHER ANTI-MALARIAL _____ I (SPECIFY)  ANTIBIOTIC DRUGS PILL/SYRUP ... J INJECTION ... K  OTHER DRUGS ASPRIN ..... L PARACETAMOL (PANADOL) .... M ACETA- MINOPHEN ... N IBUPROFEN ... O  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	ANTIMALARIAL DRUGS SP/FANSIDAR ... A CHLOROQUINE . B AMODIAQUINE . C QUININE ..... D COARTEM/ACT . E ARTEMETHER... F ASUNATE/ ARTESUNATE . G ARTEETHER ... H OTHER ANTI-MALARIAL _____ I (SPECIFY)  ANTIBIOTIC DRUGS PILL/SYRUP ... J INJECTION ... K  OTHER DRUGS ASPRIN ..... L PARACETAMOL (PANADOL) .... M ACETA- MINOPHEN ... N IBUPROFEN ... O  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z



NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
538A	CHECK 538: ANY CODE A-K CIRCLED?	YES <input type="checkbox"/> NO <input type="checkbox"/> (SKIP TO 539)	YES <input type="checkbox"/> NO <input type="checkbox"/> (SKIP TO 539)	YES <input type="checkbox"/> NO <input type="checkbox"/> (SKIP TO 539)
538B	Did you already have (NAME OF DRUG FROM 538) at home when the child became ill?  ASK SEPARATELY FOR EACH OF THE DRUGS 'A' THROUGH 'K' THAT THE CHILD IS RECORDED AS HAVING TAKEN IN 538.  IF YES FOR ANY DRUG, CIRCLE CODE FOR THAT DRUG.  IF NO FOR ALL DRUGS, CIRCLE 'Y'.	ANTIMALARIAL DRUGS SP/FANSIDAR ... A CHLOROQUINE ... B AMODIAQUINE ... C QUININE ... D COARTEM/ACT ... E ARTEMETHER... F ASUNATE/ ARTESUNATE ... G ARTEETHER ... H OTHER ANTI-MALARIAL ____ I (SPECIFY)  ANTIBIOTIC DRUGS PILL/SYRUP ... J INJECTION ... K  NO DRUGS AT HOME. Y DON'T KNOW ... Z	ANTIMALARIAL DRUGS SP/FANSIDAR ... A CHLOROQUINE ... B AMODIAQUINE ... C QUININE ... D COARTEM/ACT ... E ARTEMETHER... F ASUNATE/ ARTESUNATE ... G ARTEETHER ... H OTHER ANTI-MALARIAL ____ I (SPECIFY)  ANTIBIOTIC DRUGS PILL/SYRUP ... J INJECTION ... K  NO DRUGS AT HOME. Y DON'T KNOW ... Z	ANTIMALARIAL DRUGS SP/FANSIDAR ... A CHLOROQUINE ... B AMODIAQUINE ... C QUININE ... D COARTEM/ACT ... E ARTEMETHER... F ASUNATE/ ARTESUNATE ... G ARTEETHER ... H OTHER ANTI-MALARIAL ____ I (SPECIFY)  ANTIBIOTIC DRUGS PILL/SYRUP ... J INJECTION ... K  NO DRUGS AT HOME. Y DON'T KNOW ... Z
539	CHECK 538: ANY CODE A-I CIRCLED?	YES <input type="checkbox"/> NO <input type="checkbox"/> (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES <input type="checkbox"/> NO <input type="checkbox"/> (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES <input type="checkbox"/> NO <input type="checkbox"/> (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553)
540	CHECK 538: SP/FANSIDAR ('A') GIVEN	CODE 'A' CIRCLED <input type="checkbox"/> CODE 'A' NOT CIRCLED <input type="checkbox"/> (SKIP TO 542)	CODE 'A' CIRCLED <input type="checkbox"/> CODE 'A' NOT CIRCLED <input type="checkbox"/> (SKIP TO 542)	CODE 'A' CIRCLED <input type="checkbox"/> CODE 'A' NOT CIRCLED <input type="checkbox"/> (SKIP TO 542)
541	How long after the fever started did (NAME) first take (SP/Fansidar)?	SAME DAY ... 0 NEXT DAY ... 1 TWO DAYS AFTER FEVER ... 2 THREE DAYS AFTER FEVER ... 3 FOUR OR MORE DAYS AFTER FEVER ... 4 DON'T KNOW ... 8	SAME DAY ... 0 NEXT DAY ... 1 TWO DAYS AFTER FEVER ... 2 THREE DAYS AFTER FEVER ... 3 FOUR OR MORE DAYS AFTER FEVER ... 4 DON'T KNOW ... 8	SAME DAY ... 0 NEXT DAY ... 1 TWO DAYS AFTER FEVER ... 2 THREE DAYS AFTER FEVER ... 3 FOUR OR MORE DAYS AFTER FEVER ... 4 DON'T KNOW ... 8
541A	For how many days did (NAME) take the (SP/Fansidar)?  IF 7 DAYS OR MORE, RECORD 7.	DAYS ..... <input type="text"/> DON'T KNOW ... 8	DAYS ..... <input type="text"/> DON'T KNOW ... 8	DAYS ..... <input type="text"/> DON'T KNOW ... 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
542	CHECK 538:  CHLOROQUINE ('B') GIVEN	CODE 'B'      CODE 'B' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (SKIP TO 544) ←	CODE 'B'      CODE 'B' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (SKIP TO 544) ←	CODE 'B'      CODE 'B' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (SKIP TO 544) ←
543	How long after the fever started did (NAME) first take chloroquine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8
543A	For how many days did (NAME) take the chloroquine?  IF 7 DAYS OR MORE, RECORD 7.	DAYS . . . . . <input type="checkbox"/>  DON'T KNOW . . . 8	DAYS . . . . . <input type="checkbox"/>  DON'T KNOW . . . 8	DAYS . . . . . <input type="checkbox"/>  DON'T KNOW . . . 8
544	CHECK 538:  AMODIAQUINE ('C') GIVEN	CODE 'C'      CODE 'C' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (SKIP TO 546) ←	CODE 'C'      CODE 'C' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (SKIP TO 546) ←	CODE 'C'      CODE 'C' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (SKIP TO 546) ←
545	How long after the fever started did (NAME) first take amodiaquine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8
545A	For how many days did (NAME) take the amodiaquine?  IF 7 DAYS OR MORE, RECORD 7.	DAYS . . . . . <input type="checkbox"/>  DON'T KNOW . . . 8	DAYS . . . . . <input type="checkbox"/>  DON'T KNOW . . . 8	DAYS . . . . . <input type="checkbox"/>  DON'T KNOW . . . 8
546	CHECK 538:  QUININE ('D') GIVEN	CODE 'D'      CODE 'D' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (SKIP TO 548) ←	CODE 'D'      CODE 'D' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (SKIP TO 548) ←	CODE 'D'      CODE 'D' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (SKIP TO 548) ←
547	How long after the fever started did (NAME) first take quinine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
547A	For how many days did (NAME) take the quinine?  IF 7 DAYS OR MORE, RECORD 7.	DAYS ..... <input type="text"/>  DON'T KNOW ... 8	DAYS ..... <input type="text"/>  DON'T KNOW ... 8	DAYS ..... <input type="text"/>  DON'T KNOW ... 8
548	CHECK 538:  COARTEM/ACT ('E') GIVEN	CODE 'E'      CODE 'E' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                      ↓ (SKIP TO 549B) ←	CODE 'E'      CODE 'E' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                      ↓ (SKIP TO 549B) ←	CODE 'E'      CODE 'E' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                      ↓ (SKIP TO 549B) ←
549	How long after the fever started did (NAME) first take coartem/ACT?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE DAYS AFTER FEVER ..... 3 FOUR OR MORE DAYS AFTER FEVER .. 4 DON'T KNOW ... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE DAYS AFTER FEVER ..... 3 FOUR OR MORE DAYS AFTER FEVER .. 4 DON'T KNOW ... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE DAYS AFTER FEVER ..... 3 FOUR OR MORE DAYS AFTER FEVER .. 4 DON'T KNOW ... 8
549A	For how many days did (NAME) take the coartem/ACT (COMBINATION WITH ARTEMISININ)?  IF 7 DAYS OR MORE, RECORD 7.	DAYS ..... <input type="text"/>  DON'T KNOW ... 8	DAYS ..... <input type="text"/>  DON'T KNOW ... 8	DAYS ..... <input type="text"/>  DON'T KNOW ... 8
549B	CHECK 538:  ARTEMETHER ('F') GIVEN	CODE 'F'      CODE 'F' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                      ↓ (SKIP TO 549E) ←	CODE 'F'      CODE 'F' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                      ↓ (SKIP TO 549E) ←	CODE 'F'      CODE 'F' CIRCLED      NOT CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓                      ↓ (SKIP TO 549E) ←
549C	How long after the fever started did (NAME) first take artemether?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE DAYS AFTER FEVER ..... 3 FOUR OR MORE DAYS AFTER FEVER .. 4 DON'T KNOW ... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE DAYS AFTER FEVER ..... 3 FOUR OR MORE DAYS AFTER FEVER .. 4 DON'T KNOW ... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE DAYS AFTER FEVER ..... 3 FOUR OR MORE DAYS AFTER FEVER .. 4 DON'T KNOW ... 8
549D	For how many days did (NAME) take the artemether?  IF 7 DAYS OR MORE, RECORD 7.	DAYS ..... <input type="text"/>  DON'T KNOW ... 8	DAYS ..... <input type="text"/>  DON'T KNOW ... 8	DAYS ..... <input type="text"/>  DON'T KNOW ... 8



NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
550	CHECK 538:  OTHER ANTIMALARIAL ('I') GIVEN	CODE 'I' CIRCLED <input type="checkbox"/> CODE 'I' NOT CIRCLED <input type="checkbox"/> (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	CODE 'I' CIRCLED <input type="checkbox"/> CODE 'I' NOT CIRCLED <input type="checkbox"/> (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	CODE 'I' CIRCLED <input type="checkbox"/> CODE 'I' NOT CIRCLED <input type="checkbox"/> (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553)
551	How long after the fever started did (NAME) first take (OTHER ANTIMALARIAL)?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE DAYS AFTER FEVER . . . . . 3 FOUR OR MORE DAYS AFTER FEVER . . 4 DON'T KNOW . . . 8
551A	For how many days did (NAME) take the (OTHER ANTIMALARIAL)?  IF 7 DAYS OR MORE, RECORD 7.	DAYS . . . . . <input type="checkbox"/> DON'T KNOW . . . 8	DAYS . . . . . <input type="checkbox"/> DON'T KNOW . . . 8	DAYS . . . . . <input type="checkbox"/> DON'T KNOW . . . 8
552		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
553	<p>CHECK 215 AND 218, ALL ROWS:</p> <p>NUMBER OF CHILDREN BORN IN 2008 OR LATER LIVING WITH THE RESPONDENT</p> <p>ONE OR MORE <input type="checkbox"/> NONE <input type="checkbox"/></p> <p>↓</p> <p>RECORD NAME OF YOUNGEST CHILD LIVING WITH HER AND CONTINUE WITH 554</p> <p>_____</p> <p>(NAME)</p>	→ 556
554	<p>The last time (NAME FROM 553) passed stool, what was done to dispose off the stool?</p>	<p>CHILD USED TOILET OR LATRINE ..... 01</p> <p>PUT/RINSED</p> <p>INTO TOILET OR LATRINE ..... 02</p> <p>PUT/RINSED</p> <p>INTO DRAIN OR DITCH ..... 03</p> <p>THROWN INTO GARBAGE ..... 04</p> <p>BURIED ..... 05</p> <p>LEFT IN THE OPEN ..... 06</p> <p>OTHER ..... 96</p> <p>_____ (SPECIFY)</p>
555	<p>CHECK 522(a), ALL COLUMNS:</p> <p>NO CHILD RECEIVED FLUID FROM ORS PACKET <input type="checkbox"/></p> <p>↓</p> <p>ANY CHILD RECEIVED FLUID FROM ORS PACKET <input type="checkbox"/></p> <p>→ 557</p>	
556	<p>Have you ever heard of a special product called ORS packet you can get for the treatment of diarrhoea?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>
557	<p>CHECK 215 AND 218, ALL ROWS:</p> <p>HAS AT LEAST ONE CHILD BORN IN 2011 OR LATER AND LIVING WITH HER <input type="checkbox"/></p> <p>↓</p> <p>RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE WITH 558)</p> <p>_____</p> <p>(NAME)</p> <p>DOES NOT HAVE ANY CHILDREN BORN IN 2011 OR LATER AND LIVING WITH HER <input type="checkbox"/></p> <p>→ 601</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES				
558	Now I would like to ask you about liquids or foods that (NAME FROM 557) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods.					
	Did (NAME FROM 557) (drink/eat):		YES	NO	DK	
	a)	Plain water?	a	1	2	8
	b)	Juice or juice drinks?	b	1	2	8
	c)	Clear broth?	c	1	2	8
	d)	Milk such as tinned, powdered, or fresh animal milk?	d	1	2	8
	IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.		NUMBER OF TIMES DRANK MILK		<input type="text"/>	
	e)	Infant formula?	e	1	2	8
	IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.		NUMBER OF TIMES DRANK FORMULA		<input type="text"/>	
	f)	Any other liquids?	f	1	2	8
	g)	Yogurt?	g	1	2	8
	IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'.		NUMBER OF TIMES ATE YOGURT		<input type="text"/>	
	h)	Any Provita, Delight, Cerelac, Soya Porridge?	h	1	2	8
	i)	Bread, rice, noodles, porridge, nshima or other foods made from grains?	i	1	2	8
	j)	Pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside?	j	1	2	8
	k)	White potatoes, manioc, cassava, or any other foods made from roots?	k	1	2	8
	l)	Any dark green, leafy vegetables, cassava leaves, rape, sweet potato leaves?	l	1	2	8
	m)	Ripe mangoes, paw paw, apricot, watermelon?	m	1	2	8
	n)	Any other fruits or vegetables?	n	1	2	8
	o)	Liver, kidney, heart or other organ meats?	o	1	2	8
	p)	Any meat, such as beef, pork, lamb, goat, chicken, or duck?	p	1	2	8
	q)	Eggs?	q	1	2	8
	r)	Fresh or dried fish or shellfish?	r	1	2	8
	s)	Any foods made from beans, peas, lentils, or nuts?	s	1	2	8
	t)	Cheese or other food made from milk?	t	1	2	8
	u)	Any caterpillars, other insects or other small protein foods?	u	1	2	8
	v)	Any other solid, semi-solid, or soft food?	v	1	2	8

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	
559	<p>CHECK 558 (CATEGORIES "g" THROUGH "v"):</p> <p>NOT A SINGLE <input type="checkbox"/> AT LEAST ONE <input type="checkbox"/></p> <p>"YES" ↓ "YES" →</p>		561
560	<p>Did (NAME) eat any solid, semi-solid, or soft foods yesterday during the day or at night?</p> <p>IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?</p>	<p>YES ..... 1</p> <p>(GO BACK TO 558 TO RECORD ←</p> <p>FOOD EATEN YESTERDAY)</p> <p>NO ..... 2</p>	601
561	<p>How many times did (NAME FROM 557) eat solid, semisolid, or soft foods other than liquids yesterday during the day or at night?</p> <p>IF 7 OR MORE TIMES, RECORD '7'.</p>	<p>NUMBER OF <input type="checkbox"/></p> <p>TIMES .....</p> <p>DON'T KNOW ..... 8</p>	



