# Zimbabwe



Demographic and Health Survey 2015

**Key Indicators** 



**GOVERNMENT OF ZIMBABWE** 

# Zimbabwe Demographic and Health Survey 2015

## **Key Indicators**

Zimbabwe National Statistics Agency Harare, Zimbabwe

> The DHS Program ICF International Rockville, Maryland, USA



The 2015 Zimbabwe Demographic and Health Survey (2015 ZDHS) was implemented by the Zimbabwe National Statistics Agency from July through December 2015. The HIV testing component was implemented by the National Microbiology Reference Laboratory (NMRL). The funding for the ZDHS was provided by the Government of Zimbabwe, the United States Agency for International Development (USAID), the United Nations Population Fund (UNFPA), the United Nations Development Programme (UNDP), the United Nations Children's Fund (UNICEF), the United Kingdom Department for International Development (UKaid), the Royal Danish Embassy, the Australian Agency for International Development (AusAID), the European Union (EU), and the Swedish International Development Cooperation (SIDA). ICF International provided technical assistance through The DHS Program, a USAID-funded project providing support and technical assistance in the implementation of population and health surveys in countries worldwide.

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## ABBREVIATIONS

Ab	antibody
ACT	artemisinin-based combination therapy
Ag	antigen
AIDS	acquired immune deficiency syndrome
ANC	antenatal care
ARI	acute respiratory infection
AusAID	Australian Agency for International Development
CAPI	computer assisted personal interviewing
CBR	crude birth rate
CDC	Centers for Disease Control and Prevention
CHTTS	CSPro HIV Test Tracking System
CPR	contraceptive prevalence rate
CSPro	Censuses and Surveys Processing
DBS	dried blood spot
DHS	Demographic and Health Survey
DPT	diphtheria, pertussis, and tetanus vaccine
EA	enumeration area
EU	European Union
GFR	general fertility rate
HIV	human immunodeficiency virus
ICF	ICF International (originally, Inner City Fund)
IRS	indoor residual spraying
ITN	insecticide-treated net
IUCD	intrauterine contraceptive device
LAM	lactational amenorrhoea method
MMR	
	maternal mortality ratio
MoHCC	Ministry of Health and Child Care
MRCZ	Medical Research Council of Zimbabwe
NGO	non-governmental organisation
NMRL	National Microbiology Reference Laboratory
ORS	oral rehydration salts
RDT	rapid diagnostic test
SD	standard deviations
SDM	standard days method
SIDA	Swedish International Development Cooperation
STI	sexually transmitted infection
TFR	total fertility rate
TOT	training of trainers
UKAID or DFID	United Kingdom Department for International Development
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCT	voluntary counselling and testing
WHO	World Health Organization
ZDHS	Zimbabwe Demographic and Health Survey
ZIMSTAT	Zimbabwe National Statistics Agency
ZNFPC	Zimbabwe National Family Planning Council

## **1** INTRODUCTION

The 2015 Zimbabwe Demographic and Health Survey (ZDHS) was implemented by the Zimbabwe National Statistics Agency (ZIMSTAT) from July through December 2015, with a nationally representative sample of over 11,000 households. All women age 15-49 and all men age 15-54 in these households were eligible for individual interviews. The 2015 ZDHS is a follow-up survey to the 1988, 1994, 1999, 2005-06, and 2010-11 ZDHS surveys and provides updated estimates of basic demographic and health indicators.

Other agencies and organisations that facilitated the successful implementation of the survey through technical or financial support were the Government of Zimbabwe, the United States Agency for International Development (USAID), the United Nations Population Fund (UNFPA), the United Nations Development Programme (UNDP), the United Nations Children's Fund (UNICEF), the United Kingdom Department for International Development (DFID), the Royal Danish Embassy, the Australian Agency for International Development (AusAID), the European Union (EU), and the Swedish International Development Cooperation (SIDA). ICF International provided technical assistance through The DHS Program, a USAID-funded project that provides support and technical assistance for the implementation of population and health surveys in countries worldwide.

This Key Indicators report presents a first look at selected findings of the 2015 ZDHS. A comprehensive analysis of the data will be presented in a Final Report to be published later in 2016.

## 2 SURVEY IMPLEMENTATION

## 2.1 Sample Design

The 2015 ZDHS sample was designed to yield representative information for most indicators for the country as a whole, for urban and rural areas, and for each of Zimbabwe's ten provinces: Manicaland, Mashonaland Central, Mashonaland East, Mashonaland West, Matabeleland North, Matabeleland South, Midlands, Masvingo, Harare, and Bulawayo. The 2012 Zimbabwe Population Census sampling frame was used for the 2015 ZDHS.

Administratively, each province in Zimbabwe is divided into districts, and each district is divided into smaller administrative units called wards. During the 2012 Zimbabwe Population Census, each ward was subdivided into convenient areas called census enumeration areas (EAs). The 2015 ZDHS sample was selected using a stratified, two-stage cluster design, and EAs were the sampling units for the first stage. The 2015 ZDHS sample included 400 EAs – 166 in urban areas and 234 in rural areas.

Households comprised the second stage of sampling. A complete listing of households was carried out in each of the 400 selected EAs in March 2016. Maps were drawn for each of the clusters and all private households were listed. The listing excluded institutional living arrangements (e.g., army barracks, hospitals, police camps, and boarding schools). A representative sample of 11,196 households was selected for the 2015 ZDHS.

All women age 15-49 and all men age 15-54 who were either permanent residents of the selected households or visitors who stayed in the household the night before the survey were eligible to be interviewed. Anaemia testing was performed in each household, among eligible women age 15-49 years and men age 15-54 years who consented to being tested. With the parent's or guardian's consent, children age 6-59 months were also tested for anaemia in each household. With consent from the respondent, or parental or guardian consent in the case of a minor, blood samples were collected in each household for anaemia testing in the field and HIV testing in the laboratory for all females age 0-49 years and all males age 0-54 years who consented. In addition, a sub-sample of one eligible woman in each household was randomly selected to be asked additional questions about domestic violence.

## 2.2 Questionnaires

Four questionnaires were used for the 2015 ZDHS: the Household Questionnaire, the Woman's Questionnaire, the Man's Questionnaire, and Biomarker Questionnaire. These questionnaires were adapted from model survey instruments developed for The DHS Program to reflect the population and health issues relevant to Zimbabwe. Issues were identified at a series of meetings with various stakeholders from government ministries and agencies, research and training institutions, non-governmental organisations (NGOs), and development partners. In addition to English, the questionnaires were translated into two major languages, Shona and Ndebele. All four questionnaires were programmed into tablet computers to facilitate computer assisted personal interviewing (CAPI) for data collection purposes, with the capability to choose English, Shona, or Ndebele for each of the questionnaires.

The Household Questionnaire was used to list all the usual members and visitors of selected households. Some basic information was collected on the characteristics of each person listed, including age, sex, education, and relationship to the head of the household. For children under age 18, survival status of the parents was determined. Data on the age and sex of household members obtained in the Household Questionnaire was used to identify women age 15-49 years and men age 15-54 years who were eligible for the individual interview and anthropometry measurement, and haemoglobin and HIV testing. The Household Questionnaire was also used to identify children age 0-14 years for HIV testing and children 6-59 months for anaemia testing and anthropometry measurement. Additionally, the Household Questionnaire collected information on characteristics of the household's dwelling unit, such as the source of water, type of toilet

facilities, materials used for the floor of the house, ownership of various durable goods, and ownership and use of mosquito nets (to assess the coverage of malaria prevention programmes).

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

- Background characteristics (age, education, media exposure, etc.)
- Birth history and childhood mortality
- Knowledge and use of family planning methods
- Fertility preferences
- Antenatal, delivery, and postnatal care
- Breastfeeding and infant feeding practices
- Vaccinations and childhood illnesses
- Marriage and sexual activity
- Women's work and husband's background characteristics
- Malaria prevention and treatment
- Awareness and behaviour regarding AIDS and other sexually transmitted infections (STIs)
- Adult mortality, including maternal mortality
- Domestic violence

The Man's Questionnaire was administered to all men age 15-54 in each household in the 2015 ZDHS sample. The Man's Questionnaire collected much of the same information found in the Woman's Questionnaire, but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health.

The Biomarker Questionnaire was used to record the results of the anthropometry measurements, haemoglobin testing results, and HIV sample collection for testing in the laboratory, as well as the signatures of the fieldworker and the respondent who gave consent. Separate consent forms were administered and archived to record the respondent's consent and signature.

For this survey, interviewers used tablet computers to record all questionnaire responses during interviews. The tablet computers were equipped with Bluetooth<sup>®</sup> technology to enable remote electronic transfer of files, such as assignment sheets from the team supervisor to the interviewers, Household Questionnaires among survey team members, and completed questionnaires from interviewers to team supervisors. The tablet computer programming was created using the Censuses and Surveys Processing (CSPro) by The DHS Program, in collaboration with the U.S. Census Bureau.

## 2.3 Anthropometry, Anaemia, and HIV Testing

The 2015 ZDHS incorporated three 'biomarkers': anthropometry, anaemia testing, and HIV testing. Data related to the coverage of the biomarker component, the anthropometric measures and the result of the anaemia testing was directly recorded using the tablet. The protocol for anaemia testing and for the blood specimen collection for HIV testing was reviewed and approved by the Medical Research Council of Zimbabwe (MRCZ), the Institutional Review Board of ICF International, and the Centers for Disease Control and Prevention (CDC) in Atlanta.

## Anthropometry Measurements

In all households, height and weight measurements were recorded for children age 0-59 months, women age 15-49 years, and men age 15-54 years.

### Anaemia Testing

Blood specimens were collected for anaemia testing from all children age 6-59 months, women age 15-49 years and men age 15-54 years who voluntarily consented to the testing. Blood samples were drawn from a drop of blood taken from a finger prick (or a heel prick for young children with small fingers) and collected in a microcuvette. Haemoglobin analysis was carried out on site using a battery-operated portable HemoCue® analyser, which produces a result in less than1 minute. Results were given verbally and in writing. Parents of children with a haemoglobin level below 7 g/dl were instructed to take the child to a health facility for follow-up care. Likewise, non-pregnant women, pregnant women, and men were referred for follow-up care if their haemoglobin level was below 7 g/dl, 9 g/dl and 9 g/dl, respectively. All households in which anthropometry and/or anaemia testing was conducted were given a brochure explaining the causes and prevention of anaemia.

## HIV Testing

Blood specimens for HIV testing in the laboratory were collected by the ZDHS biomarker technicians from all women age 15-49 years and men age 15-54 years who consented to the test. Blood specimens for HIV testing in the laboratory were also collected from children age 0-14 years whose parents or guardians consented to the test. The protocol for the blood specimen collection and analysis was based on the anonymous linked protocol developed for The DHS Program. This protocol allows for the merging of the HIV test results with the socio-demographic data collected in the individual questionnaires after all information that could potentially identify an individual is destroyed.

Interviewers explained the procedure, the confidentiality of the data, and that the test results would not be made available to the respondent. If a respondent consented to the HIV testing, five blood spots from the finger prick were collected on a filter paper card to which a barcode label unique to the respondent was affixed. Respondents were asked whether they consented to having the laboratory store their blood sample for future unspecified testing. If the respondent did not consent to additional testing using their sample, it was indicated on the Biomarker Questionnaire and the Blood Sample Transmittal Form that the respondent refused additional tests using their specimen, and "no additional testing" was written on the filter paper card. Each household, whether individuals consented to HIV testing or not, was given an informational brochure on HIV/AIDS and a list of fixed sites providing voluntary counselling and testing (VCT) services in surrounding districts within the province.

Each blood sample was given a barcode label, and the barcode number was entered into the Biomarker Questionnaire. A third copy of the same barcode was affixed to the Blood Sample Transmittal Form to track the blood samples from the field to the laboratory. Blood samples were dried overnight and packaged for storage the following morning. Samples were periodically collected from the field teams, along with the Blood Sample Transmittal Forms, and transported to ZIMSTAT in Harare to be logged in, and checked. Blood samples were then transported to the National Microbiology Reference Laboratory (NMRL) in Harare.

Upon arrival at NMRL, each blood sample was logged into the CSPro HIV Test Tracking System (CHTTS) database, given a laboratory number, and stored at -20°C until tested. The HIV testing protocol stipulates that testing of blood can only be conducted after the questionnaire data entry is completed, verified, and cleaned, and all unique identifiers are removed from the questionnaire file except the anonymous barcode number. The testing algorithm calls for testing all samples on the first assay test, an ELISA, the Vironostika<sup>®</sup> HIV Ag/Ab (fourth generation) (Biomerieux). A negative result is rendered negative. All samples with positive results are subjected to a second ELISA, the Enzygnost<sup>®</sup> HIV Integral II (fourth generation) (Siemens). Samples with positive results on the second test are rendered positive. If the first and second tests are discordant, the samples are re-tested on the first and second assay. If the samples are still discordant, a third confirmatory test, the HIV 2.2 Western Blot (DiaSorin), is administered. The final result will be rendered positive if the Western Blot confirms the result to be positive and rendered negative if the Western

Blot confirms it to be negative. If the Western Blot results are indeterminate, the sample will be rendered indeterminate.

Upon finalising HIV testing, the HIV test results for the 2015 ZDHS will be entered into a spreadsheet with a barcode as the unique identifier for the result. The barcode will be used to link the HIV test results with the data from the individual questionnaires. Data from the HIV results and linked demographic and health data will be published in the 2015 ZDHS Final Report.

## 2.4 Training of Field Staff

The ZDHS technical team, comprised of ZIMSTAT staff and experts from the Ministry of Health and Child Care (MoHCC), Zimbabwe National Family Planning Council (ZNFPC), the Medical Research Council of Zimbabwe (MRCZ), UNFPA, USAID and ICF International, participated in a 3-day training of trainers (TOT) conducted April 20-22, 2015. Immediately following the TOT, the pretest training took place April 23-May 6, 2015. The pretest fieldwork was conducted May 7-9, 2015. During a 2-week period, the 15member ZDHS technical team and 3 ICF technical specialists trained 27 participants to administer both paper and electronic questionnaires using tablet computers, take anthropometric measurements, and collect blood samples for haemoglobin and HIV testing. The ICF biomarker specialist trained 42 pretest participants on the finger prick for blood collection, and proper handling and storage of the dried blood spots (DBS) for HIV testing. The pretest fieldwork was conducted over 3 days, covering approximately 150 households. The ZDHS technical team conducted debriefing sessions with the pretest field staff on May 10 2015, and modifications to the questionnaires were made based on lessons learned from the exercise.

ZIMSTAT recruited and trained 120 people (52 females and 68 males) to serve as supervisors, interviewers, biomarker technicians, and reserve interviewers for the main fieldwork. During the third week of the main training, 45 biomarker technicians (21 female and 24 male) who were also trained to administer the Household, Woman's, and Man's questionnaires were trained to collect blood from a finger prick for haemoglobin testing and DBS sample collection for HIV testing. Field staff training for the main survey was conducted June 1-24, 2015. The training course consisted of instruction regarding interviewing techniques and field procedures, a detailed review of the questionnaire content, instruction and practice in weighing and measuring children, mock interviews between participants in the classroom, and practice interviews with respondents in households located outside the 2015 ZDHS sample EAs. Field practice in anthropometry, haemoglobin testing and DBS collection was also carried out for interviewers who were assigned as team biomarker technicians. Team supervisors were trained in methods of data quality control procedures, fieldwork coordination, and the use of special programmes for the tablet computers.

## 2.5 Fieldwork

Fifteen interviewing teams conducted data collection for the 2015 ZDHS. Each team consisted of one team supervisor, seven interviewers and one driver. Three of the interviewers on each team were also biomarker technicians responsible for anthropometry measurement and blood sample collection for haemoglobin testing and DBS sample collection for HIV testing. Electronic data files were transferred from each interviewer's tablet computer to the team supervisor's tablet computer every day. The field supervisors transferred data to the central data processing office. To facilitate communication and monitoring, each field worker was assigned a unique identification number. Technical senior staff members from ZIMSTAT coordinated and supervised fieldwork activities. An ICF International technical specialist, a biomarker specialist, two data processing staff, and representatives from NMRL, MoHCC, ZNFPC, MRCZ, UNFPA, and USAID supported fieldwork monitoring activities. Data collection took place over a 6-month period, from July 6 to December 20, 2015.

## 2.6 Data Processing

The CSPro was used for data editing, weighting, cleaning, and tabulation. In ZIMSTAT's central office, data received from the supervisor's tablets were registered and checked for any inconsistencies and

outliers. Data editing and cleaning included structure and internal consistency checks to ensure completeness of work in the field. Any anomalies were communicated to the respective team through the technical team and the team supervisor. The corrected results were re-sent to the central processing unit.

## 3 RESULTS

## 3.1 Response Rates

The household and individual response rates for the 2015 ZDHS are shown in Table 1. A total of 11,196 households were selected for inclusion in the 2015 ZDHS, and of these, 10,657 were found to be occupied. A total of 10,534 households were successfully interviewed, yielding a response rate of 99 percent.

In the interviewed households, 10,351 women were identified to be eligible for the individual interview, and 96 percent of them were successfully interviewed. For men, 9,132 were identified as eligible for interview, and 92 percent of them were successfully interviewed.

The 2015 ZDHS achieved a higher response rates than did the 2010-11 ZDHS for households, women and men. The increase in response rates is particularly notable in urban areas.

