

Zambia - 2024 Zambia Demographic and Health Survey

Zambia Statistics Agency

Report generated on: January 20, 2026

Visit our data catalog at: <https://nada.zamstats.gov.zm/index.php>

Identification

SURVEY ID NUMBER
ZMB-ZSA-ZDHS-2024-V1.0

TITLE
2024 Zambia Demographic and Health Survey

SUBTITLE
Seventh Edition

COUNTRY

Name	Country code
ZAMBIA	ZMB

STUDY TYPE
Demographic and Health Survey [hh/dhs]

ABSTRACT

The main survey objective of the 2024 ZDHS was:

To provide up-to-date estimates of basic demographic and health indicators necessary for monitoring and evaluating existing health policies and programs in Zambia as well as input data for designing new health initiatives.

Specific objectives of the survey are to:

- Collect high quality data on fertility levels and preferences; contraceptive use; maternal and child health; infant, child and neonatal mortality level; maternal mortality, gender based violence, nutrition, mental health, fistula, HIV and AIDS awareness and other health issues relevant for the Sustainable Development Goals;
- Measure maternal and neonatal morbidity and mortality, and its associated factors (i.e. antenatal and delivery care, pregnancy care, etc.);
- Provide information to address evaluation/monitoring needs of maternal and child health, and family planning programs for evidence-based planning;
- Provide information on availability, access and use of mosquito nets as part of the national malaria eradication programs;
- Collect information on health-related matters such as breastfeeding, maternal and child care (antenatal, during delivery and postnatal), children's immunizations and childhood diseases;
- Assess the nutritional status of mothers and children, including the measurement of anaemia prevalence among women age 15-49 and children 6-59 months, as well as measuring weight and height among children 0-59 months and women age 15-49.
- Measure HIV prevalence levels in men age 15-59, women age 15-49 and children age 2-14, and collect data on behavioural risk factors related to HIV for men and women;
- Assess the circumstances related to violence against women and girls.
- Estimate the seroprevalence of measles among children age 6-59 months. Estimate the seroprevalence of rubella among children age 6-59 months

KIND OF DATA
Sample survey data [ssd]

UNIT OF ANALYSIS
Households and Individuals

Version

VERSION DESCRIPTION
V1.0: Edited, anonymised dataset for public distribution.

VERSION DATE
2025-11-18

Scope

NOTES

The scope of the ZDHS includes:

- **HOUSEHOLD:** used to record some information about each household member and visitor, such as name, sex, age, education, and survival of parents for children under age 18, household characteristics, housing characteristics, identify women and men who are eligible to be interviewed with the relevant Individual Questionnaire.
- **WOMEN:** Socio-demographic characteristics, Reproduction, Family planning, Maternal health care and breastfeeding, Vaccination and health of children, Children's nutrition, Woman's dietary diversity, Marriage and sexual activity, Fertility preferences, Husband's background characteristics and woman's employment activity, HIV/AIDS and other sexually transmitted infections, Other health issues, such as mental health, fistula, diabetes, hypertension, and maternal mortality.
- **MEN:** Socio-demographic characteristics, Family planning, Marriage and sexual activity, Fertility preferences, Employment and gender roles, HIV/AIDS and other sexually transmitted infections, Other health issues, such as mental health, diabetes and hypertension.
- **BIOMARKERS:** Anthropometry for children ages 0-4 years and women age 15-49; Anemia for children ages 6 months to 4 years and women age 15-49; HIV for persons 2-14 years; Measles serology testing among children 6-59 months.