SECTION 6. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED ..... 1 YES, LIVING WITH A MAN ..... 2 NO, NOT IN UNION ..... 3	<input type="checkbox"/> → 604
602	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED ..... 1 YES, LIVED WITH A MAN ..... 2 NO ..... 3	→ 612
603	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED ..... 1 DIVORCED ..... 2 SEPARATED ..... 3	<input type="checkbox"/> → 609
604	Is your husband/partner living with you now or is he staying elsewhere?	LIVING WITH HER ..... 1 STAYING ELSEWHERE ..... 2	
605	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____  LINE NO. .... <input type="text"/> <input type="text"/>	
606	Does your husband/partner have other wives or does he live with other women as if married?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<input type="checkbox"/> → 609
607	Including yourself, in total, how many wives or partners does your husband live with now as if married?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	
608	Are you the first, second, ... wife/partner?	RANK ..... <input type="text"/> <input type="text"/>	
609	Have you been married or lived with a man only once or more than once?	ONLY ONCE ..... 1 MORE THAN ONCE ..... 2	→ 609B
609A	CHECK 603: IS RESPONDENT CURRENTLY WIDOWED?  NOT ASKED OR CURRENTLY DIVORCED/SEPARATED <input type="checkbox"/> ..... CURRENTLY WIDOWED <input type="checkbox"/> .....		→ 610 → 609D
609B	CHECK 603: IS RESPONDENT CURRENTLY WIDOWED?  NOT ASKED <input type="checkbox"/> ↓ CURRENTLY WIDOWED <input type="checkbox"/> ..... CURRENTLY DIVORCED/SEPARATED <input type="checkbox"/> .....		→ 609D → 610
609C	How did your previous marriage or union end?	DEATH ..... 1 DIVORCE ..... 2 SEPARATION ..... 3	<input type="checkbox"/> → 610
609D	To whom did most of your late husband's property go?	RESPONDENT ..... 1 OTHER WIFE ..... 2 SPOUSE'S CHILDREN ..... 3 SPOUSE'S FAMILY ..... 4 NO PROPERTY ..... 5 OTHER ..... 6 (SPECIFY) _____	→ 610
609E	Did you receive any of your late husband's assets or valuables?	YES ..... 1 NO ..... 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
610	<p>CHECK 609:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>MARRIED/ LIVED WITH A MAN ONLY ONCE</p> <p>↓</p> <p>In what month and year did you start living with your husband/partner?</p> </div> <div style="text-align: center;"> <p>MARRIED/ LIVED WITH A MAN MORE THAN ONCE</p> <p>↓</p> <p>Now I would like to ask about when you started living with your first husband/partner. In what month and year was that?</p> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div> <p>MONTH .....</p> <p>DON'T KNOW MONTH ..... 98</p> <p>YEAR .....</p> <p>DON'T KNOW YEAR ..... 9998</p> </div> <div style="text-align: right;"> <p>→ 612</p> </div> </div>	
611	How old were you when you first started living with him?	<p>AGE .....</p>	
612	<b>CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.</b>		
613	<p>Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues.</p> <p>How old were you when you had sexual intercourse for the very first time?</p>	<p>NEVER HAD SEXUAL INTERCOURSE ..... 00</p> <p>AGE IN YEARS ..... → 613C</p> <p>FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER ..... 95 → 613C</p>	
613A	<p>CHECK 103:</p> <div style="display: flex; justify-content: space-around;"> <div>AGE 15-24 ↓</div> <div>AGE 25-49 ↓</div> </div>		→ 628
613B	Do you intend to wait until you get married to have sexual intercourse for the first time?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW/UNSURE ..... 8</p>	→ 628
613C	<p>CHECK 103:</p> <div style="display: flex; justify-content: space-around;"> <div>AGE 15-24 ↓</div> <div>AGE 25-49 ↓</div> </div>		→ 614
613D	The <u>first</u> time you had sexual intercourse, was a female or male condom used?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW/DON'T REMEMBER ... 8</p>	
613E	How old was the person you first had sexual intercourse with?	<p>AGE OF PARTNER ..... → 614</p> <p>DON'T KNOW ..... 98</p>	
613F	Was this person older than you, younger than you, or about the same age as you?	<p>OLDER ..... 1</p> <p>YOUNGER ..... 2</p> <p>ABOUT THE SAME AGE ..... 3</p> <p>DON'T KNOW/DON'T REMEMBER ... 8</p>	→ 614
613G	Would you say this person was ten or more years older than you or less than ten years older than you?	<p>TEN OR MORE YEARS OLDER ..... 1</p> <p>LESS THAN TEN YEARS OLDER ... 2</p> <p>OLDER, UNSURE HOW MUCH ..... 3</p>	
614	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
615	<p>When was the <u>last</u> time you had sexual intercourse?</p> <p>IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS.</p> <p>IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.</p> <p>IF LESS THAN 1 DAY RECORD "00" DAYS.</p>	<p>DAYS AGO ..... 1</p> <p>WEEKS AGO ..... 2</p> <p>MONTHS AGO ..... 3</p> <p>YEARS AGO ..... 4</p>	→ 627

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER																																																
616	When was the last time you had sexual intercourse with this person?		DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>													DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																																				
617	The last time you had sexual intercourse with (this/second/third) person, was a female or male condom used?	YES ..... 1 NO ..... 2 (SKIP TO 619) ←	YES ..... 1 NO ..... 2 (SKIP TO 619) ←	YES ..... 1 NO ..... 2 (SKIP TO 619) ←																																																
618	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2																																																
619	What was your relationship to this person with whom you had sexual intercourse?  IF BOYFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	HUSBAND ..... 1 LIVE-IN PARTNER .... 2 BOYFRIEND NOT LIVING WITH RESPONDENT .... 3 CASUAL ACQUAINTANCE ... 4 CLIENT/SEX WORKER . 5 OTHER ..... 6 (SPECIFY) (SKIP TO 622) ←	HUSBAND ..... 1 LIVE-IN PARTNER .... 2 BOYFRIEND NOT LIVING WITH RESPONDENT .... 3 CASUAL ACQUAINTANCE ... 4 CLIENT/SEX WORKER . 5 OTHER ..... 6 (SPECIFY) (SKIP TO 622) ←	HUSBAND ..... 1 LIVE-IN PARTNER .... 2 BOYFRIEND NOT LIVING WITH RESPONDENT .... 3 CASUAL ACQUAINTANCE ... 4 CLIENT/SEX WORKER . 5 OTHER ..... 6 (SPECIFY) (SKIP TO 622) ←																																																
620	CHECK 609:	MARRIED ONLY MARRIED MORE THAN ONCE <table border="1"><tr><td></td></tr></table> (SKIP TO 622) ←		MARRIED ONLY MARRIED MORE THAN ONCE <table border="1"><tr><td></td></tr></table> (SKIP TO 622) ←		MARRIED ONLY MARRIED MORE THAN ONCE <table border="1"><tr><td></td></tr></table> (SKIP TO 622) ←																																														
621	CHECK 613:	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND <table border="1"><tr><td></td></tr></table> (SKIP TO 623) OTHER <table border="1"><tr><td></td></tr></table>			FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND <table border="1"><tr><td></td></tr></table> (SKIP TO 623) OTHER <table border="1"><tr><td></td></tr></table>			FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND <table border="1"><tr><td></td></tr></table> (SKIP TO 623) OTHER <table border="1"><tr><td></td></tr></table>																																												
622	How long ago did you first have sexual intercourse with (this/second/third) person?	DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEARS AGO 4 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																	DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEARS AGO 4 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																	DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEARS AGO 4 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																
623	How many times during the last 12 months did you have sexual intercourse with this person?  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE "95".	NUMBER OF TIMES <table border="1"><tr><td></td><td></td></tr></table>			NUMBER OF TIMES <table border="1"><tr><td></td><td></td></tr></table>			NUMBER OF TIMES <table border="1"><tr><td></td><td></td></tr></table>																																												

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
624	How old is this person?	AGE OF PARTNER <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98	AGE OF PARTNER <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98	AGE OF PARTNER <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98
624A	The last time you had sexual intercourse with (this/second/third) person, did you or this person drink alcohol?	YES ..... 1 NO ..... 2 (SKIP TO 625) ←	YES ..... 1 NO ..... 2 (SKIP TO 625) ←	YES ..... 1 NO ..... 2 (SKIP TO 626) ←
624B	Were you or your partner drunk at that time?  IF YES: Who was drunk?	RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER ..... 4	RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER ..... 4	RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER ..... 4
625	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES ..... 1 (GO BACK TO 616 ← IN NEXT COLUMN) NO ..... 2 (SKIP TO 627) ←	YES ..... 1 (GO BACK TO 616 ← IN NEXT COLUMN) NO ..... 2 (SKIP TO 627) ←	
626	In total, with how many different people have you had sexual intercourse in the last 12 months?  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.  IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.'			NUMBER OF PARTNERS LAST 12 MONTHS ... <input type="text"/> <input type="text"/>  DON'T KNOW ... 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP												
627	<p>In total, with how many different people have you had sexual intercourse in your lifetime?</p> <p>IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.</p> <p>IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.'</p>	<p>NUMBER OF PARTNERS IN LIFETIME ..... <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>													
628	CHECK PRESENCE OF OTHERS DURING THIS SECTION	<table border="0"> <tr> <td></td><td>YES</td><td>NO</td></tr> <tr> <td>CHILDREN &lt;10 .....</td><td>1</td><td>2</td></tr> <tr> <td>MALE ADULTS .....</td><td>1</td><td>2</td></tr> <tr> <td>FEMALE ADULTS .....</td><td>1</td><td>2</td></tr> </table>		YES	NO	CHILDREN <10 .....	1	2	MALE ADULTS .....	1	2	FEMALE ADULTS .....	1	2	
	YES	NO													
CHILDREN <10 .....	1	2													
MALE ADULTS .....	1	2													
FEMALE ADULTS .....	1	2													
629	Do you know of a place where a person can get male condoms?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 632												
630	<p>Where is that?</p> <p>Any other place?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER/POST ... B</p> <p>MOBILE HOSPITAL/CLINIC ..... C</p> <p>FAMILY PLANNING CLINIC ..... D</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER ..... E</p> <p>OTHER PUBLIC SECTOR _____ F</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC ..... G</p> <p>MISSION HOSPITAL/CLINIC ..... H</p> <p>PHARMACY ..... I</p> <p>PRIVATE DOCTOR ..... J</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER ..... K</p> <p>MOBILE HOSPITAL/CLINIC ..... L</p> <p>OTHER PRIVATE MEDICAL SECTOR _____ M</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP ..... N</p> <p>CHURCH ..... O</p> <p>FRIENDS/RELATIVES ..... P</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>													
631	If you wanted to, could you yourself get a male condom?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW/UNSURE ..... 8</p>													
632	Do you know of a place where a person can get female condoms?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 701												

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
633	<p>Where is that?</p> <p>Any other place?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER/POST ... B</p> <p>MOBILE HOSPITAL/CLINIC ..... C</p> <p>FAMILY PLANNING CLINIC ..... D</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER ..... E</p> <p>OTHER PUBLIC</p> <p>SECTOR _____ F</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC ..... G</p> <p>MISSION HOSPITAL/CLINIC ..... H</p> <p>PHARMACY ..... I</p> <p>PRIVATE DOCTOR ..... J</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER ..... K</p> <p>MOBILE HOSPITAL/CLINIC ..... L</p> <p>OTHER PRIVATE MEDICAL</p> <p>SECTOR _____ M</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP ..... N</p> <p>CHURCH ..... O</p> <p>FRIENDS/RELATIVES ..... P</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	
634	<p>If you wanted to, could you yourself get a female condom?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW/UNSURE ..... 8</p>	

SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 304: NEITHER CODE A NOR CODE B IS CIRCLED  NEITHER STERILIZED <input type="checkbox"/> HE OR SHE STERILIZED <input type="checkbox"/>		→ 712
702	CHECK 226:  PREGNANT <input type="checkbox"/> NOT PREGNANT OR UNSURE <input type="checkbox"/>		→ 704
703	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD ..... 1 NO MORE ..... 2 UNDECIDED/DON'T KNOW ..... 8	→ 705 → 711
704	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD ..... 1 NO MORE/NONE ..... 2 SAYS SHE CAN'T GET PREGNANT ... 3 UNDECIDED/DON'T KNOW ..... 8	→ 707 → 712 → 710
705	CHECK 226:  NOT PREGNANT OR UNSURE <input type="checkbox"/> PREGNANT <input type="checkbox"/>  How long would you like to wait from now before the birth of (a/another) child?      After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS ..... 1 YEARS ..... 2  SOON/NOW ..... 993 SAYS SHE CAN'T GET PREGNANT ..... 994 AFTER MARRIAGE ..... 995  OTHER ..... 996 (SPECIFY) DON'T KNOW ..... 998	→ 710 → 712 → 710
706	CHECK 226:  NOT PREGNANT OR UNSURE <input type="checkbox"/> PREGNANT <input type="checkbox"/>		→ 711
707	CHECK 303: USING A CONTRACEPTIVE METHOD?  NOT CURRENTLY <input type="checkbox"/> USING      CURRENTLY <input type="checkbox"/> USING		→ 712
708	CHECK 705:  NOT ASKED <input type="checkbox"/> 24 OR MORE MONTHS OR 02 OR MORE YEARS <input type="checkbox"/> 00-23 MONTHS OR 00-01 YEAR <input type="checkbox"/>		→ 711

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
709	<p>CHECK 704:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>WANTS TO HAVE A/ANOTHER CHILD</p> <input type="checkbox"/> </div> <div style="text-align: center;"> <p>WANTS NO MORE/ NONE</p> <input type="checkbox"/> </div> </div> <p>You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy.</p> <p>Can you tell me why you are not using a method?</p> <p>Any other reason?</p> <p style="text-align: center;">RECORD ALL REASONS MENTIONED.</p>	<p>NOT MARRIED ..... A</p> <p>FERTILITY-RELATED REASONS</p> <p>NOT HAVING SEX ..... B</p> <p>INFREQUENT SEX ..... C</p> <p>MENOPAUSAL/HYSTERECTOMY ..... D</p> <p>CAN'T GET PREGNANT ..... E</p> <p>NOT MENSTRUATED SINCE</p> <p>LAST BIRTH ..... F</p> <p>BREASTFEEDING ..... G</p> <p>UP TO GOD/FATALISTIC ..... H</p> <p>OPPOSITION TO USE</p> <p>RESPONDENT OPPOSED ..... I</p> <p>HUSBAND/PARTNER OPPOSED ..... J</p> <p>OTHERS OPPOSED ..... K</p> <p>RELIGIOUS PROHIBITION ..... L</p> <p>LACK OF KNOWLEDGE</p> <p>KNOWS NO METHOD ..... M</p> <p>KNOWS NO SOURCE ..... N</p> <p>METHOD-RELATED REASONS</p> <p>SIDE EFFECTS/HEALTH CONCERNS ..... O</p> <p>LACK OF ACCESS/TOO FAR ..... P</p> <p>COSTS TOO MUCH ..... Q</p> <p>PREFERRED METHOD</p> <p>NOT AVAILABLE ..... R</p> <p>NO METHOD AVAILABLE ..... S</p> <p>INCONVENIENT TO USE ..... T</p> <p>INTERFERES WITH BODY'S NORMAL PROCESSES ..... U</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON'T KNOW ..... Z</p>	
710	<p>CHECK 303: USING A CONTRACEPTIVE METHOD?</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>NOT ASKED</p> <input type="checkbox"/> </div> <div style="text-align: center;"> <p>NO, NOT CURRENTLY USING</p> <input type="checkbox"/> </div> <div style="text-align: center;"> <p>YES, CURRENTLY USING</p> <input type="checkbox"/> </div> </div>		712
711	<p>Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	<p>711B</p> <p>712</p>
711A	<p>Which contraceptive method would you prefer to use?</p>	<p>FEMALE STERILIZATION ..... 01</p> <p>MALE STERILIZATION ..... 02</p> <p>IUD ..... 03</p> <p>INJECTABLES ..... 04</p> <p>IMPLANTS ..... 05</p> <p>PILL ..... 06</p> <p>MALE CONDOM ..... 07</p> <p>FEMALE CONDOM ..... 08</p> <p>DIAPHRAGM ..... 09</p> <p>FOAM/JELLY ..... 10</p> <p>STANDARD DAYS METHOD ..... 11</p> <p>LACTATIONAL AMEN. METHOD ..... 12</p> <p>RHYTHM METHOD ..... 13</p> <p>WITHDRAWAL ..... 14</p> <p>OTHER _____ 96 (SPECIFY)</p> <p>UNSURE ..... 98</p>	<p>712</p>





NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
715A	In the last six months, have you seen any of the following programmes on television? Your Health Matters Other health related programmes	<div style="text-align: right;">YES NO</div> YOUR HEALTH MATTERS ..... 1 2 OTHER ..... 1 2 (SPECIFY)	
716	CHECK 601:  <div style="display: flex; justify-content: space-around;"> <div>YES, CURRENTLY MARRIED <input type="checkbox"/></div> <div>YES, LIVING WITH A MAN <input type="checkbox"/></div> <div>NO, NOT IN UNION <input type="checkbox"/></div> </div>		→ 801
717	CHECK 304: CURRENT CONTRACEPTIVE METHOD?  OTHER <input type="checkbox"/>	CIRCLED CODE B, G, OR N <input type="checkbox"/>  NOT ASKED <input type="checkbox"/>	→ 718  → 720
717A	Does your (husband/partner) know that you are using a method of family planning?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
718	Would you say that using contraception is mainly your decision, mainly your husband's/partner's decision, or did you both decide together?	MAINLY RESPONDENT ..... 1 MAINLY HUSBAND/PARTNER ..... 2 JOINT DECISION ..... 3  OTHER ..... 6 (SPECIFY)	
719	CHECK 304: NEITHER CODE A NOR CODE B IS CIRCLED  NEITHER STERILIZED <input type="checkbox"/> HE OR SHE STERILIZED <input type="checkbox"/>	CODE A OR B CIRCLED	→ 801
720	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER ..... 1 MORE CHILDREN ..... 2 FEWER CHILDREN ..... 3 DON'T KNOW ..... 8	

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 601 AND 602:  <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>CURRENTLY MARRIED/ LIVING WITH A MAN</p> <input type="checkbox"/> </div> <div style="text-align: center;"> <p>FORMERLY MARRIED/ LIVED WITH A MAN</p> <input type="checkbox"/> </div> <div style="text-align: center;"> <p>NEVER MARRIED AND NEVER LIVED WITH A MAN</p> <input type="checkbox"/> </div> </div>	<div style="display: flex; justify-content: space-between;"> <span>→ 803</span> <span>→ 807</span> </div>	
802	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
803	Did your (last) (husband/partner) ever attend school?	YES ..... 1 NO ..... 2	→ 806
804	What was the highest level of school he attended: primary, secondary, or higher?	PRIMARY ..... 1 SECONDARY ..... 2 HIGHER ..... 3 DON'T KNOW ..... 8	→ 806
805	What is the highest grade he completed at that level?  IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL RECORD "00".	GRADE ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	
806	CHECK 801:  <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>CURRENTLY MARRIED/ LIVING WITH A MAN</p> <input type="checkbox"/> </div> <div style="text-align: center;"> <p>FORMERLY MARRIED/ LIVED WITH A MAN</p> <input type="checkbox"/> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="width: 45%;"> <p>What is your (husband's/partner's) occupation? That is, what kind of work does he mainly do?</p> </div> <div style="width: 45%;"> <p>What was your (last) (husband's/partner's) occupation? That is, what kind of work did he mainly do?</p> </div> </div>	<div style="border: 1px dashed black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="border-bottom: 1px solid black; width: 100%;"></div>	
807	Aside from your own housework, have you done any work in the last seven days?	YES ..... 1 NO ..... 2	→ 811
808	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES ..... 1 NO ..... 2	→ 811
809	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave or any other such reason?	YES ..... 1 NO ..... 2	→ 811
810	Have you done any work in the last 12 months?	YES ..... 1 NO ..... 2	→ 815
811	What is your occupation, that is, what kind of work do you mainly do?	<div style="border: 1px dashed black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="border-bottom: 1px solid black; width: 100%;"></div>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
812	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER ..... 1 FOR SOMEONE ELSE ..... 2 SELF-EMPLOYED ..... 3	
812A	Do you usually work at home or away from home?	HOME ..... 1 AWAY ..... 2	
813	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR ..... 1 SEASONALLY/PART OF THE YEAR ..... 2 ONCE IN A WHILE ..... 3	
814	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY ..... 1 CASH AND KIND ..... 2 IN KIND ONLY ..... 3 NOT PAID ..... 4	
815	CHECK 601:  CURRENTLY MARRIED/LIVING WITH A MAN <input type="checkbox"/> NOT IN UNION <input type="checkbox"/>		→ 823
816	CHECK 814:  CODE 1 OR 2 CIRCLED <input type="checkbox"/> OTHER <input type="checkbox"/>		→ 819
817	Who usually decides how the money that you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ..... 3 OTHER ..... 6 (SPECIFY)	
818	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM ..... 1 LESS THAN HIM ..... 2 ABOUT THE SAME ..... 3 HUSBAND/PARTNER HAS NO EARNING ..... 4 DON'T KNOW ..... 8	→ 820
819	Who usually decides how your husband's/partner's earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ..... 3 HUSBAND/PARTNER HAS NO EARNING ..... 4 OTHER ..... 6 (SPECIFY)	
820	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ..... 3 SOMEONE ELSE ..... 4 OTHER ..... 6	
821	Who usually makes decisions about making major household purchases?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ..... 3 SOMEONE ELSE ..... 4 OTHER ..... 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
821A	Who usually makes decisions about making purchases for daily household needs?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ... 3 SOMEONE ELSE ..... 4 OTHER ..... 6	
822	Who usually makes decisions about visits to your family or relatives?	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ... 3 SOMEONE ELSE ..... 4 OTHER ..... 6	
823	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY ..... 1 JOINTLY ONLY ..... 2 BOTH ALONE AND JOINTLY ..... 3 DOES NOT OWN ..... 4	
824	Do you own any land either alone or jointly with someone else?	ALONE ONLY ..... 1 JOINTLY ONLY ..... 2 BOTH ALONE AND JOINTLY ..... 3 DOES NOT OWN ..... 4	
825	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	<div> PRES./ LISTEN.  PRES./ NOT LISTEN.  NOT PRES. </div> CHILDREN < 10 ..... 1 2 3 HUSBAND ..... 1 2 3 OTHER MALES ..... 1 2 3 OTHER FEMALES ... 1 2 3	
826	In your opinion, is a husband justified in hitting or beating his wife in the following situations:  If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	<div> YES  NO  DK </div> GOES OUT ..... 1 2 8 NEGL. CHILDREN ... 1 2 8 ARGUES ..... 1 2 8 REFUSES SEX ..... 1 2 8 BURNS FOOD ..... 1 2 8	

SECTION 9. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES ..... 1 NO ..... 2	→ 937
902	Can people reduce their chances of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
903	Can people get the AIDS virus from mosquito bites?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
904	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
905	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
905A	Can people reduce their chance of getting the AIDS virus by not having sexual intercourse at all?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
906	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
907	Is it possible for a healthy-looking person to have the AIDS virus?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
907A	Do you think your risk of getting infected with HIV is low, medium or high, or do you have no risk at all?	LOW ..... 1 MEDIUM ..... 2 HIGH ..... 3 NO RISK ..... 4 OTHER ..... 6 DON'T KNOW ..... 8	
908	Can the virus that causes AIDS be transmitted from a mother to her baby:  During pregnancy? During delivery? By breastfeeding?	<div style="text-align: right;">YES    NO    DK</div> DURING PREG. .... 1    2    8 DURING DELIVERY ... 1    2    8 BREASTFEEDING ... 1    2    8	
909	CHECK 908: AT LEAST <input type="checkbox"/> ONE 'YES' <input type="checkbox"/>  OTHER <input type="checkbox"/> _____		→ 910A
910	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
910A	Have you heard about antiretroviral drugs (ARVs) that people infected with the AIDS virus can get from a doctor or a nurse to help them live longer?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 911
910B	Do you know any one on antiretroviral therapy (ART) treatment?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
911	CHECK 208 AND 215:  <div style="display: flex; justify-content: space-around;"> <div> LAST BIRTH SINCE JANUARY 2011 <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; vertical-align: middle;"></div> </div> <div> LAST BIRTH BEFORE JANUARY 2011 <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; vertical-align: middle;"></div> </div> </div>	NO BIRTHS <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; vertical-align: middle;"></div> → 926 <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; vertical-align: middle;"></div> → 926	
912	CHECK 408 FOR LAST BIRTH:  <div style="display: flex; justify-content: space-around;"> <div> HAD ANTENATAL CARE <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; vertical-align: middle;"></div> </div> <div> NO ANTENATAL CARE <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block; vertical-align: middle;"></div> </div> </div>	→ 920	
913	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
914	During any of the antenatal visits for your last birth, did anyone talk to you about:  Babies getting the AIDS virus from their mother? Things that you can do to prevent getting the AIDS virus? Getting tested for the AIDS virus?	<div style="display: flex; justify-content: space-around;"> YES NO DK </div> AIDS FROM MOTHER 1 2 8 THINGS TO DO . 1 2 8 TESTED FOR AIDS . 1 2 8	
915	Were you offered a test for the AIDS virus as part of your antenatal care?	YES ..... 1 NO ..... 2	
916	I don't want to know the results, but were you tested for the AIDS virus as part of your antenatal care?	YES ..... 1 NO ..... 2	→ 920
917	Where was the test done?  PROBE TO IDENTIFY THE TYPE OF SOURCE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 11 GOVT. HEALTH CENTER/POST ... 12 STAND-ALONE VCT CENTRE ..... 13 FAMILY PLANNING CLINIC ..... 14 MOBILE HOSPITAL/CLINIC ..... 15 COMMUNITY BASED AGENT/FIELDWORKER ..... 16 OTHER PUBLIC SECTOR ..... 17 (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR ..... 21 MISSION HOSPITAL/CLINIC..... 22 STAND-ALONE VCT CENTRE ..... 23 MOBILE HOSPITAL/CLINIC ..... 24 COMMUNITY BASED AGENT/FIELDWORKER ..... 25 OTHER PRIVATE MEDICAL SECTOR ..... 26 (SPECIFY)  OTHER SOURCE PRISON ..... 31  OTHER _____ (SPECIFY) 96	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
918	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO ..... 2	→ 924
918A	Did you disclose your results to any of the following:  1 (Husband/Partner)? 2 Family member? 3 Religious leader? 4 Friend? 5 Any other?	YES NO HUSBAND/PARTNER ..... 1 2 FAMILY MEMBER ..... 1 2 RELIGIOUS LEADER ..... 1 2 FRIEND ..... 1 2 OTHER ..... 1 2 (SPECIFY)	
919	All women are supposed to receive counselling after being tested. After you were tested, did you receive counselling?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
919B	How many times were you tested in total at ANC?	TIMES TESTED ..... <input type="text"/> <input type="text"/>	→ 924
920	CHECK 434 FOR LAST BIRTH: ANY CODE <input type="text"/> OTHER <input type="text"/> 21-36 CIRCLED ↓		→ 926
921	Between the time you went for delivery but before the baby was born, were you offered a test for the AIDS virus?	YES ..... 1 NO ..... 2	
922	I don't want to know the results, but were you tested for the AIDS virus at that time?	YES ..... 1 NO ..... 2	→ 926
923	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO ..... 2	
924	Have you been tested for the AIDS virus since that time you were tested during your pregnancy?	YES ..... 1 NO ..... 2	→ 927
925	How many months ago was your most recent HIV test?	MONTHS AGO ..... <input type="text"/> <input type="text"/> TWO OR MORE YEARS ..... 95	→ 932
926	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES ..... 1 NO ..... 2	→ 930
927	How many months ago was your most recent HIV test?	MONTHS AGO ..... <input type="text"/> <input type="text"/> TWO OR MORE YEARS ..... 95	
927A	For your most recent test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	ASKED FOR THE TEST ..... 1 OFFERED AND ACCEPTED ..... 2 REQUIRED ..... 3	
928	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO ..... 2	



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
929	<p>Where was the test done?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL ..... 11</p> <p>GOVT. HEALTH CENTER/POST ... 12</p> <p>STAND-ALONE VCT CENTRE ..... 13</p> <p>FAMILY PLANNING CLINIC ..... 14</p> <p>MOBILE HOSPITAL/CLINIC ..... 15</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER ..... 16</p> <p>OTHER PUBLIC</p> <p>SECTOR ..... 17</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC/</p> <p>PRIVATE DOCTOR ..... 21</p> <p>MISSION HOSPITAL/CLINIC ..... 22</p> <p>STAND-ALONE VCT CENTRE ..... 23</p> <p>MOBILE HOSPITAL/CLINIC ..... 24</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER ..... 25</p> <p>OTHER PRIVATE MEDICAL</p> <p>SECTOR ..... 26</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>PRISON ..... 31</p> <p>OTHER</p> <p>_____ 96</p> <p>(SPECIFY)</p>	<p>→ 932</p>
930	<p>Do you know of a place where people can go to get tested for the AIDS virus?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	<p>→ 932</p>
931	<p>Where is that?</p> <p>Any other place?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER/POST ... B</p> <p>STAND-ALONE VCT CENTRE ..... C</p> <p>FAMILY PLANNING CLINIC ..... D</p> <p>MOBILE HOSPITAL/CLINIC ..... E</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER ..... F</p> <p>OTHER PUBLIC</p> <p>SECTOR ..... G</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC/</p> <p>PRIVATE DOCTOR ..... H</p> <p>MISSION HOSPITAL/CLINIC ..... I</p> <p>STAND-ALONE VCT CENTRE ..... J</p> <p>MOBILE HOSPITAL/CLINIC ..... K</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER ..... L</p> <p>OTHER PRIVATE MEDICAL</p> <p>SECTOR ..... M</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>PRISON ..... N</p> <p>OTHER</p> <p>_____ X</p> <p>(SPECIFY)</p>	
932	<p>Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
933	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
934	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
935	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED ..... 1 SHOULD NOT BE ALLOWED ..... 2 DK/NOT SURE/DEPENDS ..... 8	
935A	Do you personally know someone who has or is suspected to have the AIDS virus?	YES ..... 1 NO ..... 2	
935B	Do you agree or disagree with the following statement: "People with the AIDS virus should be blamed for bringing the disease into the community."	AGREE ..... 1 DISAGREE ..... 2 DON'T KNOW ..... 8	
936	Should children aged 12-14 be taught about using a condom to avoid getting AIDS?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
936A	Should children aged 12-14 be taught to wait until they get married to have sexual intercourse in order to avoid getting AIDS?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
936B	Some individuals would choose not to go for HIV testing.  Why in your opinion is this so?  (CIRCLE ALL THAT ARE MENTIONED)	FEEL THEY ARE NOT AT RISK ..... A FEAR OF RESULTS ..... B FEAR OF STIGMA/DISCRIMINATION ..... C DON'T KNOW WHERE TO GO ..... D  OTHER _____ X (SPECIFY)	
937	CHECK 901:  HEARD ABOUT AIDS <input type="checkbox"/> ↓ Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact?  NOT HEARD ABOUT AIDS <input type="checkbox"/> ↓ Have you heard about infections that can be transmitted through sexual contact?	YES ..... 1 NO ..... 2	
938	CHECK 613: HAS HAD SEXUAL INTERCOURSE <input type="checkbox"/> HAS NOT HAD SEXUAL INTERCOURSE <input type="checkbox"/>		→ 945A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
939	CHECK 937: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS?  <div style="display: flex; justify-content: space-around; align-items: center;"> <span>YES <input type="checkbox"/></span> <span>NO <input type="checkbox"/></span> </div>		→ 941
940	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
941	Sometimes women experience a bad smelling abnormal genital discharge. During the last 12 months, have you had a bad smelling abnormal genital discharge?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
942	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
943	CHECK 940, 941, AND 942: <div style="display: flex; justify-content: space-around; align-items: center;"> <span>HAS HAD AN INFECTION (ANY 'YES') <input type="checkbox"/></span> <span>HAS NOT HAD AN INFECTION OR DOES NOT KNOW <input type="checkbox"/></span> </div>		→ 945A
944	The last time you had (PROBLEM FROM 940/941/942), did you seek any kind of advice or treatment?	YES ..... 1 NO ..... 2	→ 945A
945	Where did you go?  Any other place?  PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE(S))  _____ (NAME OF PLACE(S))  _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTER/POST ... B STAND-ALONE VCT CENTRE ..... C FAMILY PLANNING CLINIC ..... D MOBILE HOSPITAL/CLINIC ..... E COMMUNITY BASED AGENT/FIELDWORKER ..... F OTHER PUBLIC SECTOR ..... G (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR ..... H MISSION HOSPITAL/CLINIC ..... I STAND-ALONE VCT CENTRE ..... J MOBILE HOSPITAL/CLINIC ..... K COMMUNITY BASED AGENT/FIELDWORKER ..... L OTHER PRIVATE MEDICAL SECTOR ..... M (SPECIFY)  OTHER SOURCE SHOP ..... N  OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
945A	Husbands and wives do not always agree on everything. If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in refusing to have sex with him?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
946	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
946A	Is a wife justified in refusing to have sex with her husband when she is tired or not in the mood?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
947	Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with women other than his wives?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
948	CHECK 601: CURRENTLY MARRIED/ LIVING WITH A PARTNER <input type="checkbox"/> NOT IN UNION <input type="checkbox"/> → 1000A		
949	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES ..... 1 NO ..... 2 DEPENDS/NOT SURE ..... 8	
950	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES ..... 1 NO ..... 2 DEPENDS/NOT SURE ..... 8	

SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP		
1000A	Have you ever heard of an illness called tuberculosis or TB?	YES ..... 1 NO ..... 2	→ 1001		
1000B	How does tuberculosis spread from one person to another?  PROBE: Any other ways?  RECORD ALL MENTIONED.	THROUGH THE AIR WHEN COUGHING OR SNEEZING ..... A THROUGH SHARING UTENSILS ..... B THROUGH TOUCHING A PERSON WITH TB ..... C THROUGH FOOD ..... D THROUGH SEXUAL CONTACT ..... E THROUGH MOSQUITO BITES ..... F  OTHER ..... X (SPECIFY) DON'T KNOW ..... Z			
1000C	Can tuberculosis be cured?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8			
1000D	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET ..... 1 NO ..... 2 DON'T KNOW ..... 8			
1000E	If a member of your family got tuberculosis, would you care for them?	YES ..... 1 NO ..... 2 DON'T KNOW/DEPENDS ..... 8			
1001	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months?  IF YES: How many injections have you had?  IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'.  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS ... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>  NONE ..... 00			→ 1004
1002	Among these injections, how many were administered by a doctor, a nurse, a dentist, or any other health worker?  IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'.  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS ... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>  NONE ..... 00			→ 1004

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1002A	<p>The last time you had an injection given to you by a trained health worker where did you go to get the injection?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL ..... 11</p> <p>GOVT. HEALTH CENTER/POST ... 12</p> <p>MOBILE HOSPITAL/CLINIC ..... 13</p> <p>OTHER PUBLIC</p> <p>SECTOR ..... 16</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC/</p> <p>PRIVATE DOCTOR ..... 21</p> <p>MISSION HOSPITAL/CLINIC ..... 22</p> <p>DENTAL CLINIC/OFFICE ..... 23</p> <p>MOBILE HOSPITAL/CLINIC ..... 24</p> <p>PHARMACY ..... 25</p> <p>OFFICE OR HOME OF NURSE/</p> <p>HEALTH WORKER ..... 26</p> <p>OTHER PRIVATE MEDICAL</p> <p>SECTOR ..... 27</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>AT HOME ..... 31</p> <p>OTHER ..... 96</p> <p>(SPECIFY)</p>	
1003	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
1004	Do you currently smoke cigarettes?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 1006
1005	In the last 24 hours, how many cigarettes did you smoke?	CIGARETTES ..... <input type="text"/>	
1006	Do you currently smoke or use any (other) type of tobacco?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 1007A
1007	<p>What (other) type of tobacco do you currently smoke or use?</p> <p>RECORD ALL MENTIONED.</p>	<p>PIPE ..... A</p> <p>CHEWING TOBACCO ..... B</p> <p>SNUFF ..... C</p> <p>OTHER ..... X</p> <p>(SPECIFY)</p>	
1007A	Do you drink alcohol?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 1008
1007B	In the last one week how many days did you drink alcohol?	NUMBER OF DAYS ..... <input type="text"/>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																														
1008	<p>Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not?</p> <p>Getting permission to go for advice or treatment?</p> <p>Getting money needed for advice or treatment?</p> <p>The distance to the health facility?</p> <p>Having to take transport?</p> <p>Not wanting to go alone?</p> <p>Concern that there may not be a female health provider?</p> <p>Concern that there may not be any health provider?</p> <p>Concern that there may be no drugs available?</p> <p>Rude attitude of health provider?</p>	<table border="0"> <thead> <tr> <th></th><th>BIG PROB- LEM</th><th>NOT A BIG PROB- LEM</th></tr> </thead> <tbody> <tr> <td>PERMISSION TO GO ...</td><td>1</td><td>2</td></tr> <tr> <td>GETTING MONEY .....</td><td>1</td><td>2</td></tr> <tr> <td>DISTANCE .....</td><td>1</td><td>2</td></tr> <tr> <td>TAKING TRANSPORT ...</td><td>1</td><td>2</td></tr> <tr> <td>GO ALONE .....</td><td>1</td><td>2</td></tr> <tr> <td>NO FEMALE PROVIDER .</td><td>1</td><td>2</td></tr> <tr> <td>NO PROVIDER .....</td><td>1</td><td>2</td></tr> <tr> <td>NO DRUGS .....</td><td>1</td><td>2</td></tr> <tr> <td>RUDE ATTITUDE ...</td><td>1</td><td>2</td></tr> </tbody> </table>		BIG PROB- LEM	NOT A BIG PROB- LEM	PERMISSION TO GO ...	1	2	GETTING MONEY .....	1	2	DISTANCE .....	1	2	TAKING TRANSPORT ...	1	2	GO ALONE .....	1	2	NO FEMALE PROVIDER .	1	2	NO PROVIDER .....	1	2	NO DRUGS .....	1	2	RUDE ATTITUDE ...	1	2	
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NO DRUGS .....	1	2																															
RUDE ATTITUDE ...	1	2																															
1009	Are you covered by any health insurance or health scheme?	YES ..... 1 NO ..... 2	→ 1010A																														
1010	<p>What type of health (insurance/scheme)?</p> <p>RECORD ALL MENTIONED.</p>	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE ..... A HEALTH INSURANCE THROUGH EMPLOYER ..... B SOCIAL SECURITY ..... C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE . D LOW COST PRE-PAYMENT SCHEME/STANDARD ..... E HIGH COST PRE-PAYMENT SCHEME/PREMIUM ..... F OTHER ..... X (SPECIFY) _____																															
1010A	CHECK 217: (YOUNGEST) CHILD <input type="checkbox"/> IS AGE 0-17 ↓      OTHER <input type="checkbox"/> _____		→ 1010C																														
1010B	<p>Now I would like to ask you about your own child(ren) who (is/are) under the age of 18.</p> <p>Have you made arrangements for someone to care for (him/her/them) in the event that you fall sick or are unable to care for (him/her/them)?</p>	YES ..... 1 NO ..... 2 UNSURE ..... 8																															
1010C	(Besides your own child/children), are you the primary caregiver for any children under the age of 18?	YES ..... 1 NO ..... 2	→ 1101																														
1010D	Have you made arrangements for someone to care for this child/these children in the event that you fall sick or are unable to care for (him/her/them)?	YES ..... 1 NO ..... 2 UNSURE ..... 8																															

**SECTION 11. MATERNAL MORTALITY**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP			
1101	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died.  How many children did your mother give birth to, including you?	NUMBER OF BIRTHS TO NATURAL MOTHER ..... <input type="text"/> <input type="text"/>					
1102	CHECK 1101:  TWO OR MORE BIRTHS <input type="checkbox"/>	ONLY ONE BIRTH (RESPONDENT ONLY) <input type="checkbox"/>		→ 1201			
1103	How many births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS ..... <input type="text"/> <input type="text"/>					
1104	What was the name given to your oldest (next oldest) brother or sister?	(1) _____	(2) _____	(3) _____	(4) _____	(5) _____	(6) _____
1105	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
1106	Is (NAME) still alive?	YES .... 1 NO .... 2 GO TO 1108 DK .... 8 GO TO (2)	YES .... 1 NO .... 2 GO TO 1108 DK .... 8 GO TO (3)	YES .... 1 NO .... 2 GO TO 1108 DK .... 8 GO TO (4)	YES .... 1 NO .... 2 GO TO 1108 DK .... 8 GO TO (5)	YES .... 1 NO .... 2 GO TO 1108 DK .... 8 GO TO (6)	YES .... 1 NO .... 2 GO TO 1108 DK .... 8 GO TO (7)
1107	How old is (NAME)?	<input type="text"/> <input type="text"/> GO TO (2)	<input type="text"/> <input type="text"/> GO TO (3)	<input type="text"/> <input type="text"/> GO TO (4)	<input type="text"/> <input type="text"/> GO TO (5)	<input type="text"/> <input type="text"/> GO TO (6)	<input type="text"/> <input type="text"/> GO TO (7)
1108	How many years ago did (NAME) die?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
1109	How old was (NAME) when he/she died?	<input type="text"/> <input type="text"/>  IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (2)	<input type="text"/> <input type="text"/>  IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (3)	<input type="text"/> <input type="text"/>  IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (4)	<input type="text"/> <input type="text"/>  IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (5)	<input type="text"/> <input type="text"/>  IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (6)	<input type="text"/> <input type="text"/>  IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (7)
1110	Was (NAME) pregnant when she died?	YES .... 1 GO TO 1113 NO .... 2	YES .... 1 GO TO 1113 NO .... 2	YES .... 1 GO TO 1113 NO .... 2	YES .... 1 GO TO 1113 NO .... 2	YES .... 1 GO TO 1113 NO .... 2	YES .... 1 GO TO 1113 NO .... 2
1111	Did (NAME) die during childbirth?	YES .... 1 GO TO 1113 NO .... 2	YES .... 1 GO TO 1113 NO .... 2	YES .... 1 GO TO 1113 NO .... 2	YES .... 1 GO TO 1113 NO .... 2	YES .... 1 GO TO 1113 NO .... 2	YES .... 1 GO TO 1113 NO .... 2
1112	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES .... 1 NO .... 2	YES .... 1 NO .... 2	YES .... 1 NO .... 2	YES .... 1 NO .... 2	YES .... 1 NO .... 2	YES .... 1 NO .... 2
1113	How many live born children did (NAME) give birth to during her lifetime?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
IF NO MORE BROTHERS OR SISTERS, GO TO 1201							



1104	What was the name given to your oldest (next oldest) brother or sister?	(7) _____	(8) _____	(9) _____	(10) _____	(11) _____	(12) _____
1105	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
1106	Is (NAME) still alive?	YES .... 1 NO .... 2 GO TO 1108 ↙ DK .... 8 GO TO (8) ↙	YES .... 1 NO .... 2 GO TO 1108 ↙ DK .... 8 GO TO (9) ↙	YES .... 1 NO .... 2 GO TO 1108 ↙ DK .... 8 GO TO (10) ↙	YES .... 1 NO .... 2 GO TO 1108 ↙ DK .... 8 GO TO (11) ↙	YES .... 1 NO .... 2 GO TO 1108 ↙ DK .... 8 GO TO (12) ↙	YES .... 1 NO .... 2 GO TO 1108 ↙ DK .... 8 GO TO (13) ↙
1107	How old is (NAME)?	<input type="text"/> <input type="text"/> GO TO (8)	<input type="text"/> <input type="text"/> GO TO (9)	<input type="text"/> <input type="text"/> GO TO (10)	<input type="text"/> <input type="text"/> GO TO (11)	<input type="text"/> <input type="text"/> GO TO (12)	<input type="text"/> <input type="text"/> GO TO (13)
1108	How many years ago did (NAME) die?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
1109	How old was (NAME) when he/she died?	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (8)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (9)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (10)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (11)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (12)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (13)
1110	Was (NAME) pregnant when she died?	YES .... 1 GO TO 1113 ↙ NO .... 2	YES .... 1 GO TO 1113 ↙ NO .... 2	YES .... 1 GO TO 1113 ↙ NO .... 2	YES .... 1 GO TO 1113 ↙ NO .... 2	YES .... 1 GO TO 1113 ↙ NO .... 2	YES .... 1 GO TO 1113 ↙ NO .... 2
1111	Did (NAME) die during childbirth?	YES .... 1 GO TO 1113 ↙ NO .... 2	YES .... 1 GO TO 1113 ↙ NO .... 2	YES .... 1 GO TO 1113 ↙ NO .... 2	YES .... 1 GO TO 1113 ↙ NO .... 2	YES .... 1 GO TO 1113 ↙ NO .... 2	YES .... 1 GO TO 1113 ↙ NO .... 2
1112	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES .... 1 NO .... 2	YES .... 1 NO .... 2	YES .... 1 NO .... 2	YES .... 1 NO .... 2	YES .... 1 NO .... 2	YES .... 1 NO .... 2
1113	How many live born children did (NAME) give birth to during her lifetime?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

IF NO MORE BROTHERS OR SISTERS, GO TO 1201

TICK HERE IF CONTINUATION SHEET USED

☐

SECTION 12. DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																			
1201	<p>CHECK HOUSEHOLD QUESTIONNAIRE, QH21 AND COVER PAGE.</p> <p>WOMAN SELECTED FOR THIS SECTION <input type="checkbox"/>      WOMAN NOT SELECTED <input type="checkbox"/></p>		→ 1234																																			
1202	<p>CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED.</p> <p>PRIVACY OBTAINED ..... 1      PRIVACY NOT POSSIBLE ..... 2</p>		→ 1233																																			
	<p>READ TO THE RESPONDENT</p> <p>Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in Zambia. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions.</p>																																					
1203	<p>CHECK 601 AND 602:</p> <p>CURRENTLY MARRIED/LIVING WITH A MAN <input type="checkbox"/>      FORMERLY MARRIED/LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH HUSBAND/PARTNER) <input type="checkbox"/>      NEVER MARRIED/NEVER LIVED WITH A MAN <input type="checkbox"/></p>		→ 1217																																			
1204	<p>First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) (husband/partner)?</p> <p>a) He (is/was) jealous or angry if you (talk/talked) to other men? b) He frequently (accuses/accused) you of being unfaithful? c) He (does/did) not permit you to meet your female friends? d) He (tries/tried) to limit your contact with your family? e) He (insists/insisted) on knowing where you (are/were) at all times?</p>	<table> <thead> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> </thead> <tbody> <tr> <td>JEALOUS .....</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>ACCUSES .....</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>NOT MEET FRIENDS ...</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>NO FAMILY .....</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>WHERE YOU ARE .....</td><td>1</td><td>2</td><td>8</td></tr> </tbody> </table>		YES	NO	DK	JEALOUS .....	1	2	8	ACCUSES .....	1	2	8	NOT MEET FRIENDS ...	1	2	8	NO FAMILY .....	1	2	8	WHERE YOU ARE .....	1	2	8												
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NO FAMILY .....	1	2	8																																			
WHERE YOU ARE .....	1	2	8																																			
1205	<p>Now I need to ask some more questions about your relationship with your (last) (husband/partner).</p> <p>A Did your (last) (husband/partner) ever:</p> <p>a) say or do something to humiliate you in front of others? b) threaten to hurt or harm you or someone you care about? c) insult you or make you feel bad about yourself?</p>	<p>B How often did this happen during the last 12 months: often, only sometimes, or not at all?</p> <table> <thead> <tr> <th></th><th>EVER</th><th>OFTEN</th><th>SOME-TIMES</th><th>NOT IN LAST 12 MONTHS</th></tr> </thead> <tbody> <tr> <td>a) YES</td><td>1 →</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>a) NO</td><td>2 ↓</td><td></td><td></td><td></td></tr> <tr> <td>b) YES</td><td>1 →</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>b) NO</td><td>2 ↓</td><td></td><td></td><td></td></tr> <tr> <td>c) YES</td><td>1 →</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>c) NO</td><td>2 ↓</td><td></td><td></td><td></td></tr> </tbody> </table>		EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS	a) YES	1 →	1	2	3	a) NO	2 ↓				b) YES	1 →	1	2	3	b) NO	2 ↓				c) YES	1 →	1	2	3	c) NO	2 ↓				
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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																							
1206	<p>A Did your (last) (husband/partner) ever do any of the following things to you:</p> <table border="1"> <thead> <tr> <th></th><th>EVER</th><th>OFTEN</th><th>SOME-TIMES</th><th>NOT IN LAST 12 MONTHS</th></tr> </thead> <tbody> <tr> <td>a) push you, shake you, or throw something at you?</td><td>YES 1 → NO 2 ↓</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>b) slap you?</td><td>YES 1 → NO 2 ↓</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>c) twist your arm or pull your hair?</td><td>YES 1 → NO 2 ↓</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>d) punch you with his fist or with something that could hurt you?</td><td>YES 1 → NO 2 ↓</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>e) kick you, drag you, or beat you up?</td><td>YES 1 → NO 2 ↓</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>f) try to choke you or burn you on purpose?</td><td>YES 1 → NO 2 ↓</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>g) threaten or attack you with a knife, gun, or other weapon?</td><td>YES 1 → NO 2 ↓</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>h) physically force you to have sexual intercourse with him when you did not want to?</td><td>YES 1 → NO 2 ↓</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>i) physically force you to perform any other sexual acts you did not want to?</td><td>YES 1 → NO 2 ↓</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>j) force you with threats or in any other way to perform sexual acts you did not want to?</td><td>YES 1 → NO 2</td><td>1</td><td>2</td><td>3</td></tr> </tbody> </table>		EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS	a) push you, shake you, or throw something at you?	YES 1 → NO 2 ↓	1	2	3	b) slap you?	YES 1 → NO 2 ↓	1	2	3	c) twist your arm or pull your hair?	YES 1 → NO 2 ↓	1	2	3	d) punch you with his fist or with something that could hurt you?	YES 1 → NO 2 ↓	1	2	3	e) kick you, drag you, or beat you up?	YES 1 → NO 2 ↓	1	2	3	f) try to choke you or burn you on purpose?	YES 1 → NO 2 ↓	1	2	3	g) threaten or attack you with a knife, gun, or other weapon?	YES 1 → NO 2 ↓	1	2	3	h) physically force you to have sexual intercourse with him when you did not want to?	YES 1 → NO 2 ↓	1	2	3	i) physically force you to perform any other sexual acts you did not want to?	YES 1 → NO 2 ↓	1	2	3	j) force you with threats or in any other way to perform sexual acts you did not want to?	YES 1 → NO 2	1	2	3	<p>B How often did this happen during the last 12 months: often, only sometimes, or not at all?</p>	
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1207	<p>CHECK 1206A (a-j):</p> <p>AT LEAST ONE 'YES' <input type="checkbox"/> NOT A SINGLE 'YES' <input type="checkbox"/></p> <p>↓</p>	<p>1210</p>																																																								
1208	<p>How long after you first (got married/started living together) with your (last) (husband/partner) did (this/any of these things) first happen?</p> <p>IF LESS THAN ONE YEAR, RECORD '00'.</p>	<p>NUMBER OF YEARS ..... <input type="text"/> <input type="text"/></p> <p>BEFORE MARRIAGE/BEFORE LIVING TOGETHER ..... 95</p>																																																								
1209	<p>Did the following ever happen as a result of what your (last) (husband/partner) did to you:</p> <p>a) You had cuts, bruises, or aches?</p> <p>b) You had eye injuries, sprains, dislocations, or burns?</p> <p>c) You had deep wounds, broken bones, broken teeth, or any other serious injury?</p>	<p>YES ..... 1 NO ..... 2</p> <p>YES ..... 1 NO ..... 2</p> <p>YES ..... 1 NO ..... 2</p>																																																								