Table 1 Results of the household and individual interviews
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Number of households, number of interviews, and response rates, according to residence (unweighted), Zimbabwe 2015

	Resid		
Result	Urban	Rural	Total
Household interviews			
Households selected	4,646	6,550	11,196
Households occupied	4,423	6,234	10,657
Households interviewed	4,341	6,193	10,534
Household response rate <sup>1</sup>	98.1	99.3	98.8
Interviews with women age 15-49			
Number of eligible women	4,753	5,598	10,351
Number of eligible women interviewed	4,521	5,434	9,955
Eligible women response rate <sup>2</sup>	95.1	97.1	96.2
Interviews with men age 15-54			
Number of eligible men	3,917	5,215	9,132
Number of eligible men interviewed	3,456	4,940	8,396
Eligible men response rate <sup>2</sup>	88.2	94.7	91.9

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

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

## 3.2 Characteristics of the Respondents

Table 2 shows the distribution of women and men age 15-49 years in the 2015 ZDHS sample, by background characteristics. The size of the population declines steadily with increasing age. Thirty-nine percent of women and 43 percent of men are 15 to 24 years old.

Women who are in union (i.e., currently married or living with a man) constitute nearly two-thirds of all interviewed women (62 percent), and half of men age 15-49 are currently in union (50 percent). The proportion of men age 15-49 who have never been married is almost double that of women who have never been married, 45 percent compared with 25 percent. Table 2 also shows that the majority of women (62 percent) and men (64 percent) live in rural areas.

Education in Zimbabwe is widespread. Few women and men (1 percent each) have no formal education. Most Zimbabweans reach the secondary level of schooling: 73 percent of women and 77 percent of men attended at least some secondary school.

Table 2	Background	characteristics	of respondents
	Dackground	Characteristics	orrespondents

Percent distribution of women and men age 15-49 by selected background characteristics, Zimbabwe 2015

		Women		Men			
Background characteristic	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number	
Age							
15-19	22.1	2,199	2,156	26.4	2,126	2,065	
20-24	17.0	1,697	1,782	16.5	1,330	1,376	
25-29	16.6	1,657	1,656	14.3	1,148	1,166	
30-34	16.3	1,619	1,591	13.9	1,120	1,104	
35-39	12.4	1,236	1,209	11.4	917	932	
40-44	9.7	965	966	10.1	809	797	
45-49	5.9	582	595	7.4	591	578	
Religion							
Traditional	0.6	64	60	2.6	208	202	
Roman Catholic	6.7	666	670	8.0	645	652	
Protestant	15.7	1,560	1,618	15.4	1,237	1,204	
Pentecostal	25.2	2,506	2,679	17.6	1,413	1,486	
Apostolic sect	41.8	4,165	3,829	32.1	2,585	2,432	
Other Christian	4.6	461	589	6.1	487	578	
Muslim	0.4	38	30	0.7	59	50	
None	4.9	489	471	17.4	1,397	1,405	
Other	0.1	-05	9	0.1	1,007	9	
Marital status							
Never married	25.2	2,511	2,666	45.1	3,624	3,617	
Married	58.7	5,841	5,700	49.1	3,948	3,931	
Living together	3.1	310	315	0.8	62	68	
Divorced/separated	8.6	855	844	4.4	354	350	
Widowed	4.4	438	430	0.7	53	52	
Residence							
Urban	38.5	3.829	4.521	36.1	2.900	3,297	
Rural	61.5	6,126	5,434	63.9	5,140	4,721	
Province							
Manicaland	12.7	1,266	1,019	13.3	1,072	852	
Mashonaland Central	8.9	882	993	10.0	806	944	
Mashonaland East	9.6	952	993	10.0	807	759	
				12.5			
Mashonaland West	11.7	1,160	1,054		1,004	888	
Matabeleland North	4.7	465	849	4.6	366	698	
Matabeleland South	4.2	419	829	4.2	335	634	
Midlands	12.7	1,263	1,062	12.3	986	850	
Masvingo	11.9	1,187	1,046	10.5	843	747	
Harare	17.9	1,783	1,235	17.6	1,412	954	
Bulawayo	5.8	577	958	5.1	409	692	
Education							
No education	1.3	126	106	0.5	38	38	
Primary	25.8	2,571	2,385	22.4	1,803	1,726	
Secondary	65.6	6,527	6,637	66.5	5,349	5,359	
More than secondary	7.3	731	827	10.6	849	895	
Wealth quintile							
Lowest	17.1	1,704	1,499	15.1	1,212	1,121	
Second	17.0	1,693	1,452	18.0	1,448	1,294	
Middle	17.6	1,748	1,549	19.4	1,558	1,419	
Fourth	23.2	2,307	2,558	23.0	1,852	1,993	
Highest	25.1	2,503	2,897	24.5	1,970	2,191	
Total 15-49	100.0	9,955	9,955	100.0	8,041	8,018	
Men 50-54	na	na	na	na	355	378	
Total 15-54	na	na	na	na	8,396	8,396	
10tal 10-04	na	na	na	na	0,390	0,390	

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

## 3.3 Fertility

In the 2015 ZDHS, all women who were interviewed were asked to report the total number of sons and daughters to whom they had ever given birth in their lifetime. To ensure all information was reported, women were asked separately about children still living at home, those living elsewhere, and those who had died. A complete birth history was then obtained, including information on sex, date of birth, and survival status of each child. Age at death was also recorded for children who were born alive and later died.

Table 3 shows age-specific fertility rates for women by 5-year age groups for the 3-year period preceding the survey. Age-specific and total fertility rates were calculated directly from the birth history data. The sum of age-specific fertility rates (known as the total fertility rate, or TFR) is a summary measure of the level of fertility. It can be interpreted as the number of children a woman would have by the end of her childbearing years if she were to pass through those years bearing children at the current observed age-specific rates. If fertility were to remain constant at current levels, a Zimbabwean woman would bear an average of 4.0 children in her lifetime. Fertility is higher among rural women than among urban women; whereas, rural women will give birth to nearly two more children during their reproductive years than urban women (4.7 and 3.0, respectively).

Figure 1 presents trends in the TFR since the 1988 ZDHS. Over a 27-year period, TFR decreased from 5.4 in 1988 to 4.0 in 2015.

Table 3 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, Zimbabwe 2015

Residence								
Age group	Urban	Rural	Total					
15-19	63	138	110					
20-24	153	243	204					
25-29	171	222	201					
30-34	118	167	147					
35-39	77	118	102					
40-44	15	44	34					
45-49	3	8	6					
TFR (15-49) GFR CBR	3.0 110 31.1	4.7 166 32.7	4.0 144 32.0					

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



Figure 1 Trends in total fertility rate, Zimbabwe 1988-2015

Teenage pregnancy and motherhood is a major social and health concern. Early teenage pregnancy can cause serious health problems for both the mother and the child. Teenage mothers are more likely to suffer from severe complications during delivery, which may result in high morbidity and mortality for both the mother and the child. In addition, young mothers may not be sufficiently mature for childbearing and rearing. Moreover, childbearing at an early age greatly reduces women's educational and employment opportunities and is associated with higher levels of fertility. These factors may have an adverse impact on their job prospects, which often lowers their status in society.

Table 4 shows that 22 percent of adolescent females age 15-19 in Zimbabwe have begun childbearing. One in six teenagers (17 percent) has given birth and another 5 percent are pregnant with their first child. As expected, the proportion of women age 15-19 who have begun childbearing increases with age, from 3 percent among women age 15 to 48 percent among women age 19.

Early childbearing among teenagers is almost three times higher in rural than in urban areas (27 versus 10 percent, respectively). By province, early childbearing is highest in Mashonaland Central and Matabeleland South (31 percent and 30 percent, respectively) and lowest in Harare (10 percent).

More than twice the number of teenagers with primary education (38 percent) have begun childbearing compared with teenagers who have a secondary education (17 percent). The proportion of teenagers who have begun childbearing decreases as wealth increases: five times more teenagers in the lowest wealth quintile (34 percent) have begun childbearing compared with teenagers in the highest wealth quintile (6 percent).

Table 4	Teenage	preq	nancy	and	motherhood

F

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,
Zimbabwe 2015

		e of women -19 who:	Percentage who have		
Background characteristic	Have had a live birth	Are pregnant with first child	begun childbearing	Number of women	
Age					
15	1.8	1.4	3.2	487	
16	6.7	2.6	9.4	472	
17	15.7	5.7	21.4	435	
18	22.9	8.1	31.0	384	
19	40.9	7.4	48.3	421	
Residence					
Urban	7.1	3.3	10.3	724	
Rural	21.6	5.6	27.2	1,475	
Province					
Manicaland	18.8	8.8	27.7	291	
Mashonaland Central	24.0	6.9	30.9	199	
Mashonaland East	20.5	4.9	25.3	220	
Mashonaland West	18.2	2.2	20.4	244	
Matabeleland North	22.6	3.5	26.1	109	
Matabeleland South	23.8	6.5	30.3	99	
Midlands	18.5	5.4	23.9	302	
Masvingo	14.4	3.2	17.6	287	
Harare	6.6	3.2	9.9	323	
Bulawayo	8.7	3.6	12.2	126	
Education					
No education	*	*	*	4	
Primary	32.3	5.5	37.8	480	
Secondary	12.6	4.7	17.3	1,698	
More than secondary	-		-	17	
Wealth quintile					
Lowest	27.1	6.5	33.6	360	
Second	20.7	6.4	27.2	398	
Middle	21.2	4.8	26.0	479	
Fourth	14.2	5.8	20.0	458	
Highest	4.5	1.5	6.1	504	
Total	16.8	4.8	21.6	2,199	

has been suppressed.

#### 3.4 **Fertility Preferences**

Information on fertility preferences is used to assess the potential demand for family planning services for the purposes of spacing or limiting future childbearing. To elicit information on fertility preferences, several questions were asked of women (currently pregnant or not) on whether they want to have another child, and if so, how soon.

Table 5 shows that 19 percent of women want to have another child soon (within the next 2 years) and 35 percent want to have another child later (in 2 or more years). Forty-one percent of women want no more children, which includes the two those who are sterilised.

Fertility preference is closely related to the number of living children. Eighty-six percent of women with no living children want a child soon, compared with 8 percent of women with 6 or more children who would like to have another child in the next 2 years. The more children a woman has, the higher the likelihood that she does not want another child.

#### Table 5 Fertility preferences by number of living children

Percent distribution of currently married women age 15-49 by desire for children, according to number of living children, Zimbabwe 2015

	Number of living children <sup>1</sup>							
Desire for children	0	1	2	3	4	5	6+	Total
Have another soon <sup>2</sup>	86.3	27.2	18.9	12.3	9.7	6.2	7.9	18.9
Have another later <sup>3</sup>	4.9	63.6	45.3	30.5	18.7	12.5	6.3	34.7
Have another, undecided	d							
when	0.6	1.1	2.0	1.1	0.3	0.6	0.0	1.1
Undecided	1.8	1.6	4.6	5.3	3.3	3.1	1.8	3.6
Want no more	2.4	5.7	27.9	49.2	65.2	76.4	81.9	40.0
Sterilised <sup>4</sup>	0.0	0.0	0.3	1.1	2.4	0.9	1.4	0.8
Declare infecund	4.0	0.8	0.9	0.6	0.4	0.3	0.7	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	274	1,133	1,587	1,403	916	475	363	6,151

<sup>1</sup> The number of living children includes 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

## 3.5 Family Planning

Family planning refers to a conscious effort by a couple to limit or space the number of children they want to have through the use of contraceptive methods. Information about the knowledge of family planning methods was collected from female and male respondents by asking them if they had heard of various specific methods by which a couple can delay or avoid a pregnancy. Respondents were also asked if they were currently using a method, and if so, which method they were using.

Contraceptive methods are classified as modern or traditional methods. Modern methods include female sterilisation, male sterilisation, the pill, intrauterine contraceptive device (IUCD), injectables, implants, male condom, female condom, and lactational amenorrhoea method (LAM). Methods such as rhythm (periodic abstinence) and withdrawal are grouped as traditional.

Table 6.1 shows the percent distribution of currently married women by the contraceptive method currently used. Overall, 67 percent of currently married women report current use of a family planning method, and 66 percent of these women use a modern method. Only 1 percent of currently married women use a traditional method. The most popular methods are the pill (41 percent), injectables (10 percent), and implants (10 percent). Four percent of currently married women use male condoms, and 1 percent have been sterilised.

The contraceptive prevalence rate (CPR) increases with age, reaching a peak at age 35-39 years (73 percent), and then declines to 56 percent among women 45-49 years. By province, CPR ranges from 59 percent in Manicaland to 72 percent in Mashonaland West and Bulawayo. The CPR increases with an increase in education from 49 percent of women with no education to 77 percent of women with more than a secondary education. The CPR also increases with an increase in household wealth from 62 percent in the lowest wealth quintile to 73 percent in the highest wealth quintile.

Contraceptive use among currently married women in Zimbabwe has increased to 67 percent since the 2010-11 ZDHS when the CPR was 59 percent. Use of implants has increased from 3 percent in 2010-11 to 10 percent in 2015. Figure 2 presents CPR trends from 1988 to 2015.

Table 6.2 presents current contraceptive use for sexually active unmarried women age 15-49, by contraceptive methods. Similar to currently married women, 68 percent of sexually active unmarried women currently use a contraceptive method. The choice of method mix for sexually active unmarried women differs from that of currently married women: 27 percent use male condoms, 16 percent use the pill, 14 percent use implants, and 8 percent use injectables. Implants are almost three times as common among rural women (22 percent) than among their urban counterparts (8 percent).

Table 6.1 Current use of contraception among currently married women

		Anv				Σ	Modern method	-				Anv	Traditional method	method	Not		
Background characteristic	Any method	modern method	Female sterilisation	Male sterilisation	liid	IUCD	Injectables	Implants	Male condom	Female condom	LAM	traditional	Withdrawal	Other	currently using	Total	Number of women
Age 15-19	45.8	44.9	0.0	0.0	31.7	0.1	8.1	3.6	1.5	0.0	0.0	6.0	0.9		54.2	100.0	432
20-24	63.9	63.7	0.0	0.0	41.7	0.1	10.1	9.9	1.7	0.0	0.2	0.2	0.2		36.1	100.0	1,045
25-29	68.8	68.0	0.3	0.0	43.1	0.9	11.5	9.6	2.4	0.1	0.0	0.8	0.8		31.2	100.0	1,278
30-34	71.1	70.2	0.3	0.0	44.4	0.9	9.6	11.7	3.3	0.0	0.0	0.9	0.9		28.9	100.0	1,333
35-39	72.7	71.4	0.7	0.0	45.9	0.3	8.5	10.8	4.7	0.2	0.2	<u>د،</u>	1.0		27.3	100.0	975
40-44 45-49	67.4 55.8	66.2 54.1	3.6 3.6	0.0 4.0	35.4 26.6	1.0 0.8	9.0 0.3	9.5 5.9	7.6 9.3	0.2 0.9	0.1 0.3	1.2	1 1 1 2 1 2	0.0 0.5	32.6 44.2	100.0 100.0	707 381
<b>Residence</b> Urban Rural	71.2 64.1	70.6 63.0	1.4 0.5	0.0 0.0	44.1 39.2	0.1 0.4	6.6 11.2	12.0 8.4	5.3 3.1	0.0	0.2 0.0	0.6 1.1	0.6	0.0	28.8 35.9	100.0 100.0	2,100 4,051
	58.7	56.7	0.7	0.0	34.3	0.0	10.4	7.8	2.6	0.2	0.0	2.0	1.8	0.2	41.3	100.0	857
Mashonaland Central Mashonaland East	60.2 69.9	65.1 69.1	0.0 6.0	0.0	46.5 43.1	4.0 0.6	7.5 11.3	10.0	3.6	0.0	0.0	1.1	1.1	0.0	33.8 30.1	100.0	638 622
Mashonaland West	71.5 67.0	70.9 66.3	0.6	0.0	48.1 20.3	4.0 4.0	8.5 18.6	9.1 10.6	4.2 0 0	0.0	0.0 1.0	0.5	0.5	0.0	28.5 33.0	100.0	774 279
Matabeleland South	59.8	59.7	6.0	0.1	26.7	0.1	13.4	13.7	4.7	0.0	0.0	0.1	0.1	0.0	40.2	100.0	214
Midlands	67.1 61 2	66.3 60.5	0.7	0.0	39.6 27 7	0.2	11.9	10.7	, 28 2, 6	0.2	0.1	0.8	0.8	0.0	32.9	100.0	794
Harare	70.8	70.2	t 0.0	0.0	46.8	- <del>-</del> -	4.4	0.1 10.6	<del>-</del> - 9	t.0 0.0	0.0	0.5	0.5	0.0	29.2 29.2	100.0	976
Bulawayo	71.9	70.9	3.2	0.2	36.9	1.7	5.8	16.2	6.4	0.0	0.6	1.0	1.0	0.0	28.1	100.0	258
Education No education	49.3	49.3	0.7	0.0	29.4	0.0		2.8		1.9	0.0	0.0	0.0	0.0	50.7	100.0	88
Secondary	68.1 68.1	67.4	- 0 0 4 80 1	0.0	42.5	0.0 0.0	6.01 2.2	- 6 - 9	3.8 3.8	0.1	0.1.0	0.8	0.7	0.1.0	31.9	100.0	1,820 3,813
More than secondary	76.8	75.6	2.7	0.3	46.4	0.9		15.7		0.4	0.2	1.2	1.2	0.0	23.2	100.0	424
Wealth quintile Lowest Second Mindele	62.4 62.4 64.1	61.5 61.3 63.4	0.2 0.5	0.00	38.5 37.8 37.9	0.5	12.5 9.9 12.5	7.3 8.6	3.8 3.8 9	0.2	0.0	0. 1. 6	0.4 4.0	0.0	37.6 37.6 35.0	100.0 100.0	1,193 1,191 173
Fourth Highest	69.3 73.0	68.6 72.3	0.7	0.0	44.9 7.44 7.7	1 0 C	7.4 6.8	10.7 12.2	0.4 7.7 7.7	0.0	0.0	0.7	0.7	0.0	30.7 27.0	100.0 100.0	1,402 1,292
Number of living children																	
0 1-2	6.8 68.6	6.3 68.1	0.0	0.0	2.7 45.4	0.0	0.8 9.6	0.3	2.0 3.8	0.0	0.4	0.5	0.5	0.0	93.2 31.4	100.0 100.0	426 2.688
3-4 5+	75.2 66.9	74.1 65.2	1.6 12	0.0 0.0	45.7 32.6	0.4 1.5	10.3 12.3	12.0 12.6	3.9 4.3	0.1 0.5	0.0 0.2	1.1 7.1	1.1 1.5	0.0 0.2	24.8 33.1	100.0 100.0	2,234 803
Total	66.5	65.6	0.8	0.0	40.9	9.0	9.6	9.6	3.8	0.1	0.1	0.9	0.9	0.0	33.5	100.0	6,151
Note: If more than one method is used, only the most effective method is considered in this tabu LAM = Lactational amenorrhoea method	nethod is us orrhoea me:	ed, only the thod	most effective	e method is co	insidered in	this tabulation.	ou.										

