

Tanzania - The Tanzania HIV Impact Survey (THIS 2022-2023)

National Bureau of Statistics (NBS), Office of the Chief Government Statistician(OCGS-Zanzibar)

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Identification

SURVEY ID NUMBER

TZA-NBS-THIS-2022-2023-v01

TITLE

The Tanzania HIV Impact Survey (THIS 2022-2023)

ABBREVIATION OR ACRONYM

THIS 2022-2023

COUNTRY

Name	Country code
Tanzania	TZA

STUDY TYPE

Demographic and Health Survey [hh/dhs]

SERIES INFORMATION

The Tanzania HIV Impact Survey 2022-2023 (THIS 2022-2023) is the fifth in a historic series of household-based HIV surveys conducted in Tanzania since 2003.

ABSTRACT

This survey included nearly 36,000 participants aged 15 years and older from all 31 regions of the country. It has provided essential data on national HIV incidence, national and regional HIV prevalence, and national and regional prevalence of HIV viral load suppression (VLS) among those living with HIV. THIS 2022-2023 also provided critical information on national and regional progress toward HIV epidemic control—including progress towards achieving the Joint United Nations Programme on HIV and AIDS (UNAIDS) 95-95-95 targets.

Annual HIV incidence among adults (defined as individuals aged 15 years and older) in Tanzania was 0.18%, which corresponds to approximately 60,000 new cases of HIV per year among adults.

Prevalence of HIV among adults in Tanzania was 4.4%, which corresponds to approximately 1,548,000 adults living with HIV. HIV prevalence was higher among women at 5.6% than men at 3.0%.

Prevalence of VLS among all adults living with HIV in Tanzania was 78.0%. VLS prevalence was higher among women at 80.9% than men at 72.2%.

Prevalence of VLS among all adults living with HIV in Mainland Tanzania was 78.1%.

Tanzania's conditional achievement of the UNAIDS 95-95-95 targets were: 82.7% of adults living with HIV were aware of their status, 97.9% of those aware of their HIV positive status were on ART, and 94.3% of those on ART achieved VLS

KIND OF DATA

Sample survey data [ssd]

UNIT OF ANALYSIS

Household and Individual

Version

VERSION DESCRIPTION

Version 01 (Public use file for web dissemination)

VERSION DATE

2024-09

Scope

NOTES

The scope of the Tanzania HIV 2022-23 includes: Household Questionnaire and Individual Questionnaire.

- The household questionnaire collected information on household residents, assets, economic support, recent deaths, and orphans and vulnerable children .

- The individual questionnaire was administered to all participants and included modules on demographic characteristics, sexual and reproductive health, marriage, male circumcision, sexual activity, the HIV testing and treatment history, TB and other health issues, hepatitis risk factors, COVID-19 vaccination status, stigma and discrimination, and alcohol use . Participants who self-reported their HIV-positive status were asked questions about their HIV care experience.

TOPICS

Topic	Vocabulary	URI
HEALTH [8]	CESSDA	Link

KEYWORDS

Keyword	Vocabulary	URI
HEALTH [8]	CESSDA	Link

Coverage

GEOGRAPHIC COVERAGE

National Coverage. (The survey covers both the Tanzania Mainland and Zanzibar.)

Although the survey did not disaggregate findings by national zones, the country's regions fall into zones that may share some common sociodemographic characteristics and which may be useful in the interpretation of survey data.

GEOGRAPHIC UNIT

Clusters

UNIVERSE

THIS 2022-2023 was a nationally representative, cross-sectional, two-stage, population-based survey of households across Tanzania. First selected census enumeration areas (EAs), then households within each EA.

Its target population was adults (defined as individuals aged 15 years and older for the purposes of the survey).

