



BOTSWANA

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Snapshot of the Strength of the Health Information System as a Source of HIV Data

Health information systems (HIS) are important tools in combatting the HIV epidemic, from the individual to the population level. Electronic health records contain individual patient information that helps clinicians provide high-quality care and can improve continuity of care across services and institutions. Laboratory information systems improve the submission of lab tests and the receipt of results. Logistic information systems can help forecast the need for medications and other commodities and reduce stockouts of antiretroviral drugs and other medications. Routine health information systems are used to compile this information for reports from facilities to the national level. Data use at all levels of the health system is necessary to monitor coverage of HIV interventions and progress toward targets. And finally, population-level surveys provide information on changes in behavior and HIV prevalence every few years; these data are needed to assess the impact of HIV programs over time.



HIV IN BOTSWANA

- Adult HIV prevalence rate: 22.8¹
- Prevalence rate for women: 27.4¹
- Prevalence rate for men: 18.4¹
- Number of adults living with HIV: 360,000²
- Number of new HIV infections in 2016: 10,000²
- Number of AIDS-related deaths in 2016: 3,900²
- People living with HIV who know their status: 85%²
- People who know their status and are on antiretroviral therapy (ART): >95%²
- People on ART who have achieved viral suppression: 94%²

1 UNAIDS. (2017). AIDSinfo. <http://aidsinfo.unaids.org>

2 United States President's Emergency Plan for AIDS Relief. (2018). Country Specific Information: Botswana. Retrieved from <https://www.pepfar.gov/countries/index.htm>

3 World Health Organization. (2018). Global Health Observatory: Botswana Summary Statistics. Retrieved from <http://apps.who.int/gho/data>

4 United Nations Statistics Division. (2016). 2020 World Population and Housing Census Programme. Retrieved from <https://unstats.un.org/unsd/demographic/sources/census/censusdates.htm>

5 United Nations Development Programme. (2018) Human Development Indices and Indicators: 2018 Statistical Update. Retrieved from <http://hdr.undp.org/en/2018-update>

6 International Telecommunications Union. (2017). ICT Development Index 2017. Retrieved from <https://www.itu.int/net4/ITU-D/idi/2017/index.html>

Population

2,250,000+³

Year of last census

2011⁴

Life expectancy at birth

68.4 years (f)³

Total expenditure on health

6.0% GDP³

Physician density

0.384 per 10,000³

Nurse & midwife density

2.727 per 10,000³

Hospital bed density

18 per 10,000³

Internet users

39.36% of the population⁶

This is one of 13 briefs prepared by MEASURE Evaluation (funded by the United States Agency for International Development and the United States President's Emergency Plan for AIDS Relief) to document the strength of a country's HIS as a source of reliable data for efforts to control the HIV epidemic.

HEALTH INFORMATION SYSTEM FACTS

Indicator name	Status	Global* status	Title and details
Health strategy	yes	72%	Integrated Health Service Plan: A Strategy for Changing the Health Sector for Healthy Botswana 2010–2020
Health sector monitoring and evaluation (M&E) plan	no	42%	National Health Monitoring and Evaluation Plan (2014–2017)
Health information system (HIS) policy	no	19%	
HIS strategic plan	no	33%	
Core health indicators	no	49%	National Health M&E Plan 2014–2017 on page 21, figure 5
HIS coordinating body	no	26%	
Master health facility list	no	28%	Master Facility List 2018
Completed Health Metrics Network assessment	no	56%	Country M&E Guidance
Population census within the past 10 years	yes	49%	2011 Census
Availability of national health surveys	yes	100%	1988 Demographic and Health Survey 2000 Multiple Indicator Cluster Survey 2 (MICS2)
Completeness of vital registration (births and deaths)	no	7%	40.2% complete for live births; 8.4% for deaths
Electronic system for routine site-level data	yes	91%	Vital registration information
Health statistics office	yes	98%	http://www.gov.bw/en/Citizens/Topics/Statistics/
Annual health statistics report	no	9%	Republic of Botswana Health Statistics Report 2016
Health statistics website with latest data available	no	49%	http://www.moh.gov.bw/reports.html
Data quality assessment aligned with health sector strategy	yes	67%	