Percent distribution of sexually active unmarried women age 15-49 by contraceptive method currently used, according to background characteristics, Zimbabwe 2015	tion of sexua	Ily active ur	nmarried wome	en age 15-49	9 by contrac	ceptive methoo	d currently u	sed, accordir	ng to backgro	ound characte	ristics, Zim	babwe 2015				
						M	Modern method	p					Traditional method			
Background characteristic	Any method	Any modern method	Female sterilisation	llid	IUCD	Injectables Implants	Implants	Male condom	Female condom	Emergency contra- ception	LAM	Any traditional method	Any traditional method Withdrawal	Not currently using	Total	Number of women
<b>Residence</b> Urban	64.4	63.1	0.2	16.3	0.0	6.3	8.0	31.0	0.0	<u>+</u>	0.2	1.3 ני	1.3	35.6	100.0	187
Rural	71.0	71.0	0.0	15.8	0.2	10.7	21.7	21.7	0.4	0.0	0.5	0.0	0.0	29.0	100.0	163
Total	67.5	66.8	0.1	16.0	0.1	8.4	14.4	26.7	0.2	0.6	0.4	0.7	0.7	32.5	100.0	349
Note: If more than one method is used, only the most effective method is LAM = Lactational amenorrhoea method	an one meth	od is used, oea methoo	only the most e	effective me	thod is cons	considered in this tabulation.	tabulation.									

Table 6.2 Current use of contraception among sexually active unmarried women

13

## *Figure 2* Trends in CPR for currently married women, Zimbabwe 1988-2015



Table 7.1 presents data on unmet need, met need, and total demand for family planning services for currently married women. Overall, 10 percent of currently married women have an unmet need for family planning. Sixty-seven percent of married women have a met need for family planning – that is, they are currently using a contraceptive method – an increase from 59 percent in 2010-11. The total potential demand for family planning among currently married women is 77 percent, and the total demand satisfied is 87 percent.

The level of unmet need varies by background characteristics. By province, unmet need ranges from 7 percent in Mashonaland West to 16 percent in Matabeleland South. Married women with no education have the highest unmet need for family planning (22 percent) compared with 5 percent among women with more than a secondary education.

Total demand for family planning also varies by background characteristics, ranging from 69 percent in Manicaland to 81 percent in Harare and Bulawayo. Total demand for family planning increases with increasing education from 72 percent of currently married women with no education to 81 percent of women with more than a secondary education.

#### Table 7.1 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, percentage with met need for family planning who are using modern methods, percentage with demand for family planning, percentage of the demand for family planning that is satisfied, and percentage of the demand for family planning that is satisfied with modern methods, by background characteristics, Zimbabwe 2015

		Met need for fa (currentl)			Percentage of de	emand satisfied <sup>1</sup>	
Background characteristic	Unmet need	All methods	Modern methods <sup>2</sup>	Total demand for family planning <sup>3</sup>	All methods	Modern methods <sup>2</sup>	Number of women
Age							
15-19	12.6	45.8	44.9	58.5	78.4	76.8	432
20-24	10.1	64.2	63.8	74.2	86.5	86.0	1,045
25-29	10.0	69.3	68.5	79.3	87.4	86.4	1,278
30-34	8.6	71.5	70.6	80.0	89.3	88.2	1,333
35-39	11.1	72.9	71.4	83.9	86.8	85.0	975
40-44	12.3	67.4	66.1	79.7	84.6	83.0	707
45-49	11.6	55.8	53.8	67.4	82.8	79.9	381
Residence							
Urban	9.4	71.5	70.7	80.9	88.3	87.3	2,100
Rural	10.9	64.3	63.2	75.2	85.5	84.1	4,051
Province							
Manicaland	10.1	58.7	56.7	68.8	85.3	82.4	857
Mashonaland Central	8.4	66.4	65.2	74.9	88.7	87.2	638
Mashonaland East	9.3	69.9	69.1	79.3	88.2	87.2	622
Mashonaland West	6.5	71.7	71.0	78.2	91.7	90.8	774
Matabeleland North	12.5	67.0	66.3	79.5	84.3	83.3	279
Matabeleland South	16.2	59.8	59.7	75.9	78.7	78.6	214
Midlands	11.4	68.2	67.2	79.6	85.7	84.4	794
Masvingo	15.2	61.2	60.5	76.4	80.1	79.2	740
Harare	9.9	71.1	70.4	81.0	87.8	87.0	976
Bulawayo	8.9	72.4	70.8	81.3	89.1	87.1	258
Education							
No education	22.3	49.3	49.3	71.6	68.8	68.8	88
Primary	13.4	61.8	60.7	75.1	82.2	80.8	1,826
Secondary	9.4	68.4	67.5	77.8	87.9	86.8	3,813
More than secondary	4.5	76.8	75.4	81.2	94.5	92.8	424
Wealth quintile							
Lowest	14.1	62.8	61.8	76.9	81.7	80.4	1,193
Second	11.8	62.8	61.5	74.6	84.1	82.5	1,191
Middle	9.0	64.1	63.1	73.1	87.7	86.4	1,073
Fourth	10.5	69.4	68.7	80.0	86.8	85.9	1,402
Highest	6.7	73.4	72.3	80.1	91.6	90.3	1,292
Total	10.4	66.8	65.8	77.2	86.5	85.2	6,151

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

 <sup>1</sup> Percentage of demand satisfied is met need divided by total demand
 <sup>2</sup> Modern methods include female sterilisation, male sterilisation, IUCD, implants, injectables, pill, male condom, female condom, emergency contraception, standard days method (SDM), and lactational amenorrhoea method (LAM) <sup>3</sup> Total demand is the sum of unmet need and met need (with all methods)

Table 7.2 presents data on unmet need, met need, and total demand for family planning services for sexually active unmarried women. Unmet need for family planning is twice as high (20 percent) among sexually active unmarried women as it is among currently married women (10 percent). Unmet need is higher among urban sexually active unmarried women (23 percent) than among their rural counterparts (18 percent). Total demand among sexually active unmarried women is also higher (88 percent), although met need is similar (68 percent) to that of currently married women.

#### Table 7.2 Need and demand for family planning among sexually active unmarried women

Percentage of sexually active unmarried women age 15-49 with unmet need for family planning, percentage with met need for family planning, percentage with met need for family planning who are using modern methods, percentage with demand for family planning, percentage of the demand for family planning that is satisfied, and percentage of the demand for family planning that is satisfied, and percentage of the demand for family planning that is satisfied, and percentage of the demand for family planning that is satisfied, by background characteristics, Zimbabwe 2015

		Met need for fa (currentl)			Percentage of de	emand satisfied <sup>1</sup>	
Background characteristic	Unmet need	All methods	Modern methods <sup>2</sup>	Total demand for family planning <sup>3</sup>	All methods	Modern methods <sup>2</sup>	Number of women
Residence							
Urban Rural	22.5 17.9	64.4 71.0	62.8 70.5	86.9 88.9	74.1 79.9	72.3 79.3	187 163
Total	20.3	67.5	66.4	87.8	76.8	75.6	349

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

<sup>1</sup> Percentage of demand satisfied is met need divided by total demand

<sup>2</sup> Modern methods include female sterilisation, male sterilisation, IUCD, implants, injectables, pill, male condom, female condom, emergency contraception, standard days method (SDM) and lactational amenorrhoea method (LAM)

<sup>3</sup> Total demand is the sum of unmet need and met need (with all methods)

Figure 3 shows trends in unmet need, for all contraceptive use, and percentage of demand met. Unmet need has steadily declined from 19 percent in 1994 to 10 percent in 2015. Additionally, the percentage of demand satisfied for all contraceptive methods has increased from 72 percent in 1994 to 87 percent in 2015.

# *Figure 3* Trends in unmet need for family planning for all methods among currently married women, Zimbabwe 1994-2015



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

## 3.6 Infant and Child Mortality

Information on infant and child mortality is useful in identifying segments of the population that are at high risk so that programmes can be targeted to reduce it. Childhood mortality rates are also basic indicators of a country's socio-economic level and its citizens' quality of life.

Table 8 presents data on early childhood mortality rates from the 2015 ZDHS. The level of under-5 mortality is 69 deaths per 1,000 live births during the 5-year period before the survey, implying that at least 1 in every 15 children born in Zimbabwe during this period died before reaching their fifth birthday. The infant mortality rate is 50 deaths per 1,000 live births.

#### Table 8 Early childhood mortality rates

Neonatal, post-neonatal, infant, child and under-5 mortality rates for five year periods preceding the survey, Zimbabwe 2015

-	Neonatal	Post-neonatal	Mortality rates Infant	Child	Under-5
Devie diverse divers					
Period preceding	mortality	mortality	mortality	mortality	mortality
survey	(NN)	(PNN) <sup>1</sup>	(1 <b>q</b> 0)	(4 <b>q</b> 1)	(₅q₀)
0-4	29	21	50	20	69
5-9	32	37	69	32	99
10-14	23	25	48	29	76

Figure 4 presents trends in childhood mortality. Under-5 mortality peaked in the 5 years before the 1999 ZDHS.

# *Figure 4* Trends in childhood mortality for the 5-year period preceding the survey, Zimbabwe 1988-2015



## 3.7 Maternal Health

Proper care during pregnancy and delivery is important for the health of both the mother and the baby. In the 2015 ZDHS, women who had a live birth in the 5 years preceding the survey were asked a number of questions about maternal and child health care. For the last live birth in that period, mothers were asked about antenatal care (ANC) during the pregnancy, assistance during delivery, the location of the delivery, and the timing of postnatal care. Table 9 presents the results of these key maternal care indicators.

## Antenatal Care

Antenatal care from a trained provider is important to monitor the pregnancy and reduce morbidity and mortality risks for the mother and child during pregnancy and delivery. The 2015 ZDHS results show that 93 percent of women who gave birth in the 5 years preceding the survey received ANC from a trained health professional at least once for their last birth. Seventy-six percent had four or more ANC visits, an increase from 65 percent in the 2010-11 ZDHS.

## Tetanus Toxoid

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus, a major cause of early infant death in many developing countries, often due to failure to observe hygienic procedures during

delivery. Fifty-four percent of women's last births were protected against neonatal tetanus. By province, protection against neonatal tetanus ranges from 45 percent in Harare to 67 percent in Mashonaland West. Tetanus toxoid protection has remained the same since the 2010-11 ZDHS.

## **Delivery** Care

Access to proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may lead to death or serious illness for the mother, the baby, or both (De Brouwere V. and W. Van Lerberghe, 2001; WHO, 2006). Seventy-eight percent of women report that their last live birth in the last 5 years was delivered by a skilled provider or health professional, an increase from 66 percent in the 2010-11 ZDHS. Seventy-two percent of births were delivered in a health facility, an increase from 65 percent in the 2010-11 ZDHS.

### Table 9 Maternal care indicators

Among women age 15-49 who had a live birth in the 5 years preceding the survey, percentage who received ANC from a skilled provider for the last live birth, percentage with four or more ANC visits for the last live birth, and percentage whose last live birth was protected against neonatal tetanus; among all live births in the 5 years before the survey, percentage delivered by a skilled provider and percentage delivered in a health facility; and among women age 15-49 who had a live birth in the 2 years preceding the survey, percentage who received a postnatal checkup in the first 2 days after the last live birth, by background characteristics, Zimbabwe 2015

	Wom	en who had a liv preceding	ve birth in the 5 y the survey	ears		e births in the 5 ye eceding the surv		Women who h in the 2 preceding t	years
Background characteristic	Percentage with ANC from a skilled provider <sup>1</sup>	Percentage with 4+ ANC visits	Percentage whose last live birth was protected against neonatal tetanus <sup>2</sup>	Number of women	Percentage delivered by a skilled provider <sup>1</sup>	Percentage delivered in a health facility	Number of births	Percentage of women who had a postnatal checkup in the first 2 days after birth	Number of women
Mother's age at birth <20 20-34 35-49	94.6 93.0 93.1	73.4 75.9 77.3	51.1 55.4 52.2	775 3,535 677	77.2 78.9 74.7	75.8 72.2 65.4	1,074 4,572 772	54.3 51.2 45.5	455 1,784 287
Residence Urban Rural	95.7 92.1	77.4 74.9	50.2 56.3	1,637 3,351	92.9 71.3	80.8 68.0	2,027 4,392	55.2 49.5	710 1,817
Province Manicaland Mashonaland Central Mashonaland East Matabeleland West Matabeleland North Midlands Masvingo Harare Bulawayo	86.4 93.7 94.1 98.4 96.2 95.4 92.8 94.1 96.4	74.4 80.1 77.2 77.7 80.8 77.2 68.7 78.0 73.3 78.7	45.7 59.4 59.7 67.0 58.1 66.2 51.6 54.3 44.8 49.0	709 492 473 638 234 200 678 583 762 220	69.9 69.1 74.3 67.2 84.2 88.3 81.2 80.2 91.3 94.8	66.9 67.5 71.2 62.6 81.0 81.9 75.7 69.9 78.9 84.1	966 629 847 288 238 866 764 949 262	41.4 47.3 54.5 53.5 72.5 79.4 57.3 36.1 49.9 60.2	405 252 252 311 118 101 349 314 333 93
Mother's education No education Primary Secondary More than secondary	(93.1) 89.6 94.5 99.6	(78.7) 73.1 75.8 89.4	(38.4) 53.6 55.4 49.2	57 1,530 3,125 275	49.7 65.8 83.1 99.9	51.5 62.8 78.1 61.3	76 2,038 3,962 342	(30.9) 43.0 56.2 42.6	33 804 1,587 103
Wealth quintile Lowest Second Middle Fourth Highest	90.0 91.9 93.3 93.3 98.6	71.4 72.4 78.9 72.2 86.0	52.5 61.2 57.8 48.9 53.0	1,082 956 860 1,183 908	61.7 70.1 77.6 88.6 95.8	60.8 67.8 74.5 83.7 73.4	1,477 1,252 1,098 1,504 1,087	45.4 50.3 53.0 58.7 47.7	626 517 452 571 360
Total	93.3	75.7	54.3	4,988	78.1	72.0	6,418	51.1	2,527

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

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

<sup>2</sup> Includes mothers with two injections during the pregnancy of her last live 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 live 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 live birth

Ninety-three percent of births to urban mothers were attended to by a health professional and 81 percent were delivered in a health facility, compared with 71 percent and 68 percent, respectively, of births to rural women. Mothers residing in Bulawayo are the most likely to have assistance from a health professional at delivery (95 percent) and the most likely to deliver in the health facility (84 percent) compared with mothers residing in other provinces.

Mothers' educational status is highly correlated with whether delivery is assisted by a health professional and whether the birth is delivered in a health facility. For example, 50 percent of births to mothers with no education were attended to by a health professional compared with almost all of births to women with more than a secondary education. Wealth is also correlated with delivery assistance: 62 percent of births to mothers in the lowest wealth quintile were attended by a health professional compared with 96 percent of births to mothers in the highest wealth quintile.

Figure 5 shows trends in maternal health care. While these indicators changed little between the 1999 ZDHS and the 2010-11 ZDHS, there are some improvements since the 2010-11 ZDHS.





## 3.8 Child Health

## Vaccination Coverage

According to WHO, a child is considered to have received all basic vaccinations if he or she has received: a BCG vaccination against tuberculosis; three doses of DPT vaccine to prevent diphtheria, pertussis, and tetanus (or three doses of pentavalent, which includes DPT and vaccinations against both hepatitis B and haemophilus influenza type B); at least three doses of polio vaccine; and one dose of measles vaccine. These vaccinations should be received during the first year of life. The 2015 ZDHS collected information on the coverage of these vaccinations among all children born in the 5 years preceding the survey. Additionally, the 2015 ZDHS collected information on the coverage of the rotavirus vaccine, as vaccines are included in the routine immunisations for children in Zimbabwe.