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																				
1210	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/partner) at times when he was not already beating or physically hurting you?	YES ..... 1 NO ..... 2	→ 1212																				
1211	In the last 12 months, how often have you done this to your (last) (husband/partner): often, only sometimes, or not at all?	OFTEN ..... 1 SOMETIMES ..... 2 NOT AT ALL ..... 3																					
1212	Does (did) your (last) (husband/partner) drink alcohol?	YES ..... 1 NO ..... 2	→ 1214																				
1213	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN ..... 1 SOMETIMES ..... 2 NEVER ..... 3																					
1214	Are (Were) you afraid of your (last) (husband/partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID ..... 1 SOMETIMES AFRAID ..... 2 NEVER AFRAID ..... 3																					
1215	CHECK 609:  MARRIED MORE THAN ONCE <input type="checkbox"/> MARRIED ONLY ONCE <input type="checkbox"/>		→ 1217																				
1216	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>A So far we have been talking about the behaviour of your (current/last) (husband/partner). Now I want to ask you about the behaviour of any previous (husband/partner).</p> <p>a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?</p> <p>b) Did any previous (husband/partner) physically force you to have intercourse or perform any other sexual acts against your will?</p> </div> <div style="width: 45%;"> <p>B How long ago did this last happen?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">EVER</th><th style="width: 15%;">0 - 11 MONTHS AGO</th><th style="width: 15%;">12+ MONTHS AGO</th><th style="width: 15%;">DON'T REMEMBER</th></tr> </thead> <tbody> <tr> <td>YES 1 →</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>NO 2 ↓</td><td></td><td></td><td></td></tr> <tr> <td>YES 1 →</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>NO 2</td><td></td><td></td><td></td></tr> </tbody> </table> </div> </div>	EVER	0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER	YES 1 →	1	2	3	NO 2 ↓				YES 1 →	1	2	3	NO 2					
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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1217	<p>CHECK 601 AND 602:</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>EVER MARRIED/EVER LIVED WITH A MAN <input type="checkbox"/></p> <p>From the time you were 15 years old has anyone other than (your/any) (husband/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically?</p> </div> <div style="width: 45%;"> <p>NEVER MARRIED/NEVER LIVED WITH A MAN <input type="checkbox"/></p> <p>From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?</p> </div> </div>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>REFUSED TO ANSWER/ NO ANSWER ..... 3</p>	<p>→ 1220</p>
1218	<p>Who has hurt you in this way?</p> <p>Anyone else?</p> <p>RECORD ALL MENTIONED.</p>	<p>MOTHER/STEP-MOTHER ..... A</p> <p>FATHER/STEP-FATHER ..... B</p> <p>SISTER/BROTHER ..... C</p> <p>DAUGHTER/SON ..... D</p> <p>OTHER RELATIVE ..... E</p> <p>CURRENT BOYFRIEND ..... F</p> <p>FORMER BOYFRIEND ..... G</p> <p>MOTHER-IN-LAW ..... H</p> <p>FATHER-IN-LAW ..... I</p> <p>OTHER IN-LAW ..... J</p> <p>TEACHER ..... K</p> <p>EMPLOYER/SOMEONE AT WORK ..... L</p> <p>POLICE/SOLDIER ..... M</p> <p>OTHER ..... X</p> <p>(SPECIFY)</p>	
1219	<p>In the last 12 months, how often (has this person/have these persons) physically hurt you: often, only sometimes, or not at all?</p>	<p>OFTEN ..... 1</p> <p>SOMETIMES ..... 2</p> <p>NOT AT ALL ..... 3</p>	
1220	<p>CHECK 201, 226, AND 230:</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>EVER BEEN PREGNANT <input type="checkbox"/></p> <p>(YES ON 201 OR 226 OR 230)</p> </div> <div style="width: 45%;"> <p>NEVER BEEN PREGNANT <input type="checkbox"/></p> </div> </div>		<p>→ 1223</p>
1221	<p>Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	<p>→ 1223</p>
1222	<p>Who has done any of these things to physically hurt you while you were pregnant?</p> <p>Anyone else?</p> <p>RECORD ALL MENTIONED.</p>	<p>CURRENT HUSBAND/PARTNER ..... A</p> <p>MOTHER/STEP-MOTHER ..... B</p> <p>FATHER/STEP-FATHER ..... C</p> <p>SISTER/BROTHER ..... D</p> <p>DAUGHTER/SON ..... E</p> <p>OTHER RELATIVE ..... F</p> <p>FORMER HUSBAND/PARTNER ..... G</p> <p>CURRENT BOYFRIEND ..... H</p> <p>FORMER BOYFRIEND ..... I</p> <p>MOTHER-IN-LAW ..... J</p> <p>FATHER-IN-LAW ..... K</p> <p>OTHER IN-LAW ..... L</p> <p>TEACHER ..... M</p> <p>EMPLOYER/SOMEONE AT WORK ..... N</p> <p>POLICE/SOLDIER ..... O</p> <p>OTHER ..... X</p> <p>(SPECIFY)</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1223	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN <input type="checkbox"/> NEVER MARRIED/NEVER LIVED WITH A MAN <input type="checkbox"/>		→ 1223B
1223A	Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner).  At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER/ NO ANSWER ..... 3	→ 1224 → 1225A
1223B	At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER/ NO ANSWER ..... 3	→ 1227
1224	Who was the person who was forcing you the first time?	CURRENT HUSBAND/PARTNER ..... 01 FORMER HUSBAND/PARTNER ..... 02 CURRENT/FORMER BOYFRIEND ..... 03 FATHER/STEP-FATHER ..... 04 BROTHER/STEP-BROTHER ..... 05 OTHER RELATIVE ..... 06 IN-LAW ..... 07 OWN FRIEND/ACQUAINTANCE ..... 08 FAMILY FRIEND ..... 09 TEACHER ..... 10 EMPLOYER/SOMEONE AT WORK ..... 11 POLICE/SOLDIER ..... 12 PRIEST/RELIGIOUS LEADER ..... 13 STRANGER ..... 14  OTHER ..... 96 (SPECIFY)	
1225	CHECK 601 AND 602:  EVER MARRIED/EVER LIVED WITH A MAN <input type="checkbox"/> NEVER MARRIED/NEVER LIVED WITH A MAN <input type="checkbox"/>  In the last 12 months, has anyone other than (your/any) (husband/partner) physically forced you to have sexual intercourse when you did not want to?  In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES ..... 1 NO ..... 2	→ 1226
1225A	CHECK 1206A (h-j) and 1216A(b)  AT LEAST ONE 'YES' <input type="checkbox"/> NOT A SINGLE 'YES' <input type="checkbox"/>		→ 1227
1226	CHECK 601 AND 602:  EVER MARRIED/EVER LIVED WITH A MAN <input type="checkbox"/> NEVER MARRIED/NEVER LIVED WITH A MAN <input type="checkbox"/>  How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by anyone, including (your/any) husband/partner?  How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP				
1227	CHECK 1206A (a-j), 1216A (a,b), 1217, 1221, 1223A, AND 1223B:  AT LEAST ONE 'YES' <input type="checkbox"/> NOT A SINGLE 'YES' <input type="checkbox"/>		→ 1231				
1228	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES ..... 1 NO ..... 2	→ 1230				
1229	From whom have you sought help?  Anyone else?  RECORD ALL MENTIONED.	OWN FAMILY ..... A HUSBAND'S/PARTNER'S FAMILY ..... B CURRENT/FORMER HUSBAND/PARTNER ..... C CURRENT/FORMER BOYFRIEND ..... D FRIEND ..... E NEIGHBOUR ..... F RELIGIOUS LEADER ..... G DOCTOR/MEDICAL PERSONNEL ..... H POLICE ..... I LAWYER ..... J SOCIAL SERVICE ORGANIZATION ..... K  OTHER _____ X (SPECIFY)	→ 1231				
1230	Have you ever told any one about this?	YES ..... 1 NO ..... 2					
1231	As far as you know, did your father ever beat your mother?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8					
THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.							
1232	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	<div style="display: flex; justify-content: space-between;"> <span>YES ONCE</span> <span>YES, MORE THAN ONCE</span> <span>NO</span> </div> HUSBAND ..... 1         2         3 OTHER MALE ADULT ... 1         2         3 FEMALE ADULT ..... 1         2         3					
1233	INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE  _____  _____  _____						
1234	RECORD THE TIME.	HOUR ..... MINUTES .....	<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>				

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

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COMMENTS ON SPECIFIC QUESTIONS:

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ANY OTHER COMMENTS:

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SUPERVISOR'S OBSERVATIONS

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NAME OF SUPERVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_

EDITOR'S OBSERVATIONS

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NAME OF EDITOR: \_\_\_\_\_ DATE: \_\_\_\_\_



INSTRUCTIONS:

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.  
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

INFORMATION TO BE CODED FOR EACH COLUMN

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

- B BIRTHS  
P PREGNANCIES  
T TERMINATIONS
- 0 NO METHOD  
1 FEMALE STERILIZATION  
2 MALE STERILIZATION  
3 IUD  
4 INJECTABLES  
5 IMPLANTS  
6 PILL  
7 CONDOM  
8 FEMALE CONDOM  
9 DIAPHRAGM  
J FOAM OR JELLY  
K STANDARD DAYS  
L LACTATIONAL AMENORRHEA METHOD  
M RHYTHM METHOD  
N WITHDRAWAL  
X OTHER MODERN METHOD  
Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY  
1 BECAME PREGNANT WHILE USING  
2 WANTED TO BECOME PREGNANT  
3 HUSBAND/PARTNER DISAPPROVED  
4 WANTED MORE EFFECTIVE METHOD  
5 SIDE EFFECTS/HEALTH CONCERNS  
6 LACK OF ACCESS/TOO FAR  
7 COSTS TOO MUCH  
8 INCONVENIENT TO USE  
F UP TO GOD/FATALISTIC  
A DIFFICULT TO GET PREGNANT/MENOPAUSAL  
D MARITAL DISSOLUTION/SEPARATION  
X OTHER \_\_\_\_\_  
(SPECIFY)  
Z DON'T KNOW

			1	2
12	DEC	01		
11	NOV	02		
10	OCT	03		
09	SEP	04		
2	08	AUG	05	2
0	07	JUL	06	0
1	06	JUN	07	1
3	05	MAY	08	3
	04	APR	09	
	03	MAR	10	
	02	FEB	11	
	01	JAN	12	
12	DEC	13		
11	NOV	14		
10	OCT	15		
09	SEP	16		
2	08	AUG	17	2
0	07	JUL	18	0
1	06	JUN	19	1
2	05	MAY	20	2
	04	APR	21	
	03	MAR	22	
	02	FEB	23	
	01	JAN	24	
12	DEC	25		
11	NOV	26		
10	OCT	27		
09	SEP	28		
2	08	AUG	29	2
0	07	JUL	30	0
1	06	JUN	31	1
1	05	MAY	32	1
	04	APR	33	
	03	MAR	34	
	02	FEB	35	
	01	JAN	36	
12	DEC	37		
11	NOV	38		
10	OCT	39		
09	SEP	40		
2	08	AUG	41	2
0	07	JUL	42	0
1	06	JUN	43	1
0	05	MAY	44	0
	04	APR	45	
	03	MAR	46	
	02	FEB	47	
	01	JAN	48	
12	DEC	49		
11	NOV	50		
10	OCT	51		
09	SEP	52		
2	08	AUG	53	2
0	07	JUL	54	0
0	06	JUN	55	0
9	05	MAY	56	9
	04	APR	57	
	03	MAR	58	
	02	FEB	59	
	01	JAN	60	
12	DEC	61		
11	NOV	62		
10	OCT	63		
09	SEP	64		
2	08	AUG	65	2
0	07	JUL	66	0
0	06	JUN	67	0
8	05	MAY	68	8
	04	APR	69	
	03	MAR	70	
	02	FEB	71	
	01	JAN	72	

2013 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY  
MAN'S QUESTIONNAIRE  
WITH HIV/AIDS

MINISTRY OF HEALTH/CENTRAL STATISTICAL OFFICE

IDENTIFICATION	
LOCALITY NAME _____ NAME OF HOUSEHOLD HEAD _____ CLUSTER NUMBER ..... HOUSEHOLD NUMBER ..... PROVINCE ..... RURAL/URBAN (RURAL = 1, URBAN = 2) ..... LUSAKA = 1/ OTHER CITY = 2/TOWN = 3/VILLAGE = 4 ..... NAME AND LINE NUMBER OF MAN _____	<div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 100%; height: 100%; border: 1px solid black; background: white;"></div> </div>

INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY <div style="display: inline-block; width: 40px; height: 20px; border: 1px solid black; vertical-align: middle;"></div> MONTH <div style="display: inline-block; width: 40px; height: 20px; border: 1px solid black; vertical-align: middle;"></div> YEAR <div style="display: inline-block; width: 40px; height: 20px; border: 1px solid black; vertical-align: middle;"></div> INT. NUMBER <div style="display: inline-block; width: 40px; height: 20px; border: 1px solid black; vertical-align: middle;"></div> RESULT <div style="display: inline-block; width: 40px; height: 20px; border: 1px solid black; vertical-align: middle;"></div>
INTERVIEWER'S NAME	_____	_____	_____	
RESULT*	_____	_____	_____	
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS <div style="display: inline-block; width: 40px; height: 20px; border: 1px solid black; vertical-align: middle;"></div>
TIME	_____	_____		
*RESULT CODES: 1 COMPLETED      4 REFUSED 2 NOT AT HOME      5 PARTLY COMPLETED      7 OTHER _____ 3 POSTPONED      6 INCAPACITATED      (SPECIFY)				
**LANGUAGE OF QUESTIONNAIRE: <div style="border: 1px solid black; padding: 2px 10px;">01</div> LANGUAGE OF INTERVIEW: <div style="display: inline-block; width: 40px; height: 20px; border: 1px solid black; vertical-align: middle;"></div> NATIVE LANGUAGE OF RESPONDENT <div style="display: inline-block; width: 40px; height: 20px; border: 1px solid black; vertical-align: middle;"></div>				TRANSLATOR USED (YES = 1, NO = 2) <div style="display: inline-block; width: 40px; height: 20px; border: 1px solid black; vertical-align: middle;"></div>
**LANGUAGE CODES: 01 ENGLISH 03 KAONDE 05 LUNDA 07 NYANJA 09 OTHER 02 BEMBA 04 LOZI 06 LUVALE 08 TONGA				
SUPERVISOR	FIELD EDITOR		OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		NAME _____	NAME _____
DATE _____	DATE _____		DATE _____	DATE _____

## SECTION 1. RESPONDENT'S BACKGROUND

### Introduction and Consent

Hello. My name is \_\_\_\_\_. I am working with the Ministry of Health in collaboration with Central Statistical Office (CSO). We are conducting a survey about health all over Zambia. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions? May I begin the interview now?