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
National Bureau of Statistics (NBS)	Ministry Of Finance
Office of the Chief Government Statistician(OCGS-Zanzibar)	

PRODUCERS

Name	Abbreviation	Role
The Tanzania Commission for AIDS	TACAIDS	Authorised the survey
Zanzibar AIDS Commission	ZAC	Authorised the survey
United States Agency for International Development	USAID	Technical assistance

Ministries of Health	MOH	Technical assistance
National AIDS, STIs and Hepatitis Control Programme	NASHCoP	Technical assistance
Zanzibar Integrated HIV, Hepatitis, Tuberculosis and Leprosy Program	ZIHHTLP	Technical assistance
US Centers for Disease Control and Prevention	CDC	Technical assistance
ICAP at Columbia University	ICAP	Technical assistance

FUNDING AGENCY/SPONSOR

Name	Abbreviation	Role
United States (US) President's Emergency Plan for AIDS Relief	PEPFAR	Financial Support

OTHER IDENTIFICATIONS/ACKNOWLEDGMENTS

Name	Role
Westat	Technical expertise
Bugando Medical Centre (BMC)	Technical expertise
National Public Health Laboratory (NPHL)	Technical expertise
President's Office Regional Administration and Local Government (PO-RALG)	Technical expertise
President's Office Regional Administration and Local Government and Special Department (PO-RALGSD) in Zanzibar	Technical expertise
National Institute for Medical Research (NIMR)	Ethical clearance
Zanzibar Health Research Institute (ZAHRI)	Ethical clearance

Sampling

SAMPLING PROCEDURE

THIS 2022-2023 was a household-based, cross-sectional survey designed for individuals aged 15 years and older, using a two stage cluster sample approach that first selected census enumeration areas (EAs), then households within each EA.

The sampling frame was comprised of all EAs of Tanzania based on the 2022 Population and Housing Census data obtained from Tanzania National Bureau of Statistics (NBS), which included 104,188 EAs, and 14,966,262 households. The first stage selected EAs (clusters) using a probability proportional to size (PPS) method, stratified by geographical regions. However, because HIV prevalence varies widely across Tanzania's 31 regions, from below 0.2% to over 11%, a very large sample size would be required to capture accurate estimates. Consequently, modifications were made to the sampling design strategy. This included dividing specific sub-national units (SNUs) into three priority tiers:

- Highest Priority: This tier focused on achieving a VLS 95% CI of +/-10%.
- Intermediate Priority: This tier focused on achieving a VLS 95% CI of +/-20%.
- Lowest Priority: This tier aimed to estimate HIV prevalence with a 95% CI of +/- 1.2% and ensure at least 12 EAs in each group.

Regions in Tanzania were also categorized based on their HIV prevalence:

- Low: Less than 3%
- Intermediate: Between 3% and 5.9%
- High: 6% and above

The Second stage involved the households selections and the third stage of sampling involved selection of the individuals

DEVIATIONS FROM THE SAMPLE DESIGN

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RESPONSE RATE

Out of the 19,819 households selected, 18,586 were occupied and of those, 17,301 were interviewed. The overall unweighted household RR was 92.8%.

A total of 39,442 adults aged 15 years and older (22,031 women and 17,411 men) were eligible to participate in the survey. A total of 35,957 adults participated in the individual interview: interview RRs were 93.0% among women, and 87.3% among men. Among those interviewed, 93.0% of women and 92.6% of men had their blood drawn

WEIGHTING

Post-stratification procedures were used to calibrate the weighted sample counts to available population projections.

Data collection

DATES OF DATA COLLECTION

Start	End
2022-10-01	2023-03-30

DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

SUPERVISION

The field teams were supervised by their team leaders and field supervisors and managed by central staff who guided and oversaw data collection activities, performed quality checks, and provided technical support

DATA COLLECTION NOTES

The fieldwork was conducted by 65 locally hired field teams with nine members each, including four interviewers, two testers who performed phlebotomy and HBTC, a team leader, and two drivers. Field teams split into two sub teams, each of which included both male and female staff who spoke English and Kiswahili.

Overall, there were a total of 650 field staff who participated in data collection, comprised of 13 field team supervisors, seven field lab supervisors, six information and communications technology officers, 390 data collectors, 65 team leaders, and 169 drivers.

DATA COLLECTORS

Name	Abbreviation	Affiliation
National Bureau of Statistics	NBS	Ministry of Finance

Questionnaires

QUESTIONNAIRES

Two questionnaires were used for the 2022-23 THIS: the Household Questionnaire and the Individual Questionnaire. After the preparation of the definitive questionnaires in English, the questionnaires were translated into Kiswahili.

1. The household questionnaire collected information on household residents, assets, economic support, recent deaths, and orphans and vulnerable children.
2. The individual questionnaire was administered to all participants and included modules on demographic characteristics, sexual and reproductive health, marriage, male circumcision, sexual activity, the HIV testing and treatment history, TB and other health issues, hepatitis risk factors, COVID-19 vaccination status, stigma and discrimination, and alcohol use (see Appendix F). Participants who self-reported their HIV-positive status were asked questions about their HIV care experience.