The information on vaccination coverage was obtained in two ways – from vaccination cards and from mother's verbal reports. All mothers were asked to show the interviewer the vaccination cards used to record the child's immunisations. If the card was available, the interviewer copied the dates of each vaccination received. If a vaccination was not recorded on the card as being given, the mother was asked to recall whether the children had received that particular vaccination. If the mother was not able to present a card for a child, she was further asked to recall whether the child had received BCG, polio, pentavalent, measles, pneumococcal, and rotavirus vaccine. If she indicated that the child had received the polio, pentavalent, or pneumococcal vaccines, she was asked the number of doses that the child received.

Table 10 presents information on vaccination coverage for children age 12-23 months who received the recommended vaccines, the percent of children who have not received any vaccinations, and the

percentage of children who have a vaccination card. Mothers were able to produce health cards for 82 percent of these children.

Overall, 73 percent of children age 12-23 months are fully vaccinated, while 10 percent have not received any vaccinations. Basic vaccination coverage has increased by 8 percentage points since the 2010-11 ZDHS. The percentage of children who have not been vaccinated is twice as high in rural areas (12 percent) than in urban areas (6 percent). Ninety percent of children received the BCG vaccine, 90 percent received the first dose of the pentavalent vaccine, 89 percent received the first dose of polio vaccine, and 82 percent received the measles vaccine. Eighty-eight percent of children received the first pneumococcal vaccine and 55 percent received the first rotavirus vaccine. Eighty-three percent of children completed the required three doses of the pentavalent vaccine, and 78 percent completed the required three doses of the pentavalent vaccine for and 78 percent completed the required three doses of the pentavalent vaccine, and 78 percent completed the required three doses of the pentavalent vaccine for and 78 percent completed the required three doses of the pentavalent vaccine and 78 percent in Masvingo to 87 percent in Matabeleland North.

Backaround			Pentavalent <sup>1</sup>			Polio <sup>2</sup>			All basic	P	Pneumococcal	_	Rotavirus	/irus	No	Percentage with a	Number of
characteristic	BCG	۲	2	3	+	2	3	Measles	tions <sup>3</sup>	٢	2	3	٢	2	tions	card	
Sex Male	88.4	88.3	86.8	83.0	88.1	84.2	76.0	80.4	70.6	86.3	84.9	81.2	55.6	49.9	11 4.	80.7	615
Female	91.4	90.7	89.4	83.9	90.8	87.0	79.7	83.5	74.9	89.7	89.0	83.1	55.1	49.0	8.3	84.0	601
Residence Urban	03 0	04.0	00 3	87 G	03 R	U Ub	78 R	873	736	92.1	90 F	85.4	54 F	40 F	5.7	830	355
Rural	88.2	87.6	86.3	81.7	87.6	83.8	77.4	79.7	72.4	86.2	85.4	80.8	55.7	49.5	11.6	81.7	861
Province	7 70	0 70	7 60	76.6	0 7 0	7 77	072	70 6	0 04	02 6	000	7 97	54.7	с <i>с</i> у	7 7 7	0 0	707
Mashonaland Central	1070		00.1	89.5	0.10	0.00	0.10	0.0. 86.9	78.0	916	916	86.1	55.4	48.4 48.4	i t	0.10	130
Mashonaland East	92.1	92.4	91.3	89.4	92.4	89.4	82.4	6.88	80.0	92.0	92.0	90.6	62.9	62.0	7.6	86.1	119
Mashonaland West	86.2	85.4	83.9	81.5	85.4	83.9	76.7	81.5	74.5	85.4	83.9	81.5	55.5	48.8	13.8	67.4	147
Matabeleland North	100.0	100.0	97.7	96.4	97.7	96.5	90.1	94.4	86.8	96.2	95.2	94.0	66.2	59.1	0.0	91.8	58
Matabeleland South	98.4	98.4	95.5	91.9	98.4	91.0	83.3	91.5	80.2	94.3	90.5	85.0	55.9	49.2	1.6	87.5	45
Midlands	89.6	89.0	85.4	79.6	89.0	81.9	76.6	72.6	66.7	87.9	84.4	79.6	52.4	38.2	10.0	82.5	164
Masvingo	79.3	79.3	78.9	72.7	79.3	76.8	70.1	67.9	60.3	76.3	76.3	70.4	51.6	48.2	20.7	78.9	159
Harare	97.5	97.2	97.0	90.8	97.2	94.4	80.1	91.7	75.7	96.2	96.2	88.7	54.8	49.8	2.5	92.6	165
Bulawayo	92.8	91.3	88.5	88.5	6.68	87.0	72.0	87.3	69.4	87.0	84.4	81.5	49.7	42.7	7.2	56.8	44
Education					-			-					-	-			
No education	×	k	k	k	×	×	*	ĸ	×	k	×	×	k	k	k	k	12
Primary	85.4	84.3	82.1	77.6	84.5	80.2	73.6	74.1	67.4	83.7	81.7	77.1	52.5	45.0	14.6	80.0	389
Secondary	91.9	91.7 67.0	90.8	85.7	91.5 67.5	87.7	79.3	84.9	74.5	89.6 67.0	89.1	83.8 83.8	57.5	52.1	7.8	83.6	764
iviore triari secoridary	+N	0.08	C.76	92.0	0.08	80.9	04.0	94.G	07.70	0.08	90.9	9 <b>3</b> .2	1.UC	40.0	0.1	09	nc
Wealth quintile																	
Lowest	88.0	86.7	84.5	79.4	86.2	83.9	76.2	76.5	69.2	85.7	84.5	80.4	50.7	45.7	12.0	78.5	305
Second	84.2	83.0	82.3	75.9	83.6	77.8	71.5	76.2	68.6	81.4	80.5	74.0	56.2	48.8	15.8	80.8	242
Middle	92.4	92.9	92.3	91.5	92.9	89.9	84.7	87.7	81.1	91.9	91.3	88.8	61.7	56.0	6.8	86.8	212
Fourth	93.8	93.7	91.6	86.0	93.5	89.6	79.6	84.5	72.8	92.5	91.0	84.7	53.8	47.9	6.0	85.8	275
Highest	91.9	92.1	91.4	86.9	92.1	87.6	78.1	88.3	74.2	88.8	88.2	84.3	57.2	51.4	7.5	80.5	181
Total	89.9	89.5	88.1	83.4	89.4	85.6	77.8	81.9	7.77	88 0	86.9	82.2	554	49.5	80	82.4	1 216

Table 10 Vaccinations by background characteristics

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. <sup>1</sup> Pentavalent is DPT-HepB-Hib <sup>2</sup> Polio 0 is the polio vaccination given at birth <sup>3</sup> BCG, measles, and three doses each of pentavalent and polio vaccine excluding polio vaccine given at birth

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## Treatment of Childhood Illnesses

Acute respiratory infection (ARI), malaria, and dehydration caused by severe diarrhoea are major causes of child morbidity and mortality in Zimbabwe. When a child has symptoms of these illnesses, prompt medical attention is critical. To obtain information on health-seeking behaviours surrounding these common childhood illnesses, mothers were asked if any of their children under age 5 had experienced the following symptoms in the 2 weeks preceding the survey: cough with short, rapid breathing (symptoms of an acute respiratory infection, considered a proxy for pneumonia); fever (symptom of malaria); or diarrhoea. Mothers who indicated their child had experienced such symptoms were then asked if treatment or advice was sought from a health facility or provider. For children with diarrhoea, the mother was asked additional questions about treatment given to the child. Overall, 4 percent of children under age 5 showed symptoms of ARI, 14 percent exhibited fever, and 17 percent experienced diarrhoea in the 2 weeks preceding the survey (data not shown). It should be noted that the morbidity data collected are subjective because they are based on a mother's perception of illnesses without validation by medical personnel.

Table 11 shows that treatment from a health facility or provider was sought for 51 percent of the children with ARI symptoms, 45 percent of the children with fever symptoms, and 39 percent of the children with diarrhoea. Forty-one percent of children with diarrhoea received fluid from an oral rehydration salt (ORS) packet or a pre-packaged ORS fluid, 20 percent were given zinc, and 15 percent were given both zinc and any ORS.

Children of urban mothers were more likely than children of rural mothers to receive treatment from a health facility or health provider when they were sick with symptoms of ARI, fever, or diarrhoea, but children of rural mothers were more likely than their urban counter parts to have received zinc. Treatment is positively associated with wealth.

#### Table 11 Treatment for acute respiratory infection, fever, and diarrhoea

Among children under age 5 who had symptoms of acute respiratory infection (ARI) or had fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought from a health facility or provider, and among children under age 5 who had diarrhoea during the 2 weeks preceding the survey, percentage for whom advice or treatment was sought from a health facility or provider, percentage given a fluid made from oral rehydration salt (ORS) packets or given pre-packaged ORS fluid, percentage given zinc, and percentage given ORS and zinc, by background characteristics, Zimbabwe 2015

	Children with AR		Children v	vith fever		Chi	ldren with diarrh	noea	
Background characteristic	Percentage for whom treatment was sought from a health facility/ provider <sup>2</sup>	Number of children	Percentage for whom treatment was sought from a health facility/ provider <sup>2</sup>	Number of children	Percentage for whom treatment was sought from a health facility/ provider <sup>2</sup>	given fluid from ORS	Percentage given zinc	Percentage given any ORS and zinc	Number of children
Age in months									
<6	*	27	41.6	69	27.4	15.5	9.4	7.5	60
6-11	*	21	46.3	114	32.0	34.6	12.5	9.4	177
12-23	(56.0)	53	46.7	203	43.3	44.0	23.3	17.9	369
24-35	(46.0)	54	46.4	184	45.7	49.7	24.0	19.0	206
36-47	(46.9)	43	46.7	136	40.0	40.5	22.3	14.2	118
48-59	(62.1)	31	39.6	129	31.0	32.7	13.1	9.5	83
	(02.1)	51	55.0	123	51.0	52.7	10.1	3.5	00
Sex									
Male	47.3	126	40.5	391	38.6	39.8	19.4	15.8	536
Female	55.3	104	49.1	444	40.4	41.3	20.2	13.9	478
Residence									
Urban	69.1	55	55.8	273	40.6	46.4	17.2	13.4	321
Rural	45.2	175	39.8	563	38.9	37.8	21.0	15.6	693
Duradiana									
Province	(20.7)	24	35.1	100	37.1	36.7	25.0	16.9	149
Manicaland	(39.7)	34					25.0 33.6	23.8	
Mashonaland Central	*	6	64.2	50 92	44.9	40.5			111
Mashonaland East		25	34.8		40.6	33.8	10.3	5.9	70
Mashonaland West	(48.9)	35	40.3	188	37.0	36.1	18.1	13.9	176
Matabeleland North	*	6	56.5	42	61.5	60.3	29.9	27.1	32
Matabeleland South		7	55.5	31	(52.2)	(56.5)	(13.9)	(12.5)	22
Midlands	(38.2)	48	52.7	79	26.9	38.7	14.4	10.2	138
Masvingo	(57.6)	37	33.3	90	39.1	35.1	16.6	13.6	125
Harare	*	25	52.2	136	41.7	49.4	15.1	12.7	158
Bulawayo	*	5	64.4	29	54.8	50.3	28.7	24.9	33
Mother's education									
No education	*	8	*	14	*	*	*	*	16
Primary	34.1	73	39.3	254	32.5	32.8	17.5	13.5	333
Secondary	57.1	144	46.6	525	42.3	44.7	20.6	15.2	640
More than secondary	*	4	(64.3)	42	(49.7)	(43.1)	(23.7)	(21.7)	24
5			· · /		· · /	· · /	、 ,	. ,	
Wealth quintile Lowest	(43.2)	55	41.9	197	34.7	29.7	19.5	13.7	254
Second		55 61	34.1	197	40.1	29.7 37.0	22.1		254 193
Middle	(43.0)	38	34.1 43.4	167	40.1 38.8	37.0 44.2	22.1	15.6 14.2	193
	(53.6)								
Fourth	(54.7)	41	47.0	198	38.1	49.5	16.8	14.2	252
Highest	(70.0)	34	60.5	149	49.6	44.2	22.0	17.9	149
Total	50.9	230	45.1	835	39.4	40.5	19.8	14.9	1,014

Notes: 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.

Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related and/or by difficult breathing which was chest-related)

<sup>2</sup> Excludes pharmacy, shop, and traditional practitioner

## Nutritional Status of Children

Malnutrition places children at increased risk of morbidity and mortality and is also shown to be related to impaired mental development. Anthropometry provides one of the most important indicators of children's nutritional status. In the 2015 ZDHS, height and weight measurements were obtained for children born in the 5 years preceding the survey. The height and weight data were used to compute three summary indices of nutritional status: height-for-age, weight-for-height, and weight-for-age. These three indices were expressed as standardised scores (Z-scores) or standard deviation units from the median for the child growth standards recommended by WHO. Children who fall more than two standard deviations below the reference median are regarded as undernourished, while those who fall more than three standard deviations below the reference median are considered severely undernourished. Table 12 shows the nutritional status among children less than age five by selected background characteristics.

Children whose height-for-age is below minus two standard deviations (-2 SD) from the median of the reference population are considered stunted or short for their age. Stunting is the result of failure to receive adequate nutrition over an extended period, and may also be affected by recurrent or chronic illness. Over one-quarter (27 percent) of Zimbabwean children are stunted, while 9 percent are severely stunted. Analysis of stunting by age group shows that stunting is highest (39 percent) in children age 24-35 months and lowest (13 percent) in children 6-8 months. Stunting levels are higher among boys (30 percent) than girls (24 percent), and higher among rural children (29 percent) than urban children (22 percent). By province, stunting ranges from 19 percent in Bulawayo to 31 percent in Matabeleland South. Children of mothers with more than a secondary education are less likely to be stunted (9 percent) compared with children whose mothers have no education (45 percent). Stunting decreases with increasing wealth from 33 percent in the lowest wealth quintile to 17 percent in the highest.

Children whose weight-for-height is below minus two standard deviations (-2 SD) from the median of the reference population are considered wasted (or thin). Wasting represents the failure to receive adequate nutrition in the period immediately before the survey, and typically is the result of recent illness episodes, especially diarrhoea, or of a rapid deterioration in food supplies. Three percent of Zimbabwean children are wasted and 1 percent is severely wasted. Wasting levels are highest for children 9-11 months (9 percent). During this period, children are introduced to complementary foods and are more vulnerable to diseases. By province, wasting ranges from 1 percent in Harare to 5 percent in Matabeleland North and Midlands. Wasting does not vary greatly by residence or mothers' education. Wasting decreases with increasing wealth from 4 percent of children in the lowest wealth quintile to 2 percent in the highest wealth quintile.