TOPICS

Topic	Vocabulary
Fertility	World Bank
HIV/AIDS	World Bank
Malaria	World Bank
Mental Health	World Bank
Nutrition	World Bank
Maternal and child health	World Bank
Background characteristics	World Bank
Women's empowerment	World Bank
Domestic violence	World Bank
Adult mortality	World Bank
Other health issues and chronic diseases	World Bank
Family planning	World Bank
Maternal and child health	World Bank
Knowledge, awareness, and behaviour regarding HIV/AIDS and other sexually transmitted infections (STIs)	World Bank
Nutrition	World Bank
Antenatal, delivery, and postnatal care	World Bank
Vaccinations and childhood illnesses	World Bank
	World Bank

KEYWORDS

Keyword
Demographic Indicators
Health Indicators
Fertility

Family planning

HIV prevalence

Coverage

GEOGRAPHIC COVERAGE

National coverage, Urban and or rural and provincial

UNIVERSE

The survey covered all usual household members (usual residents) and visitors who spent a night in the household prior to the interviewer's visit, all women age 15-49 years resident in the household and visitors, men 15-59 years and all children aged 0-4 years (under age 5) resident in the household.

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
Zambia Statistics Agency	Ministry of Finance and National Planning

PRODUCERS

Name	Affiliation	Role
Ministry of Health	Government of Zambia	QUESTIONNAIRE DESIGN, PROVIDED THE HEALTH STAFF REQUIRED FOR THE SURVEY, DATA COLLECTION AND DATA ANALYSIS
University Teaching Hospital Virology Laboratory	Ministry of Health	TRAINING OF HEALTH SURVEY STAFF, HIV AND MEASLES TESTING
Department of Demography, Population Sciences, Monitoring and Evaluation at the University of Zambia (UNZA)	UNIVERSITY OF ZAMBIA	QUESTIONNAIRE DESIGN, DATA COLLECTION AND DATA ANALYSIS
National Health Training Institute (formerly TDRC)	MINISTRY OF HEALTH	TRAINING OF HEALTH STAFF FOR THE SURVEY, FIELD MONITORING
ICF	USAID	TECHNICAL ASSISTANCE IN ALL ASPECTS OF THE SURVEY
Johns Hopkins University	US GOVERNMENT	TECHNICAL ASSISTANCE ON THE MEASLES SEROLOGY

FUNDING AGENCY/SPONSOR

Name	Abbreviation	Role
Government of Zambia	GRZ	FINANCIAL CONTRIBUTION
United States Agency for International Development	USAID	FINANCIAL CONTRIBUTION
The Global Fund to Fight AIDS, Tuberculosis and Malaria	The Global Fund	FINANCIAL CONTRIBUTION
United Nations Children's Fund	UNICEF	FINANCIAL CONTRIBUTION
United Nations Population Fund	UNFPA	FINANCIAL CONTRIBUTION
World Health Organization	WHO	FINANCIAL CONTRIBUTION
Johns Hopkins University		FINANCIAL CONTRIBUTION TOWARDS THE MEASLES SEROLOGY

Sampling

SAMPLING PROCEDURE

The 2024 ZDHS followed a stratified two-stage sample design. The first stage involved selecting Primary Sampling Units consisting of Enumeration Areas (EAs) from the national sampling frame based on the 2022 Census of Population and Housing. EAs were selected with a probability proportional to their size, measure of size used was the number of households as of the 2022 Census within each EA. A total of 545 clusters were selected.

The second stage involved systematic sampling of households. Prior to this, a household listing operation was undertaken in all of the selected EAs. During the listing, an average of 111 households were found in an EA, from which a fixed number of 25 households were selected through an equal probability systematic selection process, to obtain a total sample size of 13,625 households. Results from this sample are representative at the national, urban and rural, and provincial levels.

All women age 15-49 and men age 15-59 who were either permanent residents of the selected households or visitors who stayed in the households the night before the survey were eligible to be interviewed.

RESPONSE RATE

13,625 households were selected for the sample. Of these, 12877 were occupied households and 12808 were successfully interviewed for a response rate of 99%. Within these households, 14362 eligible women age 15-49 were identified for interview, of which 13951 were successfully interviewed (response rate 97%), and 13424 eligible men age 15-59 were identified for interview of which 94% were interviewed.