SIGNATURE OF INTERVIEWER: \_\_\_\_\_ DATE: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED ... 1      RESPONDENT DOES NOT AGREE TO BE INTERVIEWED 2 → END  
↓

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR ..... <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> MINUTES ..... <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>	
102	In what month and year were you born?	MONTH ..... <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> DON'T KNOW MONTH ..... 98 YEAR ..... <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> DON'T KNOW YEAR ..... 9998	
103	How old were you at your last birthday?  COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>	
104	Have you ever attended school?	YES ..... 1 NO ..... 2	→ 108
105	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY ..... 1 SECONDARY ..... 2 HIGHER ..... 3	
106	What is the highest grade you completed at that level?	GRADE ..... <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>	

107	CHECK 105: PRIMARY <input type="checkbox"/> SECONDARY OR HIGHER <input type="checkbox"/>		→ 110
108	Now I would like you to read this sentence to me.  SHOW CARD TO RESPONDENT.  IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL ..... 1 ABLE TO READ ONLY PARTS OF SENTENCE ..... 2 ABLE TO READ WHOLE SENTENCE . 3 NO CARD WITH REQUIRED LANGUAGE ..... 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED ..... 5	
109	CHECK 108: CODE '2', '3' OR '4' <input type="checkbox"/> CODE '1' OR '5' CIRCLED <input type="checkbox"/>		→ 111
110	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
111	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
112	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
113	What is your religion?	CATHOLIC ..... 1 PROTESTANT ..... 2 MUSLIM ..... 3 OTHER ..... 6 (SPECIFY)	
114	What tribe do you belong to?	_____ <input type="text"/>	
114A	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?  IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS ..... <input type="text"/> <input type="text"/> ALWAYS ..... 95 VISITOR ..... 96	→ 115
114B	Just before you moved here, did you live in Lusaka, another city, in a town, or in a village?	LUSAKA ..... 1 OTHER CITY ..... 2 TOWN ..... 3 VILLAGE ..... 4	
115	In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away?	NUMBER OF TRIPS ..... <input type="text"/> <input type="text"/> NONE ..... 00	→ 201
116	In the last 12 months, have you been away from your home community for more than one month at a time?	YES ..... 1 NO ..... 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<input type="checkbox"/> → 206								
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES ..... 1 NO ..... 2	→ 204								
203	How many sons live with you?  And how many daughters live with you?  IF NONE, RECORD '00'.	SONS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAUGHTERS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES ..... 1 NO ..... 2	→ 206								
205	How many sons are alive but do not live with you?  And how many daughters are alive but do not live with you?  IF NONE, RECORD '00'.	SONS ELSEWHERE ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAUGHTERS ELSEWHERE ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
206	Have you ever fathered a son or a daughter who was born alive but later died?  IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<input type="checkbox"/> → 208								
207	How many boys have died?  And how many girls have died?  IF NONE, RECORD '00'.	BOYS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> GIRLS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL.  IF NONE, RECORD '00'.	TOTAL CHILDREN ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table>									
209	CHECK 208:  HAS HAD MORE THAN ONE CHILD <input type="checkbox"/> ↓ HAS HAD ONLY ONE CHILD <input type="checkbox"/> → HAS NOT HAD ANY CHILDREN <input type="checkbox"/> →		→ 212 → 301								
210	Did all of the children you have fathered have the same biological mother?	YES ..... 1 NO ..... 2	→ 212								
211	In all, how many women have you fathered children with?	NUMBER OF WOMEN ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table>									
212	How old were you when your (first) child was born?	AGE IN YEARS ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table>									
213	CHECK 203 AND 205:  AT LEAST ONE LIVING CHILD <input type="checkbox"/> ↓ NO LIVING CHILDREN <input type="checkbox"/> →		→ 301								

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
214	How old is your (youngest) child?	AGE IN YEARS ..... <input type="text"/> <input type="text"/>	
215	CHECK 214: (YOUNGEST) CHILD <input type="checkbox"/> IS AGE 0-2 YEARS OTHER <input type="checkbox"/> → 301		
216	What is the name of your (youngest) child? WRITE NAME OF (YOUNGEST) CHILD  _____ (NAME OF (YOUNGEST) CHILD)		
217	When (NAME)'s mother was pregnant with (NAME) did she have any antenatal check-ups?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<input type="checkbox"/> → 219
218	Were you ever present during any of those antenatal check-ups?	PRESENT ..... 1 NOT PRESENT ..... 2	
219	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY ..... 1 DON'T KNOW ..... 6 OTHER ..... 8	<input type="checkbox"/> → 220
219A	Why didn't (NAME)'s mother deliver in a health facility?  PROBE: Any other reason?	COST TOO MUCH ..... A FACILITY NOT OPEN ..... B TOO FAR/ NO TRANSPORTATION ..... C DON'T TRUST FACILITY/POOR QUALITY SERVICE ..... D NO FEMALE PROVIDER AT FACILITY ..... E I/FAMILY DID NOT ALLOW ..... F SHORT LABOUR ..... G NOT NECESSARY ..... H NOT CUSTOMARY ..... I OTHER ..... X (SPECIFY)	
220	When a child has diarrhoea, how much should he or she be given to drink: more than usual, the same amount as usual, less than usual, or should he or she not be given anything to drink at all?	MORE THAN USUAL ..... 1 ABOUT THE SAME ..... 2 LESS THAN USUAL ..... 3 NOTHING TO DRINK ..... 4 DON'T KNOW ..... 8	

SECTION 3. CONTRACEPTION

301	<p>Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy.</p> <p>Have you ever heard of (METHOD)?</p>		
01	<b>Female Sterilization.</b> PROBE: Women can have an operation to avoid having any more children.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
02	<b>Male Sterilization.</b> PROBE: Men can have an operation to avoid having any more children.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
03	<b>IUD.</b> PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
04	<b>Injectables.</b> PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
05	<b>Implants.</b> PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
06	<b>Pill.</b> PROBE: Women can take a pill every day to avoid becoming pregnant.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
07	<b>Male Condom.</b> PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
08	<b>Female Condom.</b> PROBE: Women can place a sheath in their vagina before sexual intercourse.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
09	<b>Standard Days Method (Cycle Beads):</b> A woman uses string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse	<p>YES ..... 1</p> <p>NO ..... 2</p>	
10	<b>LACTATIONAL AMENORRHEA METHOD (LAM).</b>	<p>YES ..... 1</p> <p>NO ..... 2</p>	
11	<b>Rhythm Method.</b> PROBE: Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
12	<b>Withdrawal.</b> PROBE: Men can be careful and pull out before climax.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
13	<b>Emergency Contraception.</b> PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	<p>YES ..... 1</p> <p>NO ..... 2</p>	
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	<p>YES ..... 1</p> <p>_____</p> <p align="center">(SPECIFY)</p> <p>_____</p> <p align="center">(SPECIFY)</p> <p>NO ..... 2</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last few months have you: Heard about family planning on the radio? Seen anything about family planning on the television? Read about family planning in a newspaper or magazine?	YES NO RADIO ..... 1 2 TELEVISION ..... 1 2 NEWSPAPER OR MAGAZINE . 1 2	
303	In the last few months, have you discussed the practice of family planning with a health worker or health professional?	YES ..... 1 NO ..... 2	
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<input type="checkbox"/> → 305A
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS ..... 1 DURING HER PERIOD ..... 2 RIGHT AFTER HER PERIOD HAS ENDED ..... 3 HALFWAY BETWEEN TWO PERIODS ..... 4 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8	
305A	Do you think that a woman who is breastfeeding her baby can become pregnant?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
306	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. a) Contraception is women's business and a man should not have to worry about it. b) Women who use contraception may become promiscuous.	DIS- AGREE AGREE DK CONTRACEPTION WOMAN'S BUSINESS . 1 2 8 WOMAN MAY BECOME PROMISCUOUS ..... 1 2 8	
307	CHECK 301 (07) KNOWS MALE CONDOM YES <input type="checkbox"/> NO <input type="checkbox"/>		→ 311
308	Do you know of a place where a person can get male condoms?	YES ..... 1 NO ..... 2	→ 311
309	Where is that? Any other place?  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE(S))  _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTER/POST ... B MOBILE HOSPITAL/CLINIC ..... C FAMILY PLANNING CLINIC ..... D COMMUNITY BASED AGENT/FIELDWORKER ..... E OTHER PUBLIC SECTOR ..... F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... G MISSION HOSPITAL/CLINIC ..... H PHARMACY ..... I PRIVATE DOCTOR ..... J COMMUNITY BASED AGENT/FIELDWORKER ..... K MOBILE HOSPITAL/CLINIC ..... L OTHER PRIVATE MEDICAL SECTOR ..... M (SPECIFY) OTHER SOURCE SHOP ..... N CHURCH ..... O FRIENDS/RELATIVES ..... P OTHER ..... X (SPECIFY)	



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
310	If you wanted to, could you yourself get a male condom?	YES ..... 1 NO ..... 2	
311	CHECK 301 (08) KNOWS FEMALE CONDOM  <div style="display: flex; justify-content: space-around; align-items: center;"> <span>YES <input type="checkbox"/></span> <span>NO <input type="checkbox"/></span> </div>		→ 401
312	Do you know of a place where a person can get female condoms?	YES ..... 1 NO ..... 2	→ 401
313	Where is that?  Any other place?  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE(S))    _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTER/POST ..... B MOBILE HOSPITAL/CLINIC ..... C FAMILY PLANNING CLINIC ..... D COMMUNITY BASED AGENT/FIELDWORKER ..... E OTHER PUBLIC SECTOR ..... F (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... G MISSION HOSPITAL/CLINIC ..... H PHARMACY ..... I PRIVATE DOCTOR ..... J COMMUNITY BASED AGENT/FIELDWORKER ..... K MOBILE HOSPITAL/CLINIC ..... L OTHER PRIVATE MEDICAL SECTOR ..... M (SPECIFY)  OTHER SOURCE SHOP ..... N CHURCH ..... O FRIENDS/RELATIVES ..... P  OTHER ..... X (SPECIFY)	
314	If you wanted to, could you yourself get a female condom?	YES ..... 1 NO ..... 2	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED . . . . 1 YES, LIVING WITH A WOMAN . . . 2 NO, NOT IN UNION . . . . . 3	<input type="checkbox"/> → 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED . . . . 1 YES, LIVED WITH A WOMAN . . . . 2 NO . . . . . 3	→ 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED . . . . . 3	<input type="checkbox"/> → 410
404	Is your wife/partner living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE . . . . . 2	
405	Do you have more than one wife or woman you live with as if married?	YES . . . . . 1 NO . . . . . 2	→ 407
406	Altogether, how many wives do you have or other partners do you live with as if married?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . .	<input type="text"/> <input type="text"/>
407	<p>CHECK 405:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>ONE WIFE/ PARTNER <input type="checkbox"/></p> <p>Please tell me the name of your wife/the woman you are living with as if married.</p> </div> <div style="text-align: center;"> <p>MORE THAN ONE WIFE/ PARTNER <input type="checkbox"/></p> <p>Please tell me the name of each of your wives or each woman you are living with as if married.</p> </div> </div> <p>RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER.</p> <p>IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.</p> <p>ASK 408 FOR EACH PERSON.</p>	<div style="display: flex; justify-content: space-between;"> <div> <p>NAME</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> </div> <div> <p>LINE NUMBER</p> <p><input type="text"/> <input type="text"/></p> <p><input type="text"/> <input type="text"/></p> <p><input type="text"/> <input type="text"/></p> <p><input type="text"/> <input type="text"/></p> </div> <div> <p>408 How old was (NAME) on her last birthday?</p> <p>AGE</p> <p><input type="text"/> <input type="text"/></p> <p><input type="text"/> <input type="text"/></p> <p><input type="text"/> <input type="text"/></p> <p><input type="text"/> <input type="text"/></p> </div> </div>	
409	<p>CHECK 407:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>ONE WIFE/ PARTNER <input type="checkbox"/></p> </div> <div style="text-align: center;"> <p>MORE THAN ONE WIFE/ PARTNER <input type="checkbox"/></p> </div> </div>		→ 411A
410	Have you been married or lived with a woman only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE . . . . . 2	→ 411A
411	In what month and year did you start living with your wife/partner?	<p>MONTH . . . . . <input type="text"/> <input type="text"/></p> <p>DON'T KNOW MONTH . . . . . 98</p> <p>YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>DON'T KNOW YEAR . . . . . 9998</p>	→ 413
411A	Now I would like to ask a question about your first wife/partner. In what month and year did you start living with your first wife/partner?		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
412	How old were you when you first started living with her?	AGE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table>									
413	CHECK FOR THE PRESENCE OF OTHERS.  BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.										
414	Now I would like to ask you some questions about sexual activity in order to gain a better understanding of some family life issue.  How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE ..... 00  AGE IN YEARS ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table>  FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER ..... 95			  → 414C  → 414C						
414A	CHECK 103: 15-24 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td></tr></table> YEARS OLD ↓ 25-59 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td></tr></table> YEARS OLD				→ 501						
414B	Do you intend to wait until you get married to have sexual intercourse for the first time?	YES ..... 1 NO ..... 2 DON'T KNOW/UNSURE ..... 8	→ 501								
414C	CHECK 103: 15-24 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td></tr></table> YEARS OLD ↓ 25-59 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td></tr></table> YEARS OLD				→ 415						
414D	The <u>first</u> time you had sexual intercourse, was a female or male condom used?	YES ..... 1 NO ..... 2 DON'T KNOW/DON'T REMEMBER . 8									
415	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.										
416	When was the <u>last</u> time you had sexual intercourse?  IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table> WEEKS AGO ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table> MONTHS AGO ..... 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table> YEARS AGO ..... 4 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table>									→ 430