Children whose weight-for-age is below minus two standard deviations (-2 SD) from the median of the reference population are considered underweight. The measure reflects the effects of both acute and chronic malnutrition. As shown in Table 12, 8 percent of Zimbabwean children are underweight, with 2 percent classified as severely underweight. Peak levels of low weight-for-age are found among children age 12-23 months. By province, low weight-for-age ranges from 5 percent in Bulawayo to 14 percent in Matabeleland South. Weight-for-age is inversely associated with both mother's education and wealth.
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		Height-for-age	for-age <sup>1</sup>			_	Weight-for-height	t			~	Weight-for-age		
Background characteristic	Percentage below -3 SD	Percentage below -2 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Percentage above +2 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD	Percentage above +2 SD	Mean Z-Score (SD)	Number of children
Age in months	, U	0 0		101	0	1	1	u C		a c		C	Ċ	049
6-8 6-8	6.0 5.0	12.9	0. C	100 278	9. C	4 - C	8.0	0.0	245 275	0.0	- 4	0.6	0.0	0/c 281
9-11	4.0	14.8	-0.7	272	1.4	9.0	4.5	(0.0)	272	0.8	10.6	2.3	-0.4	273
12-17	8.0	28.4	- 12	611	2.4	6.5	5.0	(0.0)	605	1.5	12.3	0.1 0.1	-0.6 -	616 000
18-23 24 25	14.5	37.1	9. <del>7</del> 9. 7	605 1 277	1.7	4.0	6.1 F 0	0.2	604 1 260	0.7 c	12.2	7.1	-0.7	608 1 202
24-33 36-47	7.9	28.5 28.5		1.352	0.1	5.0	0.0	0.4	1.346	- 4	0.0 7 3	2.0	-0.0	1,353
48-59	4.6	17.8	- -	1,373	0.5	1.7	2.8	(0.0)	1,370	<del>.</del>	6.5	0.5	-0.7	1,375
Sex	u 0	9.00	с т	77 F C			ŭ		077 0	0	1 0	1	ŭ	
wale Female	7.2	24.0 24.0	<u>-</u> - - - -	3,187 3,187	0.8	3.2 3.2 2.2	5.0	0.2	3,164 3,164	0. <del>1</del> 0. <del>1</del>	8.1 8.1	1.6	-0.5 -0.5	3,159 3,200
Mother's interview status	č					c	c L	Ċ	0 0 1		Ċ	1	L	
Not interviewed, but in household	6.2 6.2	20.2 25.4	 	0,130 179	0.9	2.8 2.8	0.0 3.6	0.3	0,090 178	0.0	0 5.4	2.1	-0.0 4.0-	o, 104 179
Not interviewed, not in household <sup>3</sup>		29.7	-1.3	1,013	0.7	1.4	4.5	0.2	1,010	2.2	10.3	1.3	-0.7	1,016
<b>Residence</b> Urban	7.2	22.2	<u>,</u>	1.723	0.8			0.4	1.705	0.6	6.0	8.		1.729
Rural	9.4	28.5	-1.3	4,605	1.1	3.5	4.8	0.1	4,578	1.9	9.3	1.6	-0.6	4,630
Province	o C	5 U S	7		00	х с	C L		900	6	9 0	0	90	100
Mashonaland Central	0. 4. 0. 4.	28.8	<u>, ,</u>	602	0.9	5 0 10 1	3.0	0.1	598	<u>, ci</u>	7.3	0.6	-0.7	603
Mashonaland East Mashonaland West	6.8 9.9	24.5 27.8	 vi w	592 793	1 i 2 i i	3.7 4 0	4.2 6.6	0.1	586 791	0.5 2 1	7.9 10.0	2.0 7.0	-0.5	593 797
Matabeleland North	6.6	23.4		325	1.7	5.0	3.6	0.0	322	1.7	9.7	1.1	-0.6	326
Matabeleland South Midlands	13.0 10.5	31.1 27 Б	ب ب دن ب	296 860	 	3.7 4 8	6.1 6.5	0.1	293 856	2.6	13.5 0.4	5 7 9 7	-0.7	300 867
Masvingo	7.7	26.5		824	0.9	0.1.0	5.8	0.2	820	- 1.9 1.8	7.6	2.3	-0.5	828
Harare Bulawavo	8.2 6.4	23.3 18.9	-1.2 -0.9	782 254	0.5 0.5	1.0 2.2	8.4 6.4	0.5 0.3	769 253	0.7 0.0	6.1 6.1	1.8 1.9	6.0 0.0	786 254
Mother's education <sup>4</sup>				2		1	1	:	ł				1	8
No education Primary	11.5 ס.ג	45.3 31 O	9.1- 4.1-	82 1 706	0.0	2.7 4.6	2.7 4.8	(0.1) 0.1	78 1 698	4. C	12.7 9.8	4.4 7.0	-0.7	82 1 715
Secondary	7.7	24.6	-1-	3,258	- <del>-</del> 5 <del>-</del> -		6.1	0.2	3,230	1.2	7.4	1.5	-0.5	3,275
More than secondary	1.8 *	9.0 *	9.0- *	268 2	0.2 *	3.0 *	9.1	0.5	266 2	0.2 *	2.4 *	4.8 8.*	0.1	270 2
Wealth mintile				J					4					J
Lowest	10.9	32.9	-1.4	1,520	1.5		5.1	0.1	1,509	2.4	10.9	1.7	-0.7	1,523
Second	9.5	28.7 25.4	<u>ب</u> دن د	1,343			4 v 8 o	0.7	1,336	7 33 7 3	0.0	2.0	-0.7	1,354
Milaale Fourth	о «	20.4 26.5	 1 v	1,192			4.0 4.0	- 6	1,100	⊂ α	7.8	0.1	0.0 - -	1,201
Highest	5.7	16.6		975	0.4	1.6	7.2	0.4	968	0.5	5.2	2.3	-0.2	978
Total	8.8	26.8	-1.2	6,329	1.0	3.2	5.6	0.2	6,284	1.5	8.4	1.7	-0.6	6,359

The indices in this table are NOT comparable to those based on the previously used 1977 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. 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> 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 85 cm; standing height is measured for all other children <sup>2</sup> Includes children who are below. 3 standard deviations (SD) from the WHO Growth Standards population median <sup>3</sup> Includes children whose mothers are decased <sup>4</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose are not interviewed, information is taken from the Household Questionnaire.

Figure 6 depicts trends in children's nutritional status between 1999 and 2015, according to stunting, wasting, underweight, and overweight categories. Zimbabwean children are more likely to experience stunting than to be underweight or wasted. Additionally, the risk of stunting peaks at 24-27 months.



Figure 6 Trends in children's nutritional status, Zimbabwe 1999-2015

The percentage of children with wasting has not changed since the 2010-11 ZDHS. Stunting has decreased from 32 percent in 2010-11 to 27 percent in 2015 and the proportion of underweight children has decreased from 10 percent in 2010-11 to 8 percent in 2015.

## 3.9 Breastfeeding and Complementary Feeding

Breastfeeding practices and introduction of supplemental foods are important determinants of the nutritional status of children, particularly among children under age 2. With improved nutritional status, the risk of child mortality is reduced and development is enhanced. Breast milk contains all the nutrients children need in the first six months of life. Supplementing breast milk before six months of age is unnecessary and is discouraged because of the likelihood of contamination, which may increase the risk of diarrhoeal diseases.

Table 13 describes the breastfeeding practices for the youngest children under age 2 who are living with their mother. The WHO recommends that children receive nothing but breastmilk (exclusive breastfeeding) for the first 6 months of life. In Zimbabwe, almost half of children less than 6 months (48 percent) are exclusively breastfed. The proportion of breastfed children declines with age. Breastfeeding is nearly universal in a child's first month of life, and the majority of children are still being breastfed until the first year and a half: 83 percent of children 12-17 months are currently breastfeeding. However, the proportion of children currently breastfeeding drops to 23 percent at 18-23 months of age.

In addition to breast milk, 28 percent of children 0-5 months are fed complementary foods, 20 percent consume plain water, 1 percent consume non-milk liquids, and 1 percent consume other milk. Further, Table 13 shows 7 percent of children under age 6 months use a bottle with a nipple. Fourteen percent of children age 6-9 months use a bottle with a nipple.

The proportion of children younger than age 6 months who are exclusively breastfed has increased from 31 percent in the 2010-11 ZDHS to the current 48 percent.

#### Table 13 Breastfeeding status by age

Breastfeeding status Number of Breastyoungest Breast-Breastfeeding and children feeding and feeding and Breastconsuming Percentage under 2 Percentage Number of consuming Exclusively consuming feeding and complecurrently years living using a all children Age in Not breastplain water non-milk consuming with the bottle with a under 2 breastmentary breastmonths feeding feeding liquids1 other milk Total feeding years only foods mother nipple 0-1 2.4 74.8 14.3 0.0 1.1 7.3 100.0 97.6 201 4.4 209 2-3 1.9 46.1 21.4 1.0 1.2 28.3 100.0 98.1 228 6.4 230 4-5 0.6 19.8 25.9 1.7 0.8 51.2 100.0 99.4 181 10.8 185 897 6-8 1.7 29 5.1 0.6 0.0 100.0 98.3 283 14.1 289 9-11 100.0 95.2 82.7 4.8 0.0 4.4 0.4 0.7 89.6 276 8.7 284 8.2 12-17 17.3 1.0 0.8 0.0 80.2 100.0 609 629 0.8 0.5 0.0 100.0 532 4.8 18-23 77.3 0.0 0.0 22.2 22.7 587 2.2 59.6 18.1 0.5 1.2 5.4 0-3 18.5 100.0 97.8 429 439 0-5 1.7 47.8 20.4 0.9 28.2 100.0 98.3 610 7.0 624 1.1 6-9 1.9 2.1 5.1 0.4 0.4 90.0 100.0 390 13.7 399 98.1 12-15 8.9 1.2 1.4 1.0 0.0 87.5 100.0 91.1 410 7.0 422 12-23 45.3 0.4 0.4 0.0 53.1 100.0 54.7 6.5 1,216 0.8 1,141 20-23 85.8 0.0 0.7 0.0 0.0 13.5 100.0 14.2 346 3.8 384

Percent distribution of youngest children under 2 years who are living with their mother, by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under 2 years using a bottle with a nipple, according to age in months, Zimbabwe 2015

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 breastfeeding, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) 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.

Figure 7 presents the percentage of children under age 2 who are consuming the minimum acceptable diet. The minimum acceptable diet recommends that breastfed children 6-23 months be fed foods from four or more food groups daily. Non-breastfed children should be fed milk or milk products in addition to foods from four or more food groups. The recommendation also requires that breastfed infants age 6-8 months be fed at least twice a day, while breastfed children age 9-23 months must be fed at least three times a day. For non-breastfed children age 6-23 months, the minimum meal frequency is solid or semi-solid food or milk feeds at least four times a day.

In Zimbabwe, only 8 percent of children age 6-23 months consume an acceptable diet. Children age 12-17 months are slightly more likely than children in other age groups to consume an acceptable diet (10 percent).





### 3.10 Anaemia Prevalence in Children and Women

Anaemia is a condition that is marked by low levels of haemoglobin in the blood. Iron is a key component of haemoglobin, and iron deficiency is estimated to be responsible for half of all anaemia, globally. Other causes of anaemia include malaria, hookworm and other helminths, other nutritional deficiencies, chronic infections, and genetic conditions. Anaemia is a serious concern for children because it can impair cognitive development, stunt growth, and increase morbidity from infectious diseases.

The 2015 ZDHS includes direct measurement of haemoglobin levels using the HemoCue system. This system consists of a battery-operated photometer and a disposable microcuvette coated with a dried reagent that serves as the blood collection device. For the test, a drop of capillary blood taken from a child's fingertip or heel is drawn into the microcuvette. The blood in the microcuvette is analysed using the photometer, which electronically displays the haemoglobin concentration. Eighty-nine percent of eligible children, 93 percent of eligible women, and 91 percent of eligible men were tested for anaemia (data not shown).

Haemoglobin testing was carried out among children age 6-59 months. During the fieldwork, parents or guardians were immediately given the results of their child's test. In cases where the haemoglobin reading was below 7.0 g/dL, the parent or guardian was referred to MoHCC facilities for follow-up.

Table 14 presents anaemia levels for children 6-59 months, and women and men age 15-49, by selected background characteristics. Children with haemoglobin levels below 11.0 g/dL were defined as anaemic. Overall, 37 percent of children suffered from some degree of anaemia. Twenty-two percent of children were classified as mildly anaemic, 15 percent were moderately anaemic, and less than 1 percent were severely anaemic. Anaemia is more prevalent among children less than age 24 months than among older children. Anaemia prevalence varies by province, from a low of 29 percent in Masvingo to a high of 42 percent in Harare.

The second panel in Table 14 presents anaemia levels for women age 15-49 by selected background characteristics. Pregnant women with haemoglobin levels below 11.0 g/dL and nonpregnant women with haemoglobin levels below 12.0 g/dL were defined as having anaemia. Overall, 27 percent of women in Zimbabwe suffer from anaemia. The majority (20 percent) are classified as mildly anaemic, 6 percent are moderately anaemic, and 1 percent are severely anaemic. By province, the prevalence of anaemia ranges from 22 percent in Manicaland and Mashonaland East to 43 percent in Matabeleland South. There is no clear association between wealth and anaemia.

The third panel in Table 14 presents anaemia levels for men age 15-49 by selected background characteristics. Men with haemoglobin levels below 11.0 g/dL were defined as anaemic. Overall, 6 percent of men age 15-49 in Zimbabwe suffer from anaemia. Five percent are classified as mildly anaemic, 1 percent are moderately anaemic, and less than 1 percent are severely anaemic. By province, the prevalence of anaemia ranges from 4 percent in Bulawayo, Manicaland and Mashonaland East to 13 percent in Matabeleland South. There is no clear association between wealth and anaemia.

Table 14 Anaemia among children, women and men

Percentage of children age 6-59 months, women age 15-49 and men age 15-49 years classified as having anaemia, by background characteristics, Zimbabwe 2015

		Perc	centage with ana	aemia	
Background characteristic	Any anaemia	Mild anaemia	Moderate anaemia	Severe anaemia	Number
	, ing anaonna	CHILDRE			Humber
Sex					
Male	37.6	22.0	15.1	0.5	2,693
Female	35.9	21.8	13.8	0.3	2,684
	55.5	21.0	10.0	0.5	2,004
Age in months					
6-11	61.9	33.3	27.6	0.9	490
12-23	52.9	26.4	25.6	0.9	1,130
24-35	36.6	22.9	13.3	0.4	1,202
36-47	28.2	18.7	9.3	0.2	1,248
48-59	21.7	15.8	5.9	0.0	1,307
Residence					
Urban	37.4	20.1	16.7	0.6	1,440
Rural	36.5	22.5	13.6	0.4	3,937
Province					
Manicaland	39.5	25.7	13.3	0.5	784
Mashonaland Central	33.6	18.0	15.1	0.4	523
Mashonaland East	36.4	22.5	13.4	0.5	500
Mashonaland West	38.0	23.3	14.8	0.0	681
Matabeleland North	38.1	22.9	14.7	0.6	295
Matabeleland South	39.1	24.0	15.1	0.0	270
Midlands	37.5	22.7	14.3	0.4	728
Masvingo	29.2	17.7	10.8	0.6	720
Harare	41.9	21.1	20.1	0.6	656
Bulawayo	33.6	20.5	12.3	0.8	219
-	00.0	20.0	12.0	0.0	210
Wealth quintile	00.0	05.0	11.0	0.0	4 000
Lowest	39.9	25.3	14.0	0.6	1,292
Second	32.4	19.3	12.6	0.6	1,149
Middle	36.4	22.6	13.8	0.0	1,037
Fourth	39.1	21.3	17.5	0.3	1,104
Highest	35.0	19.9	14.5	0.6	794
Total	36.8	21.9	14.5	0.4	5,376
		WOME	N		
Residence					
Urban	28.6	20.4	7.8	0.4	3,465
Rural	25.6	20.0	5.1	0.6	5,770
Province					
Manicaland	21.7	17.9	3.3	0.5	1,151
Mashonaland Central	23.5	18.5	4.1	0.8	848
Mashonaland East	22.3	16.5	5.0	0.8	867
Mashonaland West	25.9	20.1	5.4	0.4	1,073
Matabeleland North	25.9	18.7	6.2	1.0	452
Matabeleland South	43.1	30.7	10.4	2.0	400
Midlands	31.2	23.3	7.5	0.4	1,177
Masvingo	23.1	17.5	5.5	0.1	1,125
Harare	29.8	21.2	8.3	0.2	1,597
Bulawayo	29.4	21.5	6.8	1.0	545
Wealth guintile					
Lowest	27.1	21.6	5.0	0.5	1,596
Second	23.0	17.4	4.9	0.7	1,589
Middle	26.7	20.8	5.3	0.6	1,662
Fourth	28.6	21.0	7.1	0.5	2,141
Highest	27.5	19.6	7.4	0.5	2,248
Total	26.8	20.1	6.1	0.5	9,235

Continued...

Table 14—Continued					
		Perc	entage with ana	aemia	
Background			Moderate		
characteristic	Any anaemia	Mild anaemia	anaemia	Severe anaemia	Number
		MEN			
Residence					
Urban	4.5	3.7	0.7	0.0	2,508
Rural	6.2	5.3	0.8	0.2	4,767
Province					
Manicaland	3.6	3.3	0.2	0.2	952
Mashonaland Central	4.9	4.0	0.8	0.0	760
Mashonaland East	3.9	3.0	0.7	0.2	707
Mashonaland West	4.9	3.9	0.8	0.2	909
Matabeleland North	7.1	6.5	0.4	0.3	348
Matabeleland South	13.0	11.2	1.7	0.2	314
Midlands	9.6	8.0	1.5	0.1	894
Masvingo	5.4	4.3	0.7	0.4	775
Harare	4.7	4.2	0.5	0.0	1,236
Bulawayo	3.6	3.4	0.2	0.0	381
Wealth quintile					
Lowest	8.4	7.6	0.7	0.1	1,136
Second	5.1	4.1	0.8	0.2	1,330
Middle	6.4	5.2	0.9	0.2	1,446
Fourth	5.4	4.5	0.8	0.1	1,669
Highest	3.8	3.2	0.4	0.2	1,694
Total	5.6	4.8	0.7	0.1	7,177
Men 50-54	8.1	7.7	0.4	0.0	331
Total 15-54	5.7	4.9	0.7	0.1	7,606

Note: Table is based on children, women and men who stayed in the household the night before the interview. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude (for children, women and men) and smoking (for women and men) using CDC formulas (CDC, 1998). Children, women and men with <7.0 g/dL of haemoglobin have severe anaemia. Children, women, and men with 7.0-9.9 g/dL have moderate anaemia. Children and pregnant women with 10.0-10.9 g/dL have mild anaemia. Non-pregnant women and men with 10.0-11.9 g/dL have mild anaemia.

## 3.11 Ownership and Use of Mosquito Nets

While malaria is endemic in Zimbabwe, it is important to note that malaria is only found within specific districts among all provinces except Bulawayo, Harare and Matabeleland South. This factor should be taken into account when reviewing the malaria indicator data. One of the strongest weapons in the fight against malaria is the use of insecticide-treated nets (ITNs) while sleeping. In the 2015 ZDHS, data were collected from households on ownership and number of mosquito nets owned. Respondents were also asked to indicate particular household members who had slept under each net the night prior to the interview.

The data in Table 15 shows that 48 percent of households in Zimbabwe own at least one ITN and 26 percent own at least one ITN for every two persons who stayed in the household the night preceding the survey (considered universal coverage). Household ownership of at least one ITN has improved since the 2010-11 ZDHS, which reported that 29 percent of households had at least one ITN.

Rural households (31 percent) are almost twice as likely as urban households (17 percent) to own at least one ITN for every two persons who stayed in the household last night. Universal coverage ranges from 7 percent in Harare to 46 percent in Matabeleland North.