Indicator name	Status	Global* status	Title and details
Performance of Routine Information System Management (PRISM) assessment conducted in any region or district	no	47%	
Percentage of facilities represented in health management information system reports is available	yes	74%	2016–2018 Master Facility List
Proportion of government offices using data to manage health programs (set and monitor targets) is available	no	40%	
Measles coverage reported to the World Health Organization (WHO)/UNICEF	yes	98%	WHO/UNICEF estimates of immunization coverage: 2017 revision ; page 12.
Data on the number of institutional deliveries available by district and published within a year	no	28%	
Policies, laws, and regulations mandating public and private health facilities to report indicators determined by the national HIS	yes	33%	National Health Data Management Policy, 2014
Standards or guidelines for routine health information system data collection, reporting, and analysis	yes	51%	Data Quality Standard Operating Procedure (SOPs) and Routine Data Quality Assessment (RDQA) SOPs, 2014 Botswana RDQA User Manual, 2012 National Health M&E Plan, 2012–2019
Procedures to verify the data quality	yes	47%	Data Quality SOPs and RDQA SOPs, 2014 DHIS 2 data validation platform
Routine health information system forms allow for gender disaggregation	yes	60%	
At least one national health account completed in the past 5 years	yes	35%	National Health Account 2013/14
Database of healthcare workers by district and main cadres updated in the past 2 years	yes	26%	
Annual data on tracer medicines and commodities in public and private health facilities available	yes	21%	
eHealth strategy	yes	58%	The eHealth Strategy of Botswana 2016–2020
Completeness of disease surveillance reporting is available	no	28%	Botswana Integrated Disease Surveillance & Response —Week 35; February 2017

* “Global status” is the percentage of the 43 countries tracked by the [HIS Strengthening Resource Center](#) that have a positive result (yes/no) for the indicator. A positive result (yes) indicates that the indicator is available and current; a negative result (no) indicates that the indicator is unknown, not available, or not current.

HIV testing data for Botswana, compared to that of other sub-Saharan African countries, is sparse. The last Demographic and Health Survey report was completed in 1988 and the last Multiple Indicator Cluster Survey was completed in 2000. One of the more recent reports online regarding the epidemic in Botswana was the 2014 Progress Report on the National Response to the 2011 Declaration of Commitments on HIV and AIDS. The report indicates that 63.7 percent of adults ages 15–49 years were tested for HIV and received their results. The report also estimated that 94.3 percent of pregnant women were tested for HIV during prenatal and postnatal care for 2014.⁷ UNAIDS estimates that 82 percent of pregnant women were tested for HIV in 2017.⁷

According to the 2014 Progress Report on the National Response to the 2011 Declaration of Commitments on HIV and AIDS, of those living with HIV, 63.2 percent were on ART. Data on HIV retention and viral suppression were not

available. More recently, UNAIDS estimated that in 2017, 81 percent of people living with HIV were on ART and that 89 percent receiving treatment had suppressed viral loads.⁸

The Integrated Health Service Plan: A Strategy for Changing the Health Sector for Healthy Botswana 2010–2020, published in November 2010, outlines the HIS strategy. It offers a six-objective strategic plan to reach the overarching goal, which is “to create an enabling environment for efficient monitoring and evaluation of the implementation and achievements of the integrated health service plan and make decisions based on evidence emanating from the integrated M&E system at all levels.”⁹ The six objectives have strategic actions that center mostly on addressing the fragmented and overloaded HIS; this includes agreeing on core indicators, updating and harmonizing data collection tools, and developing systems for the collection, collation, and timely analysis of data.⁹

7 Republic of Botswana National AIDS Coordinating Agency. (2015). Progress Report of the National Response to the 2011 Declaration of Commitments on HIV and AIDS: Reporting Period 2014. Retrieved from http://www.unaids.org/sites/default/files/country/documents/BWA_narrative_report_2015.pdf

8 UNAIDS. (2017). UNAIDS Data 2017. Retrieved from http://www.unaids.org/sites/default/files/media_asset/20170720_Data_book_2017_en.pdf

9 Ministry of Health. (2010). Integrated Health Service Plan: A Strategy for Changing the Health Sector for Healthy Botswana 2010-2020. Retrieved from <https://www.moh.gov.bw/Publications/policies/Botswana%20IHSP%20Final%20HLS.pdf>