WEIGHTING

Sample weights were calculated for each of the data files. Sample weights for the household data were computed as the inverse of the probability of selection of the household, computed at the sampling domain level. The household weights were adjusted for non-response at the domain level, and were then normalized by a constant factor so that the total weighted number of households equals the total unweighted number of households. The household weight variable is called HHWEIGHT and is used with the HH data and the HL data.

Sample weights for the women's and men's data used the un-normalized household weights, adjusted for non-response for the women's and man's questionnaire, and were then normalized by a constant factor so that the total weighted number of women's cases equals the total unweighted number of women's cases.

Design weights were adjusted for household nonresponse and as well as for individual non-response to get the sampling weights, for households, women and men surveys respectively. All the nonresponse adjustments will be done at sampling stratum level. The differences between the household sampling weights and the individual sampling weights were introduced by individual non-response. The final sampling weights were normalised in order to give the total number of un-weighted cases equal to the total number of weighted cases at national level, for both household weights and individual weights, respectively. The sampling weights for HIV testing were calculated in a similar way, with correction of nonresponse for both individual survey and for HIV testing, but the normalisation of the sampling weights was different. The HIV testing weights were normalised for male and female together at national level, in order that the HIV prevalence calculated for male and female together are valid. Sampling weights for the domestic violence survey were calculated based on the number of eligible respondents in the households. A total number of six sets of weights were calculated: household; woman; man; women domestic violence; adult HIV testing; HIV testing for children 2-14 years.

Data Collection

DATES OF DATA COLLECTION

Start	End
2024-01-17	2024-07-08

DATA COLLECTION MODE

Face-to-face [f2f]

SUPERVISION

Data collection was carried out from 17 January to 7 July 2024 by 22 teams, each composed of 12 members: one supervisor, three female interviewers, two male interviewers, four biomarker technicians, and two drivers. Fieldwork monitoring was a crucial part of the 2024 ZDHS. Senior technical staff from ZamStats; the Department of Demography, Population Sciences, Monitoring and Evaluation at the

University of Zambia (UNZA); and UTH-VL regularly visited teams to review their work and monitor data quality.

DATA COLLECTORS

Name	Abbreviation	Affiliation
MINISTRY OF HEALTH	MOH	GOVERNMENT OF ZAMBIA
ZAMBIA STATISTICS AGENCY	ZAMSTATS	MINISTRY OF FINANCE AND NATIONAL PLANNING

Questionnaires

QUESTIONNAIRES

Four questionnaires were used for the 2024 ZDHS: the Household Questionnaire, the Woman's Questionnaire, the Man's Questionnaire, and the Biomarker Questionnaire. The questionnaires, based on The DHS Program's model questionnaires, were adapted to reflect the population and health issues relevant to Zambia. In addition, a self-administered Fieldworker Questionnaire collected information about the survey's fieldworkers. The Household, Man's, and Woman's Questionnaires were administered in eight major languages: English, Bemba, Kaonde, Lozi, Lunda, Luvale, Nyanja, and Tonga. The Biomarker Questionnaire was used to record the results of anthropometry (height and weight) measurements and haemoglobin and field-based HIV testing for eligible respondents. In addition, the questionnaire was used to record information on specimen collection for lab-based HIV testing for eligible women, men, and children and lab-based testing of antibodies to measles among children.

The Fieldworker Questionnaire collects data on the basic characteristics of fieldworkers and can serve as a tool in conducting analyses of data quality.

Data Processing

DATA EDITING

The data processing monitors monitored the quality of the data received and downloaded completed data files for completed clusters into the system. ICF provided the CPro software for data processing and offered technical assistance in the preparation of the data capture, data management, and data editing programmes. Secondary editing was conducted simultaneously with data collection and was completed following data collection.