#### Table 15 Household possession of insecticide-treated nets

Percentage of households with at least one insecticide-treated net (ITN); average number of ITNs per household; and percentage of households with at least one ITN per two persons who stayed in the household last night, by background characteristics, Zimbabwe 2015

Background characteristic	Percentage of households with at least one ITN <sup>1</sup>	Average number of ITNs <sup>1</sup> per household	Number of households	Percentage of households with at least one ITN <sup>1</sup> for every two persons who stayed in the household last night (universal coverage) <sup>2</sup>	Number of households with at least one person who stayed in the household last night
Residence					
Urban	32.4	0.5	3,531	16.5	3,499
Rural	55.7	1.2	7,003	31.4	6,916
Province					
Manicaland	57.3	1.2	1,484	32.9	1,463
Mashonaland Central	48.5	0.9	952	23.8	939
Mashonaland East	53.1	1.0	1,171	32.6	1,162
Mashonaland West	66.6	1.4	1,209	35.4	1,200
Matabeleland North	70.9	1.6	527	46.4	510
Matabeleland South	40.1	0.9	530	26.8	525
Midlands	47.1	1.0	1,271	23.5	1,256
Masvingo	55.0	1.1	1,244	30.6	1,234
Harare	17.0	0.2	1,604	6.6	1,584
Bulawayo	30.2	0.4	542	15.0	542
Wealth quintile					
Lowest	52.7	1.0	1,996	26.8	1,965
Second	54.6	1.1	1,983	28.9	1,964
Middle	58.6	1.3	2,000	34.9	1,980
Fourth	38.1	0.7	2,398	22.1	2,365
Highest	38.2	0.7	2,158	20.3	2,141
Total	47.9	0.9	10,534	26.4	10,415

<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 net that has been soaked with insecticide within the past 12 months.

<sup>2</sup> Percentage of de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Figure 8 shows the percentage of the de facto population with access to an ITN in the household, by residence and province. Thirty-seven percent of household members in Zimbabwe have access to an ITN in the household: 44 percent in rural areas and 23 percent in urban areas. By province, access to ITNs in the household ranges from 11 percent in Harare to 58 percent in Matabeleland North.





Table 16 shows the use of nets by children and pregnant women by background characteristics. The results show that 9 percent of children under 5 slept under an ITN the night before the survey. Thirty percent of children under age five slept under an ITN the night before the survey, or in a dwelling treated by indoor residual spraying (IRS) in the past 12 months. Among households with at least one ITN, 18 percent of children under 5 slept under an ITN the night before the survey.

#### Table 16 Use of insecticide-treated nets by children and pregnant women

Percentage of children under 5 who, the night before the survey, slept under an insecticide-treated net (ITN), and slept 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 5 in households with at least one ITN, percentage who slept under an ITN the night before the survey; percentage of pregnant women age 15-49 who, the night before the survey, slept under an ITN, and slept under an ITN or in a dwelling in which the interior walls have been sprayed with IRS in the past 12 months; and among pregnant women age 15-49 who, the night before the survey, slept under an ITN, and slept under an ITN or in a dwelling in which the interior walls have been sprayed with IRS in the past 12 months; and among pregnant women age 15-49 in households with at least one ITN, percentage who slept under an ITN the night before the survey, by background characteristics, Zimbabwe 2015

	Children u	under 5 in all h	ouseholds		under 5 in with at least ITN <sup>1</sup>	Pregnant	women age 1 households	5-49 in all		vomen age Iseholds with one ITN <sup>1</sup>
Background characteristic	Percentage who slept under an ITN <sup>1</sup> 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	Number of children	Percentage who slept under an ITN <sup>1</sup> 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 pregnant women	Percentage who slept under an ITN <sup>1</sup> last night	Number of pregnant women
Residence										
Urban	7.7	10.9	1,898	21.1	690	4.6	8.0	201	14.1	66
Rural	9.5	36.9	4,742	16.6	2,714	6.8	35.1	436	12.9	230
Province										
Manicaland	12.5	41.5	1,018	22.0	578	3.0	38.6	94	(7.9)	36
Mashonaland Central	9.0	45.9	619	18.3	304	12.6	48.5	83	(23.0)	46
Mashonaland East	8.7	28.1	625	16.2	335	4.6	25.3	60	(8.7)	32
Mashonaland West	11.1	27.3	850	15.6	607	10.2	24.9	80	(14.2)	57
Matabeleland North	15.8	52.1	329	22.8	228	(8.4)	(45.7)	24	(11.5)	17
Matabeleland South	6.7	27.2	317	14.7	144	13.1	26.8	27	(28.5)	13
Midlands	7.6	27.7	905	14.3	482	4.5	22.6	74	(9.9)	34
Masvingo	8.9	31.4	844	15.9	473	4.5	27.7	73	(7.7)	43
Harare	2.6	4.6	867	13.6	165	0.6	0.6	98	*	14
Bulawayo	9.5	11.2	265	28.5	89	(7.2)	(7.2)	24	*	4
Wealth quintile										
Lowest	9.5	42.2	1,545	18.0	811	7.0	35.7	135	13.9	68
Second	10.1	35.6	1,391	18.3	769	8.4	44.3	130	14.8	74
Middle	9.9	32.9	1,232	16.1	760	4.0	26.1	106	(7.0)	60
Fourth	7.4	16.7	1,395	17.5	593	6.0	15.2	155	17.1	54
Highest	7.7	16.0	1,078	17.7	472	4.3	10.8	111	12.3	38
Total	9.0	29.5	6,640	17.5	3,404	6.1	26.5	638	13.1	295

Notes: Table is based on children who stayed in the household the night before the interview. 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> An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) 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 NGO

Just 6 percent of pregnant women age 15-49 in all households slept under an ITN the night before the survey. Twenty-seven percent of pregnant women slept under an ITN the night before the survey or in a dwelling sprayed by IRS in the past 12 months. Among households with at least one ITN, 13 percent of pregnant women slept under an ITN the night before the survey.

By province, net use among children under 5 ranges from 3 percent in Harare to 16 percent in Matabeleland North. Among pregnant women, net use ranges from 1 percent in Harare to 13 percent in Matabeleland South and Mashonaland Central.

#### 3.12 Treatment of Children with Fever

Prompt and effective treatment for malaria is crucial to prevent the disease from becoming severe and complicated. Artemesinin-based combination therapy (ACT) is the recommended first-line antimalarial treatment for uncomplicated malaria in Zimbabwe. The 2015 ZDHS asked mothers whether their children under 5 had a fever in the 2 weeks preceding the survey and if so, what treatment was given. Table 17 shows

treatment behaviours for children with fever in the 2 weeks preceding the survey by background characteristics.

In the 2 weeks preceding the survey, 14 percent of children under 5 had a fever. Treatment or advice was sought for half of children with fever (50 percent), while 13 percent had blood taken from a finger or heel for testing (considered a proxy for malaria test). Less than 1 percent of children under 5 with fever took any ACT.

While seeking treatment is more common in urban areas (60 percent) than rural areas (44 percent), blood testing is more common in rural areas (15 percent) than urban areas (9 percent). By province, seeking treatment ranges from 37 percent in Manicaland to 71 percent in Bulawayo. Blood testing ranges from 4 percent in Harare to 24 percent in Matabeleland South. Only children in Manicaland (2 percent), Matabeleland South (2 percent) and Mashonaland Central (1 percent) received ACTs.

#### Table 17 Prevalence, diagnosis, and prompt treatment of children with fever

Percentage of children under 5 with fever in the 2 weeks preceding the survey; among children under 5 with fever, percentage for whom advice or treatment was sought, percentage who had blood taken from a finger or heel, and percentage who took any artemisinin-based combination therapy (ACT), by background characteristics, Zimbabwe 2015

	Childre	n under 5		Children unde	er 5 with fever	
Background characteristic	Percentage with fever in the 2 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	Number of childrer
Residence						
Urban	14.1	1,937	60.4	8.7	0.2	273
Rural	13.7	4,118	44.4	14.7	0.4	563
Province						
Manicaland	11.2	893	36.7	9.0	2.2	100
Mashonaland Central	8.4	590	67.2	19.1	0.6	50
Mashonaland East	15.9	574	37.5	15.3	0.0	92
Mashonaland West	23.9	783	46.8	8.7	0.0	188
Matabeleland North	15.4	275	62.7	21.8	0.0	42
Matabeleland South	13.3	230	60.8	23.9	1.9	31
Midlands	9.6	821	60.9	19.4	0.0	79
Masvingo	12.4	731	38.6	16.9	0.0	90
Harare	15.0	910	54.5	4.0	0.0	136
Bulawayo	11.6	249	71.2	17.2	0.0	29
Wealth quintile						
Lowest	14.3	1,381	48.1	16.2	0.3	197
Second	14.2	1,179	40.7	12.5	0.0	167
Middle	12.3	1,016	45.1	12.8	1.5	125
Fourth	13.9	1,428	51.1	9.2	0.1	198
Highest	14.1	1,052	63.7	12.9	0.2	149
Total	13.8	6,055	49.7	12.7	0.4	835

<sup>1</sup> Excludes advice or treatment from a traditional practitioner

### 3.13 Knowledge of HIV Prevention Methods

Knowledge of ways to reduce HIV transmission is important in the fight against HIV/AIDS. HIV prevention programmes focus their messages and efforts on several important aspects of behaviour to avoid the spread of HIV, which include: using condoms and limiting the number of sexual partners to one uninfected partner. To ascertain the depth of knowledge about modes of HIV prevention, respondents were asked questions about these specific behaviours.

Knowledge of HIV prevention methods among women and men age 15-49 is presented in Table 18. The results show knowledge is generally widespread throughout Zimbabwe; 84 percent of women and 88 percent of men know that HIV can be prevented by using condoms during sexual intercourse. Ninety-two percent of women and 94 percent of men say that limiting sexual intercourse to one uninfected partner can reduce the chances of getting HIV. Similarly, 79 percent of women and 85 percent of men cited both these methods of HIV prevention. Knowledge of HIV prevention has increased since the 2010-11 ZDHS, mostly among men, while 77 percent of women and 79 percent of men cited both of these methods of HIV prevention.

#### Table 18 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 HIV 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, Zimbabwe 2015

	Percentage	e of women who s	ay HIV can be pr	evented by:	Percenta	ge of men who sa	y HIV can be pre	vented by:
Background characteristic	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>2</sup>	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>2</sup>	Number of men
Age								
15-24	75.9	87.4	70.6	3,895	83.9	89.6	78.1	3,456
15-19	71.3	85.3	66.0	2,199	81.0	86.6	73.6	2,126
20-24	81.9	90.1	76.5	1,697	88.4	94.5	85.3	1,330
25-29	87.4	92.1	83.1	1,657	91.7	94.8	87.6	1,148
30-39	89.9	95.4	87.1	2,855	91.5	97.4	89.8	2,036
40-49	87.4	94.2	83.6	1,548	91.9	96.8	90.1	1,400
Marital status				,				,
Never married	74.9	88.0	70.6	2,511	84.6	90.0	78.9	3,624
Ever had sex	79.9	91.4	76.2	670	88.7	90.0	83.5	1,680
Never had sex	79.9	86.8	68.6	1,841	81.1	92.0 87.8	74.9	1,000
Married or living								,
together Divorced/separated/	86.1	92.7	82.1	6,151	91.5	96.6	89.3	4,010
widowed	88.7	92.5	83.9	1,292	89.5	95.9	87.7	407
Residence								
Urban	87.4	94.4	84.2	3,829	90.6	96.0	88.1	2,900
Rural	81.2	89.7	76.5	6,126	87.0	92.2	82.4	5,140
Province								
Manicaland	78.7	88.0	73.1	1,266	89.3	95.8	87.2	1,072
Mashonaland Central	84.4	90.7	79.8	882	88.0	90.8	81.7	806
Mashonaland East	78.9	86.4	72.9	952	91.7	93.9	87.5	807
Mashonaland West	84.2	93.5	81.4	1,160	89.5	94.5	85.5	1,004
Matabeleland North	80.1	91.2	76.4	465	84.8	93.6	81.5	366
Matabeleland South	82.2	91.3	78.5	419	86.3	94.2	82.5	335
Midlands	85.0	95.1	82.6	1,263	87.9	91.9	84.0	986
Masvingo	85.0	90.6	79.9	1,187	81.4	89.7	76.3	843
Harare	87.6	95.0	84.7	1,783	90.3	95.3	87.6	1,412
Bulawayo	85.7	88.5	78.7	577	89.9	96.0	86.4	409
-	0011	0010		011	00.0	00.0		
Education No education	75.8	80.2	67.6	126	(75.8)	(80.7)	(74.5)	38
		86.3						
Primary	77.4		72.1	2,571	80.7	87.9	74.3	1,803
Secondary More than secondary	85.2 92.8	93.0 98.4	81.2 91.8	6,527 731	90.2 93.3	95.0 97.4	86.9 91.5	5,349 849
	02.0		00		00.0		00	0.0
Wealth quintile Lowest	79.4	87.4	74.3	1,726	84.3	91.8	80.0	1,243
	79.4 79.8	87.4 88.3	74.3 74.1	1,726		91.8 92.4	80.0 81.7	1,243
Second			74.1 78.2	1,660	85.8 87 5		81.7 82.7	1,446
Middle	81.8 86.5	91.9 93.7	78.2 82.9	2,269	87.5 89.9	91.7 94.2	82.7 86.3	1,579
Fourth	86.5 87.6	93.7 94.2	82.9 84.1	2,269 2,567	89.9 92.0	94.2 96.6	86.3 89.4	1,892
Highest								
Total 15-49	83.6	91.5	79.4	9,955	88.3	93.6	84.5	8,041
Men 50-54	na	na	na	na	88.8	92.9	85.6	355
Total 15-54	na	na	na	na	88.3	93.5	84.5	8,396

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

na = Not applicable

<sup>1</sup> Using condoms every time they have sexual intercourse

<sup>2</sup> Partner who has no other partners

Women and men age 15-19 have lower levels of knowledge of these HIV prevention methods than people age 20 and older. Similarly, knowledge of prevention methods is lower among women and men who have never had sex than among those who are married or living together with a partner; those who are divorced, separated, or widowed; or those who never married but have had sex. Urban residents were more knowledgeable on each of the described HIV prevention methods than their rural counterparts. As expected, women and men with higher levels of education are more likely than those with lower levels of education to be aware of HIV prevention methods. Similarly, women and men in households in higher wealth quintiles have more knowledge of HIV prevention methods than those in lower quintiles.

Some misconceptions about HIV transmission are still common in Zimbabwe. Sixteen percent of women and men age 15-49 say HIV can be transmitted by mosquito bites, 7 percent say a person can become infected by sharing food with a person who has HIV, and 5 percent say HIV can be transmitted by supernatural means (data not shown).

### 3.14 Comprehensive Knowledge of HIV Prevention among Young People

Table 19 shows knowledge of HIV prevention among young people age 15-24. Almost one half of young people in Zimbabwe are knowledgeable about HIV prevention methods: 46 percent among women and 47 percent among men. Knowledge of prevention methods among young people has a strong positive association with education and wealth.

Table 19 Comprehensi Percentage of young we background characteris	omen and young me	n age 15-24 wit		
	Women ag	e 15-24	Men age	15-24
Background characteristic	Percentage with comprehensive knowledge about HIV prevention <sup>1</sup>	Number of women	Percentage with comprehensive knowledge about HIV prevention <sup>1</sup>	Number of men
Age 15-19 15-17 18-19 20-24 20-22 23-24	41.4 37.1 48.7 52.8 50.6 56.1	2,199 1,394 805 1,697 1,034 663	41.4 38.5 46.5 54.9 54.3 56.2	2,126 1,352 774 1,330 889 442
Marital status Never married Ever had sex Never had sex Ever married	47.1 50.3 46.3 45.3	2,192 451 1,741 1,703	46.7 50.2 44.4 45.7	3,085 1,235 1,850 371
<b>Residence</b> Urban Rural	55.7 40.8	1,452 2,443	60.0 40.6	1,070 2,387
Province Manicaland Mashonaland Central Mashonaland East Mashonaland West Matabeleland North Matabeleland South Midlands Masvingo Harare Bulawayo	41.4 41.9 34.6 50.0 36.2 37.7 51.6 48.4 53.4 53.1	492 331 363 428 186 196 540 455 655 248	50.4 38.8 54.4 45.3 36.6 35.1 41.2 39.1 57.2 59.0	508 314 337 427 179 173 434 395 513 177
Education No education Primary Secondary More than secondary	* 28.7 49.9 80.9	11 851 2,891 142	* 26.4 51.7 80.1	12 831 2,485 128
Wealth quintile Lowest Second Middle Fourth Highest Total 15-24	35.6 38.5 41.4 51.7 57.6 46.3	646 661 747 842 1,000 3,895	33.4 37.7 42.5 50.4 63.3 46.6	450 662 857 735 753 3.456

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

<sup>1</sup> Comprehensive knowledge about HIV prevention means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV: 1) HIV can be transmitted by mosquito bites, and 2) A person can become infected by sharing food with a person who has HIV.

#### 3.15 **Multiple Sexual Partners**

Having multiple sexual partners and having unprotected sex increases one's chances of both contracting and transmitting HIV. The percentages of women and men age 15-49 who had two or more sexual partners in the last year and who used a condom at last sex, and the mean number of partners are presented in Table 20.1 for women and Table 20.2 for men.