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER																								
417	When was the last time you had sexual intercourse with this person?		DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr></table>							DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr></table>																		
418	The last time you had sexual intercourse with this (second/third) person, was a female or male condom used?	YES ..... 1 NO ..... 2 (SKIP TO 420) ←	YES ..... 1 NO ..... 2 (SKIP TO 420) ←	YES ..... 1 NO ..... 2 (SKIP TO 420) ←																								
419	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2																								
420	What was your relationship to this person with whom you had sexual intercourse?  IF GIRLFRIEND Were you living together as if married? IF YES, CIRCLE '02' IF NO, CIRCLE '03'	WIFE ..... 1 LIVE-IN PARTNER ..... 2 LINE NUMBER OF WIFE/ PARTNER <table border="1"><tr><td></td><td></td></tr></table> GIRLFRIEND NOT LIVING WITH RESPONDENT ..... 3 CASUAL ACQUAINTANCE ..... 4 SEX WORKER ..... 5 OTHER ..... 6 (SPECIFY) (SKIP TO 423) ←			WIFE ..... 1 LIVE-IN PARTNER ..... 2 LINE NUMBER OF WIFE/ PARTNER <table border="1"><tr><td></td><td></td></tr></table> GIRLFRIEND NOT LIVING WITH RESPONDENT ..... 3 CASUAL ACQUAINTANCE ..... 4 SEX WORKER ..... 5 OTHER ..... 6 (SPECIFY) (SKIP TO 423) ←			WIFE ..... 1 LIVE-IN PARTNER ..... 2 LINE NUMBER OF WIFE/ PARTNER <table border="1"><tr><td></td><td></td></tr></table> GIRLFRIEND NOT LIVING WITH RESPONDENT ..... 3 CASUAL ACQUAINTANCE ..... 4 SEX WORKER ..... 5 OTHER ..... 6 (SPECIFY) (SKIP TO 423) ←																				
421	CHECK 410:	MARRIED ONLY <table border="1"><tr><td></td></tr></table> MARRIED MORE THAN ONCE OR BLANK <table border="1"><tr><td></td></tr></table> (SKIP TO 423) ←			MARRIED ONLY <table border="1"><tr><td></td></tr></table> MARRIED MORE THAN ONCE OR BLANK <table border="1"><tr><td></td></tr></table> (SKIP TO 423) ←			MARRIED ONLY <table border="1"><tr><td></td></tr></table> MARRIED MORE THAN ONCE OR BLANK <table border="1"><tr><td></td></tr></table> (SKIP TO 423) ←																				
422	CHECK 414:	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE <table border="1"><tr><td></td></tr></table> (SKIP TO 423A) ↓ OTHER <table border="1"><tr><td></td></tr></table> ↓			FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE <table border="1"><tr><td></td></tr></table> (SKIP TO 423A) ↓ OTHER <table border="1"><tr><td></td></tr></table> ↓			FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE <table border="1"><tr><td></td></tr></table> (SKIP TO 423A) ↓ OTHER <table border="1"><tr><td></td></tr></table> ↓																				
423	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr></table> YEARS AGO 4 <table border="1"><tr><td></td><td></td></tr></table>									DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr></table> YEARS AGO 4 <table border="1"><tr><td></td><td></td></tr></table>									DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr></table> YEARS AGO 4 <table border="1"><tr><td></td><td></td></tr></table>								

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
423A	The last time you had sexual intercourse with this (second/third) person did you or this person drink alcohol?	YES ..... 1 NO ..... 2 (SKIP TO 424) ←	YES ..... 1 NO ..... 2 (SKIP TO 424) ←	YES ..... 1 NO ..... 2 (SKIP TO 424) ←
423B	Were you or your partner drunk at that time?  IF YES: Who was drunk?	RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER ..... 4	RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER ..... 4	RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER ..... 4
424	How many times during the last 12 months did you have sexual intercourse with this person?  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.	NUMBER OF TIMES <input type="text"/> <input type="text"/>	NUMBER OF TIMES <input type="text"/> <input type="text"/>	NUMBER OF TIMES <input type="text"/> <input type="text"/>
425	How old is this person?	AGE OF PARTNER <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98	AGE OF PARTNER <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98	AGE OF PARTNER <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98
426	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES ..... 1 (GO BACK TO 417) ← IN NEXT COLUMN) NO ..... 2 (SKIP TO 428) ←	YES ..... 1 (GO BACK TO 417) ← IN NEXT COLUMN) NO ..... 2 (SKIP TO 428) ←	
427	In total, with how many different people have you had sexual intercourse in the last 12 months?  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.  IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST 12 MONTHS ... <input type="text"/> <input type="text"/>  DON'T KNOW ... 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
428	CHECK 420 (ALL COLUMNS):  AT LEAST ONE PARTNER IS A SEX WORKER <input type="checkbox"/> ↓	NO PARTNERS ARE SEX WORKERS <input type="checkbox"/>	→ 430
429	CHECK 420 AND 418 (ALL COLUMNS):  CONDOM USED WITH EVERY SEX WORKER <input type="checkbox"/>  OTHER <input type="checkbox"/>		→ 433 → 434
430	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES ..... 1 NO ..... 2	→ 432
431	Have you ever paid anyone in exchange for having sexual intercourse?	YES ..... 1 NO ..... 2	→ 434
432	The last time you paid someone in exchange for having sexual intercourse, was a female or male condom used?	YES ..... 1 NO ..... 2	→ 434
433	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES ..... 1 NO ..... 2 DK ..... 8	
434	In total, with how many different people have you had sexual intercourse in your lifetime?  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.  IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95.'	NUMBER OF PARTNERS IN LIFETIME ..... <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98	
435	CHECK 418, MOST RECENT PARTNER (FIRST COLUMN):  NOT ASKED <input type="checkbox"/>  CONDOM USED <input type="checkbox"/> ↓	NO CONDOM USED <input type="checkbox"/>	→ 438 → 438
436	You told me that a condom was used the last time you had sex. What brand name of the female or male condoms did you use?  ASK TO SEE THE PACKAGE IF RESPONDENT DOES NOT REMEMBER NAME OF BRAND.	MAXIMUM CLASSIC ..... 01 MAXIMUM SCENTED ..... 02 ROUGH RIDER ..... 03 DUREX ..... 04 CARE FEMALE CONDOM ..... 05 FEMIDOM ..... 06 REALITY ..... 07 PUBLIC SECTOR: UNBRANDED (WHITE COLOUR FOIL) ..... 08 OTHER SPECIFY ..... 96 (SPECIFY) DON'T KNOW ..... 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
437	<p>From where did you obtain the female or male condom the last time?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL . . . . . 11</p> <p>GOVT. HEALTH CENTER/POST . 12</p> <p>MOBILE HOSPITAL/CLINIC . . . . . 13</p> <p>FAMILY PLANNING CLINIC . . . . . 14</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER . . . . . 15</p> <p>OTHER PUBLIC</p> <p>SECTOR _____ 16</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC . . . 21</p> <p>MISSION HOSPITAL/CLINIC . . . . 22</p> <p>PHARMACY . . . . . 23</p> <p>PRIVATE DOCTOR . . . . . 24</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER . . . . . 25</p> <p>MOBILE HOSPITAL/CLINIC . . . . . 26</p> <p>OTHER PRIVATE MEDICAL . . . . .</p> <p>SECTOR _____ 27</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP . . . . . 31</p> <p>CHURCH . . . . . 32</p> <p>FRIENDS/RELATIVES . . . . . 33</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p>	
438	<p>The last time you had sex did you or your partner use any method (other than a condom) to avoid or prevent a pregnancy?</p>	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>	<p><input type="checkbox"/> → 501</p>
439	<p>What method did you or your partner use?</p> <p>PROBE:</p> <p>Did you use any other method to prevent pregnancy?</p> <p>RECORD ALL MENTIONED.</p>	<p>FEMALE STERILIZATION . . . . . A</p> <p>MALE STERILIZATION . . . . . B</p> <p>IUD . . . . . C</p> <p>INJECTABLES . . . . . D</p> <p>IMPLANTS . . . . . E</p> <p>PILL . . . . . F</p> <p>CONDOM . . . . . G</p> <p>FEMALE CONDOM . . . . . H</p> <p>DIAPHRAGM . . . . . I</p> <p>FOAM/JELLY . . . . . J</p> <p>STANDARD DAYS . . . . . K</p> <p>LAM . . . . . L</p> <p>RHYTHM METHOD . . . . . M</p> <p>WITHDRAWAL . . . . . N</p> <p>OTHER MODERN METHOD . . . . . X</p> <p>OTHER TRADITIONAL METHOD . . . Y</p>	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401:  CURRENTLY MARRIED OR LIVING WITH A PARTNER <input type="checkbox"/> NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER <input type="checkbox"/>		→ 509
502	CHECK 439:  MAN NOT STERILIZED <input type="checkbox"/> MAN STERILIZED <input type="checkbox"/>		→ 509
503	(Is your wife (partner)/Are any of your wives (partners)) currently pregnant?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 505
504	Now I have some questions about the future. After the (child/children) you and your (wife(wives)/partner(s)) are expecting now, would you like to have another child, or would you prefer not have any more children?	HAVE ANOTHER CHILD ..... 1 NO MORE ..... 2 UNDECIDED/DON'T KNOW ..... 8	→ 506 → 509
505	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD ..... 1 NO MORE/NONE ..... 2 SAYS COUPLE CAN'T GET PREGNANT ..... 3 WIFE (WIVES)/PARTNER(S) STERILIZED ..... 4 UNDECIDED/DON'T KNOW ..... 8	→ 509
506	CHECK 407:  ONE WIFE/PARTNER <input type="checkbox"/> MORE THAN ONE WIFE/PARTNER <input type="checkbox"/>		→ 508
507	CHECK 503: WIFE/PARTNER NOT PREGNANT <input type="checkbox"/> WIFE/PARTNER PREGNANT <input type="checkbox"/>  How long would you like to wait from now before the birth of (a/another) child? After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS ..... 1 YEARS ..... 2 SOON/NOW ..... 993 COUPLE INFECUND ..... 994 OTHER ..... 996 (SPECIFY) DON'T KNOW ..... 998	→ 509
508	How long would you like to wait from now before the birth of (a/another) child?	MONTHS ..... 1 YEARS ..... 2 SOON/NOW ..... 993 HE/ALL HIS WIVES/PARTNERS ARE INFECUND ..... 994 OTHER ..... 996 (SPECIFY) DON'T KNOW ..... 998	



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
509	<p>CHECK 203 AND 205:</p> <p>HAS LIVING CHILDREN <input type="checkbox"/> NO LIVING CHILDREN <input type="checkbox"/></p> <p>If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?</p> <p>If you could choose exactly the number of children to have in your whole life, how many would that be?</p> <p>PROBE FOR A NUMERIC RESPONSE.</p>	<p>NONE ..... 00</p> <p>NUMBER ..... <input type="text"/> <input type="text"/></p> <p>OTHER _____ 96 (SPECIFY)</p>	<p>→ 601</p> <p>→ 601</p>
510	<p>How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?</p>	<p>BOYS    GIRLS    EITHER</p> <p>NUMBER <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>OTHER _____ 96 (SPECIFY)</p>	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES ..... 1 NO ..... 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES ..... 1 NO ..... 2	→ 604
603	Have you done any work in the last 12 months?	YES ..... 1 NO ..... 2	→ 607
604	What is your occupation, that is, what kind of work do you mainly do?	<div style="border: 1px solid black; width: 150px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 150px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 150px; height: 30px;"></div>	
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR ..... 1 SEASONALLY/PART OF THE YEAR ..... 2 ONCE IN A WHILE ..... 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY ..... 1 CASH AND KIND ..... 2 IN KIND ONLY ..... 3 NOT PAID ..... 4	
607	CHECK 401: CURRENTLY MARRIED OR <input type="checkbox"/> NOT CURRENTLY MARRIED <input type="checkbox"/> LIVING WITH A PARTNER      AND NOT LIVING WITH A PARTNER		→ 612
608	CHECK 606: CODE 1 OR 2 <input type="checkbox"/> OTHER <input type="checkbox"/> CIRCLED		→ 610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT ..... 1 WIFE/PARTNER ..... 2 RESPONDENT AND WIFE/ PARTNER JOINTLY ..... 3 OTHER ..... 6 (SPECIFY)	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT ..... 1 WIFE/PARTNER ..... 2 RESPONDENT AND WIFE/ PARTNER JOINTLY ..... 3 SOMEONE ELSE ..... 4 OTHER ..... 6 SPECIFY	
611	Who usually makes decisions about making major household purchases?	RESPONDENT ..... 1 WIFE/PARTNER ..... 2 RESPONDENT AND WIFE/ PARTNER JOINTLY ..... 3 SOMEONE ELSE ..... 4 OTHER ..... 6 SPECIFY	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
611A	Who usually makes decisions about making purchases for daily household needs?	RESPONDENT ..... 1 WIFE/PARTNER ..... 2 RESPONDENT AND WIFE/ PARTNER JOINTLY ..... 3 SOMEONE ELSE ..... 4 OTHER ..... 6 SPECIFY	
611B	Who usually makes decisions about visits to your family or relatives?	RESPONDENT ..... 1 WIFE/PARTNER ..... 2 RESPONDENT AND WIFE/ PARTNER JOINTLY ..... 3 SOMEONE ELSE ..... 4 OTHER ..... 6 SPECIFY	
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY ..... 1 JOINTLY ONLY ..... 2 BOTH ALONE AND JOINTLY ..... 3 DOES NOT OWN ..... 4	
613	Do you own any land either alone or jointly with someone else?	ALONE ONLY ..... 1 JOINTLY ONLY ..... 2 BOTH ALONE AND JOINTLY ..... 3 DOES NOT OWN ..... 4	
614	In your opinion, is a husband justified in hitting or beating his wife in the following situations:  If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	YES NO DK GOES OUT ..... 1 2 8 NEGL. CHILDREN ... 1 2 8 ARGUES ..... 1 2 8 REFUSES SEX ..... 1 2 8 BURNS FOOD ..... 1 2 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES ..... 1 NO ..... 2	→ 723
702	Can people reduce their chances of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
703	Can people get the AIDS virus from mosquito bites?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
704	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
705	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
705A	Can people reduce their chance of getting the AIDS virus by not having sexual intercourse at all?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
706	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
707	Is it possible for a healthy-looking person to have the AIDS virus?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
707A	Do you think your risk of getting infected with HIV is low, medium or high, or do you have no risk at all?	LOW ..... 1 MEDIUM ..... 2 HIGH ..... 3 NO RISK ..... 4 OTHER ..... 6 DON'T KNOW ..... 8	
708	Can the virus that causes AIDS be transmitted from a mother to her baby:  During pregnancy? During delivery? By breastfeeding?	<div style="text-align: right; margin-bottom: 5px;">YES    NO    DK</div> DURING PREG. .... 1    2    8 DURING DELIVERY ... 1    2    8 BREASTFEEDING ... 1    2    8	
709	CHECK 708: AT LEAST <input type="checkbox"/> OTHER <input type="checkbox"/>		→ 710A
710	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
710A	Have you heard about antiretroviral drugs (ARVs) that people infected with the AIDS virus can get from a doctor or a nurse to help them live longer?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 711
710B	Do you know anyone on antiretroviral therapy (ART) treatment?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
711	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
712	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES ..... 1 NO ..... 2	→ 716
713	How many months ago was your most recent HIV test?	MONTHS AGO ..... <input type="text"/> <input type="text"/> TWO OR MORE YEARS ..... 95	
713A	For your most recent test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	ASKED FOR THE TEST ..... 1 OFFERED AND ACCEPTED ..... 2 REQUIRED ..... 3	
714	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO ..... 2	
715	Where was the test done?  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 11 GOVT. HEALTH CENTER/POST . 12 STAND-ALONE VCT CENTRE ... 13 FAMILY PLANNING CLINIC ..... 14 MOBILE HOSPITAL/CLINIC ..... 15 COMMUNITY BASED AGENT/FIELDWORKER ..... 16 OTHER PUBLIC SECTOR ..... 17 (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR ..... 21 MISSION HOSPITAL/CLINIC ... 22 STAND-ALONE VCT CENTRE ... 23 MOBILE HOSPITAL/CLINIC ..... 24 COMMUNITY BASED AGENT/FIELDWORKER ..... 25 OTHER PRIVATE MEDICAL SECTOR ..... 26 (SPECIFY)  OTHER SOURCE PRISON ..... 31  OTHER ..... 96 (SPECIFY)	→ 718
716	Do you know of a place where people can go to get tested for the AIDS virus?	YES ..... 1 NO ..... 2	→ 718