Data Appraisal

ESTIMATES OF SAMPLING ERROR

Sampling errors for the 2024 ZDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas separately, and for each of the 10 provinces. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 through B.14 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95% confidence limits ($R \pm 2SE$) for each variable. The sampling errors for mortality rates are presented for the 5-year period preceding the survey for the national sample and the urban and rural samples and for the 10-year period preceding the survey at other domain levels. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

Access policy

CONTACTS

Name	Affiliation	Email	URL
HEAD OF DISSEMINATION	ZAMBIA STATISTICS AGENCY	info@zamstats.gov.zm	Link

CONFIDENTIALITY

The Agency shall, where statistics are designated as official statistics, protect the confidentiality and identity of the source of data. Under the provision of the Statistics ACT no.13 of 2018, ZamStats is obliged to preserve the confidentiality of

respondent information in all its census and survey data Before being granted access to the dataset, all users have to formally agree: 1. To make no copies of any files or portions of files to which s/he is granted access except those authorized by the Agency. 2. Not to use any technique in an attempt to learn the identity of any person, establishment, or sampling unit not identified on public use data files. 3. To hold in strictest confidence the identification of any establishment or individual that may be inadvertently revealed in any documents or discussion, or analysis. Such inadvertent identification revealed in her/his analysis will be immediately brought to the attention of the Agency

ACCESS CONDITIONS

Micro data records are anonymised as per procedures before these are made available to users.

Survey micro data will only be provided and subjected to the anonymisation techniques and documented accordingly.

Micro data files are all free but under access policy Conditions:

Each dataset has an access policy :Public use file- Accessible to all and - Licensed datasets, accessible under conditions. The dataset has been anonymized and is available as a Public Use Dataset. It is accessible to all for statistical and research purposes only, under the following terms and conditions:

1. The data and other materials will not be redistributed or sold to other individuals, institutions, or organizations without the written agreement of the Zambia Statistics Agency
2. The data will be used for statistical and scientific research purposes only. They will be used solely for reporting of aggregated information, and not for investigation of specific individuals or organizations.
3. No attempt will be made to re-identify respondents, and no use will be made of the identity of any person or establishment discovered inadvertently.

CITATION REQUIREMENTS

Zambia Statistics Agency, Ministry of Health (MoH) [Zambia], and ICF. 2024. Zambia Demographic and Health Survey 2024. Lusaka, Zambia, and Rockville, Maryland, USA: Zambia Statistics Agency, MoH, and ICF

ACCESS AUTHORITY

Name	Affiliation	Email	URL
ZAMBIA STATISTICS AGENCY	MINISTRY OF FINANCE AND NATIONAL PLANNING	info@zamstats.gov.zm	Link

Disclaimer and copyrights

DISCLAIMER

ZamStats will not bear any responsibility for the erroneous use of its data by researchers. Users should report inconsistencies in the data (both micro and aggregated) to ZamStats as soon as possible.

The user of the data acknowledges that the original collector of the data, the authorized distributor of the data, and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such use

COPYRIGHT

(c) 2024, Zambia Statistics Agency

Metadata production

DDI DOCUMENT ID

DDI-ZMB-ZAMSTATS-DHS-2024-V1

PRODUCERS

Name	Abbreviation	Affiliation	Role
ZAMBIA STATISTICS AGENCY	ZAMSTATS	MINISTRY OF FINANCE AND NATIONAL PLANNING	DOCUMENTATION OF THE STUDY

DATE OF METADATA PRODUCTION

2026-01-14

DDI DOCUMENT VERSION

Version 1.0 (January 2026)