#### Table 20.1 Multiple sexual partners in the past 12 months: 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 her lifetime for women who ever had sexual intercourse, by background characteristics, Zimbabwe 2015

	All wo	men	Women who had the past 12		Women who even intercon	
Background characteristic	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
Age						
15-24	1.3	3,895	44.2	52	1.5	2,152
15-19	0.8	2,199	*	18	1.3	728
20-24	2.0	1,697	(47.3)	34	1.6	1,423
25-29	1.2	1,657	(52.0)	20	1.8	1,597
30-39	1.1	2,855	(63.8)	32	1.9	2,803
40-49	0.5	1,548	*	8	1.9	1,527
Aarital status						
Never married Married/living	1.5	2,511	(57.0)	37	2.3	664
together Divorced/separated/	0.6	6,151	(9.7)	35	1.5	6,137
widowed	3.1	1,292	(78.2)	40	2.8	1,278
Residence						
Urban	1.8	3,829	58.1	68	2.0	2,973
Rural	0.7	6,126	(36.4)	44	1.6	5,106
Province						
Manicaland	0.3	1,266	*	4	1.5	1,061
Mashonaland Central	0.6	882	*	5	1.5	752
Mashonaland East	0.6	952	*	6	1.7	790
Mashonaland West	1.4	1,160	*	17	1.7	952
Matabeleland North	0.9	465	*	4	2.3	393
Matabeleland South	2.0	419	*	8	2.4	359
Midlands	1.4	1,263	*	17	1.8	1,019
Masvingo	0.6	1,187	*	7	1.4	936
Harare	1.5	1,783	*	27	1.9	1,367
Bulawayo	2.7	577	(54.3)	16	2.4	451
Education						
No education	1.4	126	*	2	1.6	123
Primary	1.1	2,571	(51.3)	28	1.8	2,318
Secondary	1.1	6,527	47.6	72	1.7	5,023
More than secondary	1.4	731	*	11	1.9	614
Vealth guintile						
Lowest	0.3	1.726	*	5	1.6	1,520
Second	0.8	1,660	*	14	1.6	1,400
Middle	1.2	1,733	*	21	1.0	1,389
Fourth	1.2	2,269	(53.0)	27	1.9	1,890
Highest	1.2	2,205	63.5	46	2.0	1,880
0						
Total	1.1	9,955	49.6	112	1.8	8,079

Notes: 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> Means are calculated excluding respondents who gave non-numeric responses.

#### Table 20.2 Multiple sexual partners in the past 12 months: Men

Among all men age 15-49, the percentage who had sexual intercourse with more than one sexual partner; 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 his lifetime for men who ever had sexual intercourse, by background characteristics, Zimbabwe 2015

	All r	men		+ partners in the months	Men who even	er had sexual ourse <sup>1</sup>
Background characteristic	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
Age						
15-24	9.3	3,456	65.7	322	4.0	1,599
15-19	3.9	2,126	71.1	82	2.7	575
20-24	18.0	1,330	63.8	240	4.7	1,023
25-29	20.0	1,148	35.2	230	6.3	1,072
30-39	19.0	2,036	23.9	387	7.2	1,949
40-49	14.7	1,400	20.3	205	6.8	1,344
		1,100	20.0	200	0.0	1,011
Marital status						
Never married Married/living	9.4	3,624	80.7	340	4.5	1,660
together Divorced/separated/	17.9	4,010	12.4	719	6.3	3,915
widowed	21.1	407	73.8	86	10.4	389
Residence						
Urban	16.6	2,900	46.4	482	7.2	2,238
Rural	12.9	5,140	30.6	663	5.4	3,726
Province						
Manicaland	11.0	1,072	44.9	117	4.9	755
Mashonaland Central	13.3	806	16.9	107	4.6	617
Mashonaland East	13.3	807	35.7	107	5.3	589
Mashonaland West	15.0	1,004	32.4	151	6.1	758
Matabeleland North	15.4	366	36.1	57	5.8	286
Matabeleland South	17.0	335	44.9	57	7.9	261
Midlands	15.1	986	29.2	149	6.9	735
Masvingo	11.9	843	34.7	101	5.4	576
Harare	17.1	1,412	44.3	242	7.4	1,068
Bulawayo	13.7	409	65.8	56	6.6	318
Education						
No education	(0.5)	38	*	0	(5.3)	31
Primary	13.3	1,803	31.3	240	5.0	1,330
Secondary	14.4	5,349	38.2	772	6.3	3,853
More than secondary	15.6	849	43.0	133	7.0	750
Wealth quintile						
Lowest	12.0	1,243	17.8	150	5.1	978
Second	13.1	1,446	31.3	190	5.0	1,042
Middle	12.1	1,579	33.4	192	5.6	1,086
Fourth	16.0	1,892	38.6	304	6.9	1,455
Highest	16.5	1,880	51.5	309	7.0	1,404
Total 15-49	14.2	8,041	37.3	1,144	6.1	5,964
Men 50-54	15.6	355	33.0	56	10.7	331
Total 15-54	14.3	8,396	37.1	1,200	6.3	6,295

Notes: 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> Means are calculated excluding respondents who gave non-numeric responses.

More men than women report having two or more sexual partners (14 percent and 1 percent, respectively). Among men, this is a small increase from the 2010-11 ZDHS where 11 percent of men reported having two or more sexual partners while among women, there was no notable change. Having two or more partners is more common among divorced, separated, or widowed women and men (3 percent and 21 percent, respectively) compared with married women and men (1 percent and 18 percent, respectively). Having multiple partners is slightly more common in urban settings.

Among those reporting two or more sexual partners in the past 12 months, condom use at last sex was 50 percent for women and 37 percent for men. Men age 15-19 were more likely to report condom use (71 percent) than men in other age groups. Among men reporting two or more sexual partners in the past 12 months, condom use has a positive association with education and wealth.

The mean number of lifetime sexual partners among women and men is also presented in Tables 20.1 and 20.2. Women reported fewer lifetime sexual partners than men (1.8 and 6.1, respectively). Women's and men's mean number of sex partners increases with age. Divorced, separated, or widowed women and men have a higher mean than their married and never-married counterparts. The mean number of sexual partners increases slightly with increasing education and wealth.

## 3.16 Coverage of Prior HIV Testing

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce their risk and increase safe sex practices to remain disease free. For individuals who are HIV-positive, knowledge of their status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future. Tables 21.1 and 21.2 present coverage of prior HIV testing for women and men by background characteristics.

Table 21.1 shows that 94 percent of women age 15-49 know where to get an HIV test, and 80 percent of women have been tested for HIV and received the test results. In the 12 months preceding the survey, 49 percent of women were tested for HIV and received the results. Women age 15-19, women who have never had sex, and women with less education are less likely than their counterparts to have ever had an HIV test. By province, women in Manicaland are least likely than women residing in other provinces to have been tested for HIV and received the results (73 percent), and women in Matabeleland North are most likely to have been tested for HIV and received the results (85 percent).

While 95 percent of men report knowing where to get an HIV test (Table 21.2), compared with women, men report lower levels of past HIV testing and receipt of their results (62 percent). Thirty-six percent of men were tested for HIV in the past 12 months and received their test results. Similar to women, men age 15-19, men who have never had sex, and men with less education report lower percentages past HIV testing. By province, similar to women, the lowest HIV testing coverage among men is observed in Manicaland (55 percent). Different from women, the highest HIV testing coverage among men is observed in Bulawayo (72 percent).

Coverage of prior HIV testing has increased since the 2010-11 ZDHS. Among women, the percentage who were tested for HIV in the past 12 months and received the results has increased from 34 percent in 2010-11 to 49 percent in 2015. Among men, the percentage who were tested for HIV in the past 12 months and received the results has increased from 21 percent in the 2010-11 ZDHS to 36 percent in 2015.

#### Table 21.1 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, percentage ever tested, and percentage who were tested in the past 12 months and received the results of the last test, according to background characteristics, Zimbabwe 2015

	Percentage	Percent distribution of women by testing status and by whether they received the results of the last test				Percentage who have been tested for HIV in the past 12 months and		
Background	who know where to get	Ever tested and received	Ever tested, did not receive	N	Table	Percentage	received the results of the	Number of
characteristic	an HIV test	results	results	Never tested <sup>1</sup>	Total	ever tested	last test	women
Age								
15-24	90.2	62.7	1.2	36.1	100.0	63.9	42.0	3,895
15-19	87.0	46.3	1.6	52.1	100.0	47.9	29.8	2,199
20-24	94.3	84.0	0.7	15.2	100.0	84.8	57.8	1,697
25-29	95.1	91.2	0.8	7.9	100.0	92.1	60.7	1,657
30-39	96.7	92.4	1.0	6.6	100.0	93.4	54.1	2,855
40-49	97.8	85.8	1.0	13.2	100.0	86.8	43.4	1,548
Marital status								
Never married	88.9	47.8	1.2	51.0	100.0	49.0	27.0	2.511
Ever had sex	95.5	80.5	1.2	18.3	100.0	81.7	53.8	670
Never had sex	86.5	35.9	1.2	62.9	100.0	37.1	17.2	1,841
Married or living	00.0	00.0	1.4	02.0	100.0	57.1		1,011
together	95.3	90.0	1.0	9.0	100.0	91.0	56.5	6,151
Divorced/separated/	00.0	00.0	1.0	0.0	100.0	01.0	00.0	0,101
widowed	98.0	91.4	1.0	7.5	100.0	92.5	54.3	1,292
								.,
Residence	00.0	00.4	0.9	10.0	100.0	04.0	40.0	2 000
Urban Rural	96.0 92.9	80.1 79.2	0.9	19.0 19.6	100.0 100.0	81.0 80.4	46.8 50.0	3,829
Rulai	92.9	79.2	1.1	19.0	100.0	60.4	50.0	6,126
Province								
Manicaland	89.9	72.8	1.4	25.8	100.0	74.2	44.5	1,266
Mashonaland Central	93.5	78.8	1.3	19.9	100.0	80.1	54.7	882
Mashonaland East	91.4	77.8	2.1	20.1	100.0	79.9	45.8	952
Mashonaland West	95.1	82.1	0.2	17.7	100.0	82.3	47.1	1,160
Matabeleland North	95.8	84.8	0.8	14.4	100.0	85.6	51.1	465
Matabeleland South	94.5	81.4	0.6	18.0	100.0	82.0	51.6	419
Midlands	95.8	83.5	0.4	16.1	100.0	83.9	54.2	1,263
Masvingo	94.6	79.0	1.6	19.4	100.0	80.6	50.3	1,187
Harare	94.8	79.8	1.2	19.0	100.0	81.0	45.7	1,783
Bulawayo	97.4	79.3	0.6	20.1	100.0	79.9	47.9	577
Education								
No education	90.2	76.4	0.0	23.6	100.0	76.4	38.8	126
Primary	89.8	77.6	1.5	20.8	100.0	79.2	46.6	2,571
Secondary	95.2	79.2	0.9	19.9	100.0	80.1	49.5	6,527
More than secondary	99.4	90.1	1.0	8.9	100.0	91.1	51.5	731
Wealth guintile								
Lowest	90.1	79.7	1.2	19.1	100.0	80.9	48.4	1.726
Second	92.1	78.2	1.1	20.7	100.0	79.3	49.4	1,660
Middle	94.5	79.1	1.7	19.2	100.0	80.8	49.5	1,733
Fourth	95.4	82.0	0.5	17.5	100.0	82.5	53.0	2,269
Highest	96.5	78.5	1.0	20.5	100.0	79.5	44.5	2,567
Total	94.1	79.6	1.1	19.4	100.0	80.6	48.8	9,955
<sup>1</sup> Includes 'don't know/m	-	10.0			100.0	00.0	10.0	0,000

### Table 21.2 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, percentage ever tested, and percentage who were tested in the past 12 months and received the results of the last test, according to background characteristics, Zimbabwe 2015

		Percent distribution of men by testing status and by whether they received the results of the last test					Percentage who have been tested for	
Background characteristic	Percentage who know where to get an HIV test	Ever tested and received results	Ever tested, did not receive results	Never tested <sup>1</sup>	Total	Percentage ever tested	HIV in the past 12 months and received the results of the last test	Number of men
Age								
15-24	90.6	45.3	2.1	52.5	100.0	47.5	26.4	3.456
15-19	86.8	35.0	2.7	62.4	100.0	37.6	19.4	2,126
20-24	96.8	61.9	1.3	36.8	100.0	63.2	37.7	1,330
25-29	98.2	74.3	1.1	24.6	100.0	75.4	50.1	1,148
30-39	98.6	77.1	1.2	21.7	100.0	78.3	42.7	2,036
40-49	98.8	73.4	1.7	24.9	100.0	75.1	37.7	1,400
40-49	90.0	73.4	1.7	24.9	100.0	75.1	57.7	1,400
Marital status								
Never married	90.7	45.2	1.9	52.9	100.0	47.1	25.3	3,624
Ever had sex	96.8	58.9	1.4	39.7	100.0	60.3	34.1	1,680
Never had sex	85.5	33.4	2.3	64.3	100.0	35.7	17.7	1,943
Married or living	00.7	70.0		04 7	100.0	70.0	· · <del>·</del>	4.046
together	98.7	76.9	1.4	21.7	100.0	78.3	44.7	4,010
Divorced/separated/								
widowed	98.7	72.6	2.4	25.0	100.0	75.0	42.9	407
Residence								
Urban	98.1	68.6	1.0	30.5	100.0	69.5	37.9	2,900
Rural	93.5	58.9	2.1	39.0	100.0	61.0	34.7	5,140
Province								
Manicaland	96.0	55.4	1.7	42.9	100.0	57.1	29.2	1,072
Mashonaland Central	93.8	60.3	2.8	36.9	100.0	63.1	39.6	806
Mashonaland East	95.3	64.3	0.7	35.1	100.0	64.9	36.6	807
Mashonaland West	95.5 96.6	67.1	1.5	31.4	100.0	68.6	40.4	1,004
			2.6					
Matabeleland North	94.8	58.4		38.9	100.0	61.1	31.6	366
Matabeleland South	92.5	62.0	2.1	35.9	100.0	64.1	40.0	335
Midlands	92.7	60.9	1.7	37.5	100.0	62.5	38.2	986
Masvingo	90.4	56.7	2.2	41.1	100.0	58.9	31.8	843
Harare	98.4	67.4	1.1	31.5	100.0	68.5	36.5	1,412
Bulawayo	98.5	72.0	1.8	26.2	100.0	73.8	34.3	409
Education								
No education	(78.4)	(46.5)	(0.0)	(53.5)	100.0	(46.5)	(22.8)	38
Primary	88.6	48.0	3.1	48.9	100.0	51.1	28.7	1,803
Secondary	96.8	64.1	1.3	34.6	100.0	65.4	37.0	5,349
More than secondary	99.4	83.1	1.0	16.0	100.0	84.0	44.8	849
Wealth quintile								
Lowest	91.9	57.7	2.9	39.5	100.0	60.5	32.3	1,243
Second	93.3	58.2	2.3	39.5	100.0	60.5	35.5	1,446
Middle	93.7	59.0	1.7	39.4	100.0	60.6	34.7	1,440
Fourth	93.7 97.0	59.0 64.6	1.7	39.4 34.4	100.0	65.6	34.7 36.9	1,579
Highest	97.0 98.0	69.5	1.1	34.4 29.4	100.0	70.6	38.5	1,892
Total 15-49	95.1	62.4	1.7	35.9	100.0	64.1	35.9	8,041
			2.2					,
Men 50-54	98.2	76.0		21.8	100.0	78.2	36.4	355
Total 15-54	95.3	63.0	1.7	35.3	100.0	64.7	35.9	8,396

Note: Figures in parentheses are based on 25-49 unweighted cases. <sup>1</sup> Includes 'don't know/missing'

### 3.17 Male Circumcision

Circumcision is practiced in some areas in Zimbabwe. In recent years, male circumcision has been associated with a lower risk of HIV transmission (WHO and UNAIDS, 2007). To examine this practice at the national level, men interviewed in the 2015 ZDHS were asked whether they had been circumcised.

Nationally, 14 percent of men age 15-49 report that they are circumcised. Young men age 15-19 are more likely to be circumcised (23 percent) than men of other ages. Male circumcision is higher in urban areas (18 percent) than in rural areas (12 percent). There is wide variation among the provinces ranging from a low of 7 percent in Mashonaland Central to a high of 33 percent in Bulawayo.

#### Table 22 Male circumcision

Percentage of men age 15-49 who report having been circumcised, by background characteristics, Zimbabwe 2015

Background	Percentage	
characteristic	circumcised	Number of men
Age		
15-24	18.8	3,456
15-19	22.6	2,126
20-24	12.8	1,330
25-29	10.0	1,148
30-39	11.6	2,036
40-49	10.4	1,400
Residence		
Urban	18.0	2,900
Rural	12.2	5,140
Province		
Manicaland	10.4	1,072
Mashonaland Central	6.8	806
Mashonaland East	9.5	807
Mashonaland West	10.5	1,004
Matabeleland North	18.2	366
Matabeleland South	26.4	335
Midlands	14.5	986
Masvingo	17.3	843
Harare	15.5	1,412
Bulawayo	33.4	409
Total 15-49	14.3	8,041
Men 50-54	14.3	355
Total 15-54	14.3	8,396

### 3.18 Prevention of Cervical Cancer

Cervical cancer is one of the leading causes of deaths among women. Cervical cancer screening via the Papanicolau (Pap) test or the Visual Inspection with Acetic Acid and Camera (VIAC) are effective for detecting early abnormal or cancer cells in the cervix and uterus. The Pap and VIAC tests are recommended for women from the time they become sexually active.

In the 2015 ZDHS, women age 15-49 were asked if they had heard of cervical cancer and whether they had ever been screened for cervical cancer. Women who ever had a cervical screening were asked about the timing of their last cervical exam. Nationally, 79 percent of women report that they have heard of cervical cancer. However, only 13 percent of women have ever had a cervical exam. Among those who report having a cervical exam, 90 percent report having the exam in the last 3 years and 66 percent had their cervical exam within the last 12 months.