Data Processing

DATA EDITING

There was a team of data editors who were checking the quality of data everyday as the data was coming electronically from the field.

Data Appraisal

ESTIMATES OF SAMPLING ERROR

Estimates from sample surveys are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors result from mistakes made during data collection (eg, misinterpretation of an HIV test result) and data management (eg, transcription errors in data entry). While THIS 2022-2023 implemented numerous QA and QC measures to minimize nonsampling errors, these errors are impossible to avoid and difficult to evaluate statistically.

In contrast, sampling errors can be evaluated statistically. The sample of respondents selected for THIS 2022-2023 is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

The standard error, which is the square root of the variance, is the usual measurement of sampling error for a particular statistic (eg, proportion, mean, rate, count). In turn, the standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of approximately plus or minus two times the standard error of that statistic in 95% of all possible samples of identical size and design.

THIS 2022-2023 utilized a multistage stratified sample design, which required complex calculations to obtain sampling errors. Specifically, a variant of the jackknife replication method was implemented in SAS to estimate variance for proportions (eg, HIV prevalence), rates (eg, annual HIV incidence), and counts (eg, numbers of people living with HIV). To take account of the precision benefits of implicit stratification as fully as possible, the sampled PSUs within each sampling stratum were paired off in the systematic order in which they were selected, treating each pair as a variance-estimation stratum. To fully reflect the sample design, the formation of the variance-estimation strata was applied to all 566 of the sampled PSUs.

Detailed documentation of the estimates of Sampling Error can be found in Appendix C of the "Tanzania HIV Impact Survey 2022-2023 Report" document provided as an external resource

Access policy

CONTACTS

Name	Affiliation	Email	URL
Statistician General	National Bureau of Statistics, Tanzania	sg@nbs.go.tz	www.nbs.go.tz

CONFIDENTIALITY

Confidentiality of respondents is guaranteed by The Statistics Act, [Cap 351 R.E 2019] Before being granted access to the dataset,, all users have formally agree: 1. All identifying information such as the name and address of respondent has been removed; and 2. The information is disclosed in a manner that is not likely to enable the identification of the particular person or undertaking or business to which it relates. 3. Not attempt to identify any particular person or undertaking or business; 4. Use of information for research or statistically purpose only; 5. Not to disclose the information to any other person, organization 6. When required by the Director General, return all documents made available to him to the Director General; 7. Comply with the directions given by the Director General relating to the records. 8. Every person involved in the research or statistical project for which information is disclosed pursuant to this section shall make the declaration of secrecy set out in the first schedule.

ACCESS CONDITIONS

Tanzania NBS considered three levels of accessibility:

- 1) Public use files, accessible by all
- 2) Licensed datasets, accessible under certain conditions
- 3) Datasets only accessible on location, for certain datasets

The dataset has been anonymized and available as a public use dataset. It accessible to all for statistical and research purposes only, under the following terms and conditions:

1. The data and other material will not be redistributed or sold to other individuals, institutions, or organization without the written agreement of the Tanzania National Bureau of Statistics.
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 produce links among dataset provided by the National Bureau of Statistics, or among data from the (National Bureau of Statistics) and other datasets that could identify individuals or organizations.
4. No attempt will be made to re-identify respondents, and no use will be made of the identify of any person or establishment discovered inadvertently. Any such discovery would immediately be reported to the National Bureau of Statistics.
5. Any books, articles, conference papers, theses, dissertations, reports, or other publications that employ data obtained from the National Bureau of Statistics will cite the source of data in accordance with the Citation Requirement provided with each dataset.

CITATION REQUIREMENTS

National Bureau of Statistics (NBS) [Tanzania]. Tanzania HIV Impact Survey 2022-2023. Dodoma, Tanzania: NBS.

ACCESS AUTHORITY

Name	Affiliation	Email	URL
National Bureau of Statistics (NBS)	Ministry of Finance	sg@nbs.go.tz	mailto:sg@nbs.go.tz

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PRODUCERS

Name	Abbreviation	Affiliation	Role
National Bureau of Statistics	NBS	Ministry of Finance	Documentation of the study

DATE OF METADATA PRODUCTION

2024-12-23

DDI DOCUMENT VERSION

Version 1.0