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
717	<p>Where is that?</p> <p>Any other place?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p> <p>_____</p> <p>(NAME OF PLACE(S))</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL . . . . . A</p> <p>GOVT. HEALTH CENTER/POST . . . . . B</p> <p>STAND-ALONE VCT CENTRE . . . . . C</p> <p>FAMILY PLANNING CLINIC . . . . . D</p> <p>MOBILE HOSPITAL/CLINIC . . . . . E</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER . . . . . F</p> <p>OTHER PUBLIC</p> <p>SECTOR _____ G</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC/</p> <p>PRIVATE DOCTOR . . . . . H</p> <p>MISSION HOSPITAL/CLINIC . . . . . I</p> <p>STAND-ALONE VCT CENTRE . . . . . J</p> <p>MOBILE HOSPITAL/CLINIC . . . . . K</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER . . . . . L</p> <p>OTHER PRIVATE MEDICAL</p> <p>SECTOR _____ M</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>PRISON . . . . . N</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	
718	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>	
719	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	<p>YES, REMAIN A SECRET . . . . . 1</p> <p>NO . . . . . 2</p> <p>DK/NOT SURE/DEPENDS . . . . . 8</p>	
720	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DK/NOT SURE/DEPENDS . . . . . 8</p>	
721	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	<p>SHOULD BE ALLOWED . . . . . 1</p> <p>SHOULD NOT BE ALLOWED . . . . . 2</p> <p>DK/NOT SURE/DEPENDS . . . . . 8</p>	
721A	Do you personally know someone who has or is suspected to have the AIDS virus?	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p>	
721B	Do you agree or disagree with the following statement: People with the AIDS virus should be blamed for bringing the disease into the community.	<p>AGREE . . . . . 1</p> <p>DISAGREE . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>	
722	Should children age 12-14 be taught about using a condom to avoid getting the AIDS virus?	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DK/NOT SURE/DEPENDS . . . . . 8</p>	
722A	Should children age 12-14 be taught to wait until they get married to have sexual intercourse in order to avoid getting AIDS virus?	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
722B	<p>Some individuals would choose not to go for HIV testing. Why in your opinion is this so?</p> <p>(CIRCLE ALL THAT ARE MENTIONED)</p> <p>(MORE THAN ONE ANSWER IS POSSIBLE)</p>	<p>FEEL THEY ARE NOT AT RISK ... A</p> <p>FEAR OF RESULTS ..... B</p> <p>FEAR OF STIGMA/DISCRIMINATION . C</p> <p>DON'T KNOW WHERE TO GO ... D</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	
723	<p>CHECK 701:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>HEARD ABOUT AIDS <input type="checkbox"/></p> <p>↓</p> <p>Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact?</p> </div> <div style="text-align: center;"> <p>NOT HEARD ABOUT AIDS <input type="checkbox"/></p> <p>↓</p> <p>Have you heard about infections that can be transmitted through sexual contact?</p> </div> </div>	<p>YES ..... 1</p> <p>NO ..... 2</p>	
724	<p>CHECK 414:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>HAS HAD SEXUAL INTERCOURSE <input type="checkbox"/></p> <p>↓</p> </div> <div style="text-align: center;"> <p>HAS NOT HAD SEXUAL INTERCOURSE <input type="checkbox"/></p> <p>→ 732</p> </div> </div>		
725	<p>CHECK 723: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS?</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>YES <input type="checkbox"/></p> <p>↓</p> </div> <div style="text-align: center;"> <p>NO <input type="checkbox"/></p> <p>→ 727</p> </div> </div>		
726	<p>Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
727	<p>Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
728	<p>Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer near your penis?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
729	<p>CHECK 726, 727, AND 728:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>HAS HAD AN INFECTION (ANY 'YES') <input type="checkbox"/></p> <p>↓</p> </div> <div style="text-align: center;"> <p>HAS NOT HAD AN INFECTION OR DOES NOT KNOW <input type="checkbox"/></p> <p>→ 732</p> </div> </div>		
730	<p>The last time you had (PROBLEM FROM 726/727/728), did you seek any kind of advice or treatment?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 732

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
731	<p>Where did you go?</p> <p>Any other place?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p> <p>_____</p> <p>(NAME OF PLACE(S))</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL . . . . . A</p> <p>GOVT. HEALTH CENTER/POST . . . . . B</p> <p>STAND-ALONE VCT CENTRE . . . . . C</p> <p>FAMILY PLANNING CLINIC . . . . . D</p> <p>MOBILE HOSPITAL/CLINIC . . . . . E</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER . . . . . F</p> <p>OTHER PUBLIC</p> <p>SECTOR _____ G</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC/</p> <p>PRIVATE DOCTOR . . . . . H</p> <p>MISSION HOSPITAL/CLINIC . . . . . I</p> <p>STAND-ALONE VCT CENTRE . . . . . J</p> <p>MOBILE HOSPITAL/CLINIC . . . . . K</p> <p>COMMUNITY BASED</p> <p>AGENT/FIELDWORKER . . . . . L</p> <p>OTHER PRIVATE MEDICAL</p> <p>SECTOR _____ M</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP . . . . . N</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	
732	<p>If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?</p>	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>	
732A	<p>Husband and wives do not always agree in everything.</p> <p>If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in refusing to have sex with him?</p>	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>	
733	<p>Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with other women other than his wife/wives?</p>	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>	
733A	<p>Is a wife justified in refusing to have sex with her husband when she is tired or not in the mood?</p>	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>DON'T KNOW . . . . . 8</p>	



## SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Some men are circumcised, that is, the foreskin is completely removed from the penis. Are you circumcised?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 805
802	How old were you when you got circumcised?	AGE CIRCUMCISED ..... <input type="text"/> <input type="text"/>  DURING CHILDHOOD (<5 YEARS) ... 95 DON'T KNOW ..... 98	
802A	Why were you circumcised?	TRADITIONAL CUSTOM ..... A TREATMENT FOR DISEASE ..... B HYGIENE ..... C PREVENTION FROM A DISEASE ... D INCREASE SEXUAL PLEASURE ..... E OTHER ..... X (SPECIFY) DON'T KNOW ..... Z	
803	Who performed your circumcision?	HEALTH PROFESSIONAL DOCTOR ..... 11 TRAINED NURSE/MIDWIFE ..... 12 OTHER HEALTH PROFESSIONAL ..... 16 (SPECIFY) TRADITIONAL TRADITIONAL CIRCUMCISOR ... 21 OTHER TRADITIONAL ..... 26 (SPECIFY) OTHER ..... 36	
804	Where was it performed?	HEALTH FACILITY ..... 1 HOME OF A HEALTH WORKER/ PROFESSIONAL ..... 2 CIRCUMCISION DONE AT HOME ... 3 RITUAL SITE ..... 4 OTHER HOME/PLACE ..... 5 OTHER ..... 6 DON'T KNOW ..... 8	
805	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months?  IF YES: How many injections have you had?  IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'.  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE	NUMBER OF INJECTIONS ... <input type="text"/> <input type="text"/>  NONE ..... 00	→ 808
806	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker?  IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'.  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE	NUMBER OF INJECTIONS ... <input type="text"/> <input type="text"/>  NONE ..... 00	→ 808

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
806A	<p>The last time you had an injection given to you by a trained health worker where did you go to get the injection?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL ..... 11</p> <p>GOVT. HEALTH CENTER/POST ... 12</p> <p>MOBILE HOSPITAL/CLINIC ..... 13</p> <p>OTHER PUBLIC SECTOR ..... 16</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC/</p> <p>PRIVATE DOCTOR ..... 21</p> <p>MISSION HOSPITAL/CLINIC ..... 22</p> <p>DENTAL CLINIC/OFFICE ..... 23</p> <p>MOBILE HOSPITAL/CLINIC ..... 24</p> <p>PHARMACY ..... 25</p> <p>OFFICE OR HOME OF NURSE/</p> <p>HEALTH WORKER ..... 26</p> <p>OTHER PRIVATE MEDICAL SECTOR ..... 27</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>AT HOME ..... 31</p> <p>OTHER ..... 96</p> <p>(SPECIFY)</p>	
807	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
808	Do you currently smoke cigarettes?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 810
809	In the last 24 hours, how many cigarettes did you smoke?	<p>NUMBER OF CIGARETTES ..... <input type="text"/> <input type="text"/></p>	
810	Do you currently smoke or use any other type of tobacco?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 811A
811	<p>What (other) type of tobacco do you currently smoke or use?</p> <p>RECORD ALL MENTIONED.</p>	<p>PIPE ..... A</p> <p>CHEWING TOBACCO ..... B</p> <p>SNUFF ..... C</p> <p>OTHER ..... X</p> <p>(SPECIFY)</p>	
811A	Do you drink alcohol?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 811C
811B	In the last one week how many days did you drink alcohol?	<p>NUMBER OF DAYS ..... <input type="text"/></p>	
811C	Have you ever heard of an illness called tuberculosis or TB?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 812
811D	<p>How does tuberculosis spread from one person to another?</p> <p>PROBE: Any other ways?</p> <p>RECORD ALL MENTIONED.</p>	<p>THROUGH THE AIR WHEN</p> <p>COUGHING OR SNEEZING ..... A</p> <p>THROUGH SHARING UTENSILS ..... B</p> <p>THROUGH TOUCHING A PERSON</p> <p>WITH TB ..... C</p> <p>THROUGH FOOD ..... D</p> <p>THROUGH SEXUAL CONTACT ..... E</p> <p>THROUGH MOSQUITO BITES ..... F</p> <p>OTHER ..... X</p> <p>(SPECIFY)</p> <p>DON'T KNOW ..... Z</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
811E	Can tuberculosis be cured?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
811F	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET ..... 1 NO ..... 2 DON'T KNOW ..... 8	
811G	If a member of your family got tuberculosis, would you care for them?	YES ..... 1 NO ..... 2 DON'T KNOW/DEPENDS ..... 8	
812	Are you covered by any health (insurance/scheme)?	YES ..... 1 NO ..... 2	→ 813A
813	What type of health (insurance/scheme)?  RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY BASED HEALTH INSURANCE ..... A HEALTH INSURANCE THROUGH EMPLOYER ..... B SOCIAL SECURITY ..... C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE. D LOW COST PRE-PAYMENT SCHEME/STANDARD ..... E HIGH COST PRE-PAYMENT SCHEME/PREMIUM ..... F OTHER ..... X (SPECIFY)	
813A	CHECK 214: (YOUNGEST) CHILD <input type="checkbox"/> IS AGE 0-17 OTHER <input type="checkbox"/>		→ 813C
813B	Now I would like to ask you about your own child(ren) who (is/are) under the age of 18.  Have you made arrangements for someone to care for (him/her/them) in the event that you fall sick or are unable to care for (him/her/them)?	YES ..... 1 NO ..... 2 UNSURE ..... 8	
813C	(Besides your own child/children), are you the primary caregiver for any children under the age of 18?	YES ..... 1 NO ..... 2	→ 901
813D	Have you made arrangements for someone to care for (this child/these children) in the event that you fall sick or are unable to care for (him/her/them)?	YES ..... 1 NO ..... 2 UNSURE ..... 8	

SECTION 9. MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died.  How many children did your mother give birth to, including you?	NUMBER OF BIRTHS TO NATURAL MOTHER ..... <input type="text"/> <input type="text"/>	
902	CHECK 901:  TWO OR MORE BIRTHS <input type="checkbox"/> ONLY ONE BIRTH (RESPONDENT ONLY) <input type="checkbox"/>		→ 914
903	How many births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS ..... <input type="text"/> <input type="text"/>	
904	What was the name given to your oldest (next oldest) brother or sister?	(1) _____ (2) _____ (3) _____ (4) _____ (5) _____ (6) _____	
905	Is (NAME) male or female?	MALE 1 FEMALE 2 MALE 1 FEMALE 2 MALE 1 FEMALE 2 MALE 1 FEMALE 2 MALE 1 FEMALE 2 MALE 1 FEMALE 2	
906	Is (NAME) still alive?	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (2) ← YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (3) ← YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (4) ← YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (5) ← YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (6) ← YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (7) ←	
907	How old is (NAME)?	<input type="text"/> <input type="text"/> GO TO (2) <input type="text"/> <input type="text"/> GO TO (3) <input type="text"/> <input type="text"/> GO TO (4) <input type="text"/> <input type="text"/> GO TO (5) <input type="text"/> <input type="text"/> GO TO (6) <input type="text"/> <input type="text"/> GO TO (7)	
908	How many years ago did (NAME) die?	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
909	How old was (NAME) when he/she died?	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (2) <input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (3) <input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (4) <input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (5) <input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (6) <input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (7)	
910	Was (NAME) pregnant when she died?	YES ... 1 GO TO 913 ← NO ... 2 YES ... 1 GO TO 913 ← NO ... 2 YES ... 1 GO TO 913 ← NO ... 2 YES ... 1 GO TO 913 ← NO ... 2 YES ... 1 GO TO 913 ← NO ... 2 YES ... 1 GO TO 913 ← NO ... 2	
911	Did (NAME) die during childbirth?	YES ... 1 GO TO 913 ← NO ... 2 YES ... 1 GO TO 913 ← NO ... 2 YES ... 1 GO TO 913 ← NO ... 2 YES ... 1 GO TO 913 ← NO ... 2 YES ... 1 GO TO 913 ← NO ... 2 YES ... 1 GO TO 913 ← NO ... 2	
912	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES ... 1 NO ... 2 YES ... 1 NO ... 2 YES ... 1 NO ... 2 YES ... 1 NO ... 2 YES ... 1 NO ... 2 YES ... 1 NO ... 2	
913	How many live born children did (NAME) give birth to during her lifetime?	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
IF NO MORE BROTHERS OR SISTERS, GO TO 914.			

904	What was the name given to your oldest (next oldest) brother or sister?	(7) _____	(8) _____	(9) _____	(10) _____	(11) _____	(12) _____
905	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
906	Is (NAME) still alive?	YES ... 1 NO ... 2 GO TO 908 DK ... 8 GO TO (8)	YES ... 1 NO ... 2 GO TO 908 DK ... 8 GO TO (9)	YES ... 1 NO ... 2 GO TO 908 DK ... 8 GO TO (10)	YES ... 1 NO ... 2 GO TO 908 DK ... 8 GO TO (11)	YES ... 1 NO ... 2 GO TO 908 DK ... 8 GO TO (12)	YES ... 1 NO ... 2 GO TO 908 DK ... 8 GO TO (13)
907	How old is (NAME)?	<input type="text"/> <input type="text"/> GO TO (8)	<input type="text"/> <input type="text"/> GO TO (9)	<input type="text"/> <input type="text"/> GO TO (10)	<input type="text"/> <input type="text"/> GO TO (11)	<input type="text"/> <input type="text"/> GO TO (12)	<input type="text"/> <input type="text"/> GO TO (13)
908	How many years ago did (NAME) die?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
909	How old was (NAME) when he/she died?	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (8)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (9)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (10)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (11)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (12)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (13)
910	Was (NAME) pregnant when she died?	YES ... 1 GO TO 913 NO ... 2	YES ... 1 GO TO 913 NO ... 2	YES ... 1 GO TO 913 NO ... 2	YES ... 1 GO TO 913 NO ... 2	YES ... 1 GO TO 913 NO ... 2	YES ... 1 GO TO 913 NO ... 2
911	Did (NAME) die during childbirth?	YES ... 1 GO TO 913 NO ... 2	YES ... 1 GO TO 913 NO ... 2	YES ... 1 GO TO 913 NO ... 2	YES ... 1 GO TO 913 NO ... 2	YES ... 1 GO TO 913 NO ... 2	YES ... 1 GO TO 913 NO ... 2
912	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2
913	How many live born children did (NAME) give birth to during her lifetime?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
IF NO MORE BROTHERS OR SISTERS, GO TO 914.							
TICK HERE IF CONTINUATION SHEET USED <input type="checkbox"/>							
914	RECORD THE TIME.				HOURS ..... <input type="text"/> <input type="text"/> MINUTES..... <input type="text"/> <input type="text"/>		

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

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COMMENTS ON SPECIFIC QUESTIONS:

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ANY OTHER COMMENTS:

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SUPERVISOR'S OBSERVATIONS

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NAME OF SUPERVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_

EDITOR'S OBSERVATIONS

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NAME OF EDITOR: \_\_\_\_\_ DATE: \_\_\_\_\_