Women in urban areas are three times more likely than their rural counterparts to report ever having a cervical exam (21 percent and 7 percent, respectively). Women in Harare (24 percent) and Bulawayo (21 percent) have the highest percentages who report ever having a cervical exam, and women in Manicaland have the lowest percentage (6 percent). As education and wealth increases, so does the likelihood of a woman having a cervical exam.

#### Table 23 Knowledge and prevention of cervical cancer

Percentage of women age 15-49 who have ever heard of cervical cancer, have had a cervical screening (Pap test) ever or in the last 12 months and the last 3 years, by background characteristics, Zimbabwe 2015

				Among women who have had a cervical exam			
		Have ever been		Had cervical	Had cervical		
Background	Have heard of	screened for	Number of	exam in the last	exam in the last	Number of	
characteristic	cervical cancer	cervical cancer	women	12 months	3 years	women	
Age							
15-19	57.1	1.5	2,199	(82.9)	(97.0)	33	
20-24	77.0	4.8	1,697	84.8	98.8	81	
25-29	83.6	13.9	1,657	71.6	94.4	231	
30-34	88.2	19.0	1,619	60.1	89.7	308	
35-39	89.2	19.3	1,236	68.5	94.0	238	
40-44	88.2	22.7	965	61.2	84.4	219	
45-49	85.9	24.1	582	56.6	81.5	140	
Residence							
Urban	88.4	21.1	3,829	64.9	89.2	806	
Rural	72.6	7.2	6,126	67.5	92.3	444	
Province			-,				
Manicaland	73.4	6.4	1,266	52.5	84.2	80	
Mashonaland Central	79.8	9.4	882	66.2	91.3	83	
Mashonaland East	82.0	11.9	952	71.9	93.0	114	
Mashonaland West	82.9	10.4	1,160	65.5	93.3	121	
Matabeleland North	65.4	8.1	465	79.2	93.1	38	
Matabeleland South	61.5	8.2	419	59.7	84.9	35	
Midlands	72.6	8.4	1,263	66.6	90.6	106	
Masvingo	73.0	10.5	1,187	74.8	94.1	125	
Harare	90.8	23.9	1,783	65.9	88.5	426	
Bulawayo	85.0	21.2	577	56.6	91.0	122	
Marital status							
Never married	64.3	2.4	2,511	70.9	98.4	60	
Married	83.2	16.0	5,841	64.0	89.3	932	
Living together	83.8	10.2	310	(71.8)	(96.7)	31	
Divorced/separated	83.9	16.3	855	69.5	91.0	139	
Widowed	86.7	19.9	438	74.3	92.5	87	
Education							
No education	59.2	8.9	126	*	*	11	
Primary	66.4	7.5	2.571	71.4	88.9	192	
Secondary	81.7	12.4	6,527	68.2	91.1	812	
More than secondary	97.7	32.0	731	54.6	88.4	234	
Wealth quintile							
Lowest	65.1	5.3	1,726	54.6	90.0	91	
Second	71.9	5.2	1,660	71.4	94.2	86	
Middle	74.9	6.9	1,733	70.0	94.6	120	
Fourth	84.2	16.7	2,269	71.7	90.6	379	
Highest	89.7	22.4	2,567	62.0	88.7	575	
Total 15-49	78.7	12.6	9,955	65.8	90.3	1,250	

Notes: 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.

### 3.19 Domestic Violence

In Zimbabwe, domestic violence is widely acknowledged to be of great concern, not just from a human rights perspective, but also from an economic and health perspective. In 2006, Zimbabwe enacted the Domestic Violence Act "to make provision for the protection and relief of victims of domestic violence" (Domestic Violence Act [*Chapter 5:16*] *Act 14/2006*). Reliable data are needed to further inform and educate the population about the problem. To collect these data, the 2015 ZDHS again included the same module with questions on domestic violence that were in the 2005-06 and 2010-11 ZDHS surveys. Information was collected on both domestic violence (also known as spousal violence or intimate partner violence) and violence by other family members of unrelated individuals.

Table 24 shows the percentage of women 15-49 who have ever experienced physical violence since age 15, and the percentage who experienced physical violence during the 12 months prior to the survey, by background characteristics. Overall, 35 percent of women report that they have experienced physical violence at some time in their lives.

### Table 24 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, Zimbabwe 2015

	Percentage who have ever experienced	Percentage who			
Background characteristic	physical violence since age 15 <sup>1</sup>	Often	Sometimes	Often or sometimes <sup>2</sup>	Number of women
Age					
15-19	27.9	2.3	13.5	15.9	1,537
20-24	34.8	3.6	13.3	16.8	1,190
25-29	42.4	4.1	14.3	18.5	1,205
30-39	36.7	2.9	10.4	13.3	2,110
40-49	32.7	2.0	6.2	8.1	1,181
Religion					
Traditional	(25.9)	(2.3)	(0.0)	(2.3)	41
Roman Catholic	`31.8 <sup>´</sup>	`1.6 <sup>´</sup>	7.6	9.2	466
Protestant	31.4	2.8	9.1	12.0	1,169
Pentecostal	32.9	2.3	11.5	13.8	1,793
Apostolic sect	36.9	3.2	12.4	15.7	3,040
Other Christian	31.5	3.9	9.5	13.5	315
Muslim	*	*	*	*	27
None	45.3	4.8	19.0	24.0	367
Other	*	*	*	*	6
Residence					
Urban	34.2	2.5	11.6	14.2	2,739
Rural	35.2	3.2	11.4	14.6	4,484
Province					
Manicaland	34.3	3.4	13.4	16.8	909
Mashonaland Central	34.5	2.7	12.3	15.0	647
Mashonaland East	45.1	2.1	14.2	16.4	691
Matabeleland North	27.3	1.4	9.6	11.0	335
Matabeleland South	23.3	2.9	7.8	10.7	311
Mashonaland West	38.6	2.9	10.4	13.0	850
Midlands	36.5	3.8	10.4	14.7	921
Masvingo	29.3	4.1	9.9	14.0	881
Harare Bulawayo	35.8 31.4	2.4 2.9	12.6 9.2	15.1 12.2	1,262 415
Marital status					
Never married	22.9	1.3	9.2	10.5	1,729
Married or living			•	1010	.,
together	36.8	3.3	13.0	16.3	4,593
Divorced/separated/	00.0	0.0	10.0	10.0	4,000
widowed	47.6	4.2	8.4	12.7	902
Number of living					
children					
0	25.0	1.9	10.6	12.6	1,859
1-2	38.2	3.6	12.8	16.5	2,656
3-4	37.8	2.9	10.7	13.7	2,026
5+	39.9	3.1	11.1	14.2	681
Employment					
Employed for cash	39.5	3.0	11.7	14.7	3,458
Employed not for cash	39.6	4.6	15.2	19.8	253
Not employed	29.9	2.7	11.1	13.8	3,513
Education					
No education	37.8	1.7	15.0	16.6	96
Primary	37.5	3.8	12.3	16.1	1,910
Secondary	35.1	2.8	11.8	14.6	4,680
More than secondary	21.9	1.4	5.2	6.7	537
Wealth quintile					
Lowest	36.4	3.8	11.6	15.3	1,260
Second	37.5	3.6	12.4	16.1	1,239
Middle	34.9	2.9	11.4	14.4	1,270
Fourth	37.4	2.9	13.9	16.9	1,680
Highest	29.4	1.9	8.6	10.4	1,775
Total 15-49	34.8	2.9	11.5	14.5	7,223
		2.0			.,

<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.

The experience of physical violence varies by background characteristics. Almost a third of women age 15-19 have experienced physical violence since the age of 15. The percentage increases with age, peaking among women age 25-29 (42 percent), and then decreasing to 33 percent among women age 40-49.

The prevalence of physical violence is similar among urban and rural women; however, there are notable differences by province, ranging from 23 percent in Matabeleland to 45 percent in Mashonaland East.

Almost a quarter of never-married women report experience with physical violence (23 percent), while just over one-third of women who are currently married or living with a partner report the same. About half of women who are divorced, separated, or widowed report experience with physical violence (48 percent).

The percentage of experience with physical violence increases with the number of living children. A quarter of women with no children report physical violence compared with 40 percent of women with 5 or more children.

Forty percent of women who are employed for cash and those who are employed but do not receive cash report have experienced physical violence since the age of 15, while 30 percent of women with no employment report the same.

Experience with physical violence decreases with an increase in education. Thirty-eight percent of women with no education report experience with physical violence compared with 22 percent of women with more than a secondary education. There is no clear pattern observed in the prevalence of physical violence according to wealth. However, 29 percent of women in the highest wealth quintile report the lowest percentage of experience with physical violence compared with their counterparts in the other wealth quintiles.

Women who had experienced some form of physical violence since age 15 were asked who committed the violence. Table 25 shows the distribution by marital status of women age 15-49 who have experienced physical violence since age 15 by specific persons who subjected them to physical violence. The most commonly reported perpetrator is the current husband or partner (54 percent), followed by the former husband or partner (23 percent), other relative (7 percent), and a sister or brother (4 percent). Among ever-married women, a similar trend is observed with the current husband or partner as the most likely perpetrator of physical violence (64 percent), followed by the former husband or partner (27 percent). Women who have never married are most likely to suffer physical violence committed by other relatives who are not captured in any of the listed categories (22 percent), followed by a teacher (17 percent), and a mother or step-mother (14 percent).

#### Table 25 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, Zimbabwe 2015

	Marita	l status	
_	Ever-	Never	
Person	married	married	Total
Current husband/partner	64.0	na	53.9
Former husband/partner	26.9	na	22.6
Current boyfriend	0.3	2.9	0.7
Former boyfriend	2.9	5.1	3.3
Father/step-father	2.9	10.6	4.1
Mother/step-mother	2.5	14.0	4.3
Sister/brother	3.3	12.7	4.8
Daughter/ son	0.1	0.7	0.2
Other relative	4.0	21.5	6.7
Mother-in-law	0.1	na	0.1
Father-in-law	0.1	na	0.1
Other in-law	0.4	na	0.4
Teacher	1.4	18.6	4.1
Employer/someone at work	0.4	0.1	0.4
Police/soldier	0.1	0.0	0.1
Other	6.0	23.9	8.8
Number women who have experienced physical			
violence since age 15	2,120	395	2,515
na = Not applicable			

Table 26 provides data for ever-married women age 15-49 who reported their experience of spousal emotional, physical, and sexual violence. The final report will present additional data information regarding domestic violence.

Almost half of ever-married women (45 percent) report that they have experienced physical, emotional, or sexual violence from their husband or partner at some point in time. Thirty-two percent of women report that they experienced emotional violence, 31 percent experience physical violence, and 13 percent experienced sexual violence. There is no difference between urban and rural residence. Education is more of a deterrent than wealth. The rates of abuse decrease as women's level of education increases.

#### Table 26 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, Zimbabwe 2015

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
Age								
15-19	31.9	31.1	18.4	11.0	10.0	38.6	45.2	350
20-24	31.1	32.5	13.2	8.5	7.0	37.2	45.9	890
25-29	35.5	35.9	12.3	7.7	6.3	40.5	50.9	1,082
30-39	32.5	30.6	13.4	8.6	7.1	35.4	45.7	2,032
40-49	26.4	24.5	9.6	5.9	5.2	28.3	37.5	1,140
Religion								
Traditional	(15.0)	(23.4)	(9.3)	(9.3)	(5.1)	(23.4)	(30.3)	31
Roman Catholic	22.5	24.9	12.4	8.4	6.9	28.9	36.9	336
Protestant	30.6	27.5	10.7	6.8	6.0	31.5	41.5	776
	29.6	29.2	12.1	7.4				
Pentecostal					6.6	33.9	43.4	1,293
Apostolic sect	33.1	32.0	14.1	8.8	7.2	37.3	46.9	2,485
Other Christian Muslim	33.8	31.0 *	9.6 *	6.0 *	5.3	34.5	43.5	224 22
None	37.7	41.5	12.4	8.3	6.4	45.6	54.9	323
Other	*	*	*	*	*	*	*	5
Residence								
Urban	32.0	30.0	12.1	7.5	6.6	34.6	45.0	1,956
Rural	31.3	31.1	13.0	8.2	6.8	35.9	45.0	3,538
Province								
Manicaland	32.9	31.8	16.0	9.4	7.3	38.5	47.8	732
Mashonaland Central	30.4	26.1	13.9	8.4	7.1	31.6	41.1	550
Mashonaland East	29.1	37.6	11.7	8.4	6.6	40.8	48.7	547
Matabeleland North	22.5	17.3	5.5	2.8	2.5	19.9	29.9	249
Matabeleland South	26.0	23.2	5.5	4.3	3.3	24.4	32.4	198
Mashonaland West	33.3	37.9	18.2	10.9	8.5	45.1	52.5	691
Midlands	36.8	33.1	11.1	7.8	7.0	36.5	48.8	708
Masvingo	28.0	27.7	11.3	7.7	7.1	31.3	38.7	675
Harare	32.3	29.3	12.4	7.5	6.9	34.2	44.5	905
Bulawayo	35.9	28.8	9.1	4.8	3.9	33.1	49.7	240
Marital status								
Married or living								
together	29.9	29.2	11.5	6.6	5.5	34.0	43.7	4,593
Divorced/separated/								
widowed	39.8	38.5	18.9	14.9	13.0	42.5	51.4	902
Education								
No education	36.0	31.7	10.8	7.1	7.1	35.4	49.8	90
Primary	33.3	34.3	14.0	9.3	7.5	39.0	48.4	1,644
Secondary	31.6	30.4	12.5	7.6	6.4	35.3	45.0	3,359
More than secondary	22.5	18.2	9.6	6.0	5.9	21.8	29.9	401
Wealth quintile								
Lowest	33.1	31.6	14.2	9.9	8.2	35.9	46.3	1,050
Second	30.7	32.8	14.0	9.8	7.9	37.0	45.3	993
Middle	31.9	32.2	11.8	6.6	5.5	37.3	47.2	964
Fourth	33.8	32.8	14.0	8.4	7.6	38.5	46.7	1,313
Highest	27.9	24.7	9.5	5.5	4.4	28.7	39.8	1,175
Total 15-49	31.5	30.7	12.7	8.0	6.7	35.4	45.0	5,494

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.

### 3.20 Maternal Mortality

Maternal deaths are a subset of all female deaths and are associated with pregnancy and childbearing. Two survey methods are generally used to estimate maternal mortality in developing countries: the indirect sisterhood method (Graham et al., 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan, 1991). In this report, the direct estimation procedure is applied.

Age-specific estimates of maternal mortality from the reported survivorship of sisters are shown in Table 27 for the 7-year period preceding the survey. These rates were calculated by dividing the number of maternal deaths by woman-years of exposure. To remove the effect of truncation bias (the upper boundary for eligibility among women interviewed in the survey is 49 years), the overall rate for women age 15-49 was standardised by the age distribution of survey respondents. A maternal death was defined as any death reported as occurring during pregnancy, childbirth, or within 2 months after the birth or termination of a pregnancy. Estimates of maternal mortality are therefore based solely on the timing of the death in relationship to pregnancy.

The results in Table 27 indicate that the rate of mortality associated with pregnancy and childbearing is 0.90 maternal deaths per 1,000 woman-years of exposure, down from 1.3 in the 2010-11 ZDHS. The estimated age-specific mortality rates display a plausible pattern, being generally higher during the peak childbearing ages than in the younger and older age groups. However, the age-specific pattern should be interpreted with caution because of the small number of events: only 99 maternal deaths among women of all ages. Maternal deaths represent 12 percent of all deaths among women age 15-49 during the 7-year period preceding the survey (99 maternal deaths divided by 796 female deaths).

The maternal mortality rate can be converted to a maternal mortality ratio by dividing the rate by the general fertility rate (GFR) during the 7-year period preceding the 2015 ZDHS. The maternal mortality ratio is expressed per 100,000 live births in order to emphasise the obstetrical risk of pregnancy and childbearing. The estimate of the maternal mortality ratio for the 7-year period preceding the 2015 ZDHS is 651 deaths per 100,000 live births; that is, for every 1,000 births in Zimbabwe, there are about 7 maternal deaths. The 95 percent confidence interval surrounding the maternal mortality estimate is 473-829 deaths per 100,000 live births.

Table 27 Maternal mortality

Direct estimates of maternal mortality rates for the 7 years preceding the survey, by 5-year age groups, Zimbabwe 2015

Age	Percentage of female deaths that are maternal	Maternal deaths	Exposure years	Maternal mortality rate
15-19	20.2	6	16,199	0.38
20-24	31.0	16	20,326	0.77
25-29	16.2	19	23,096	0.81
30-34	10.7	23	20,182	1.15
35-39	9.7	18	13,497	1.32
40-44	10.6	13	8,248	1.62
45-49	4.5	4	4,953	0.77
Total 15-49	12.2	99	106,502	0.90
General fertility rate (GFR) <sup>2</sup> Maternal mortality ratio (MMR) <sup>3</sup>	139ª 651	CI: (473, 829)		
Lifetime risk of maternal death4	0.027			

CI: Confidence interval

Expressed per 1,000 woman-years of exposure

<sup>2</sup> Expressed per 1,000 women age 15-49

<sup>3</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>4</sup> Calculated as 1-(1-MMR)<sup>TFR</sup> where TFR represents the total fertility rate for the seven years preceding

the survey <sup>a</sup> Age-adjusted rate

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