Data Dictionary

Data file	Cases	Variables
<p>ZMAR81FL AR: HIV testing Recode Unit of analysis: Person tested for HIV</p> <p>Contains the result of lab testing for HIV from blood samples provided by women and men, together with a separate weight variable for use when analyzing HIV test results. This dataset is used for analysis of HIV prevalence (Chapter 14).</p>	48444	11
<p>ZMBR81FL BR: Births Recode Unit of analysis: Birth</p> <p>Contains the full birth history of all women interviewed, including information on pregnancy and postnatal care as well as immunization, health and nutrition data for children born in the last 5 years. Data for the mother of each of these children are also included. This dataset is used for fertility (Chapter 5) and mortality (Chapter 8) analysis.</p>	35610	1242
<p>ZMCR81FL CR: Couples Recode Unit of analysis: Married woman and man</p> <p>Contains data for married or living together women and men who both declared that they are married (living together) to each other and with completed individual interviews. This dataset is the result of linking the IR (Female) and MR (Male) files, based on whom they both declared as partners. In polygamous societies a man's data may be linked to more than one woman's data. This dataset is used for analysis of couples, principally related to HIV (Chapters 13 and 14).</p>	5515	1753
<p>ZMFW81FL FW: Fieldworker's Dataset Unit of analysis: Fieldworker</p> <p>Contains the basic characteristics of each fieldworker who participated in the survey, including their age, sex, marital status, level of education, region of residence, languages, and prior experience with DHS or other surveys. Data from the fieldworker's dataset may be linked to the survey responses using the interviewer, supervisor, field editor, or biomarker specialists IDs.</p>	107	29
<p>ZMGR81FL GR: Pregnancies Recode Unit of analysis: Pregnancy outcome</p> <p>Contains the full pregnancy history of all women interviewed, including information on type of pregnancy outcome, and pregnancy and postnatal care for pregnancies ending in the 3 years preceding the survey. Data for the mother of each of these pregnancy outcomes are also included.</p>	37843	869
<p>ZMHR81FL HR: Household Recode Unit of analysis: Household</p> <p>Includes household characteristics, the household roster, and biomarkers rosters as repeating sets of variables. This dataset is used for calculation of household level indicators such as water and sanitation.</p>	12808	4442
<p>ZMIR81FL IR: Individual (Women's) Recode Unit of analysis: De facto woman interviewed</p> <p>Contains all the data collected in the Woman's Questionnaire for de facto women plus some variables from the Household Questionnaire. Up to 20 births in the birth history (see also BR file), and up to 6 children under age 5 (see also KR file), for whom pregnancy and postnatal care as well as immunization, health and nutrition data were collected, can be found as repeated variables in this file. This dataset is used for most woman-level analysis including marriage and sexual activity, fertility and fertility preferences, family planning, anthropometry and anemia in women, malaria prevention for women, HIV/AIDS, women's empowerment, and domestic violence.</p>	13951	6140

ZMKR81FL

KR: Kids Recode

Unit of analysis: Child under age 5 born to a woman interviewed

Contains information related to the child's pregnancy and postnatal care and immunization, health and nutrition data. The data for the mother of each of these children is also included. This dataset is used to look at child health indicators such as immunization coverage, vitamin A supplementation, recent occurrences of diarrhea, fever, and cough for young children and treatment of childhood diseases, nutrition of young children, and malaria prevention and treatment.

8673 1242

ZMMR81FL

MR: Men's Recode

Unit of analysis: De facto man interviewed

Contains all data collected in the Man's Questionnaire de facto men plus some variables from the Household Questionnaire. This dataset is used for most man-level analysis including marriage and sexual activity, fertility preferences, and HIV/AIDS.

12585 607

ZMNR81FL

NR: Pregnancy and postnatal care Recode

Unit of analysis: Pregnancy outcome in the 3 years preceding the survey to a woman interviewed

Contains the information related to pregnancy and postnatal care for pregnancy outcomes in the 3 years preceding the survey. This dataset is used for analysis of maternal healthcare.

5866 869

ZMPR81FL

PR: Household members (or Persons) Recode

Unit of analysis: Household member

Includes characteristics of household members including age, sex, marital status, education, as well as biomarker measurement information. The dataset includes both de facto and de jure household members. It also includes the characteristics of the households where the individual lives or was visiting. This dataset is used for analysis of education of household members and of anthropometry and anemia in children under age 5.

61646 463

ZMSR81FL

SR: Siblings Recode

Unit of analysis: Sibling

Contains data for each sibling of the interviewed woman including their sex, survival status, age (if alive), age at death and years since death (if deceased), and for female siblings age 12 and above information on whether the death was pregnancy-related. This dataset is used for analysis of adult and maternal mortality.

71603 145