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 ZAMBIA

- Adult HIV prevalence rate: 11.5¹
- Prevalence rate for women: 14.3¹
- Prevalence rate for men: 8.8¹
- Number of adults living with HIV: 1,200,000²
- Number of new HIV infections in 2016: 59,000²
- Number of AIDS-related deaths in 2016: 21,000²
- People living with HIV who know their status: 67%²
- People who know their status and are on antiretroviral therapy (ART): 85%²
- People on ART who have achieved viral suppression: 89%²

1 UNAIDS. (2017). AIDSinfo. <u>http://aidsinfo.unaids.org</u> 2 United States President's Emergency Plan for AIDS Relief. (2018). Country Specific Information: Zambia. Retrieved from <u>https://www.pepfar.gov/countries/index.htm</u>

- 3 World Health Organization. (2018). Global Health Observatory: Zambia 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 (UNDP). (2018) Human Development Indices and Indicators: 2018 Statistical Update. Retrieved from <u>http://hdr.undp.org/en/2018-update</u>

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



Population 16,591,000+³

Year of last census 2010⁴

Life expectancy at birth 59.6/64.4 years (m/f)^{3,5}

Total expenditure on health 5.4% GDP³

> Physician density 0.091 per 10,000³

Nurse & midwife density 0.886 per 10,000³

Hospital bed density 20 per 10,000³

Internet users 25.51% 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%	National Health Strategic Plan 2017–2021
Health sector monitoring and evaluation (M&E) plan	no	42%	
Health information system (HIS) policy	no	19%	
HIS strategic plan	no	33%	Health Information System Strategic Plan (HISSP) 2009–2015
Core health indicators	no	49%	
HIS coordinating body	no	26%	
Master health facility list	no	28%	The 2012 List of Health Facilities in Zambia
Completed Heath Metrics Network assessment	yes	56%	Assessment of the Health Information System in Zambia 2007
Population census within the past 10 years	yes	49%	<u>2010 Census</u>
Availability of national health surveys	yes	100%	2013–2014 Demographic and Health Survey
Completeness of vital registration (births and deaths)	no	7%	13.1% complete for deaths; 35.4% complete for live births
Electronic system for routine site-level data	yes	91%	https://www.dhis2.org/inaction
Health statistics office	yes	98%	http://www.zamstats.gov.zm
Annual health statistics report	no	9%	The 2013 Annual Health Statistical Bulletin
Health statistics website with latest data available	no	49%	www.moh.gov.zm/
Data quality assessment aligned with health sector strategy	no	67%	

Indicator name	Status	Global* status	Title and details
Performance of Routine Information System Management (PRISM) assessment conducted in any region or district	yes	47%	PRISM Report 2012
Percentage of facilities represented in health management information system reports is available	yes	74%	
Proportion of government offices using data to manage health programs (set and monitor targets) is available	yes	40%	
Measles coverage reported to the World Health Organization (WHO)/UNICEF	yes	98%	WHO and UNICEF estimates of immunization coverage: 2017 revision; page 7.
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	no	33%	
Standards or guidelines for routine health information system data collection, reporting, and analysis	no	51%	
Procedures to verify the data quality	no	47%	
Routine health information system forms allow for gender disaggregation	no	60%	
At least one national health account completed in the past 5 years	no	35%	Zambia National Health Accounts 2002: Main Findings
Database of healthcare workers by district and main cadres updated in the past 2 years	no	26%	
Annual data on tracer medicines and commodities in public and private health facilities available	no	21%	2012 Annual Health Statistical Bulletin; page 92
eHealth strategy	yes	58%	eHealth Strategy 2017–2021
Completeness of disease surveillance reporting is available	no	28%	<u>Weekly Epidemiology Bulletin Week 2: 9–15</u> January 2017; page 3

* "Global status" is the percentage of the 43 countries tracked by the <u>HIS Strengthening Resource Center</u> 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.

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According to the 2007 and 2013/2014 Zambian Demographic and Health Survey reports, the proportion of reproductive-age women who were tested for HIV in the past 12 months and received the results of the test rose from 18.5 percent in 2007 to 46.2 percent in 2013/2014.^{7,8} The proportion of men in the same age group rose from 11.7 percent to 37.1 percent for the same years, respectively.^{7,8} In addition, in 2013/2014, 84.7 percent of pregnant women attending antenatal care received counseling on HIV, an HIV test, and the results of that test.⁷

According to the 2013 report "Monitoring the Declaration of Commitment on HIV and AIDS and the Universal Access," produced by the Zambian Ministry of Health, the goals were to reach 90 percent of adults and 95 percent of children eligible for ART with treatment by 2015. In 2013, they reached 92 percent of their adult target and 35 percent of their child target. In addition, the report estimated that they had reached 81.9 percent of all adults and 80.6 percent of all children living with HIV with ART.⁹ The Zambia Population-Based HIV Impact Assessment, published in 2016, found that of those ages 15–59 who knew they were HIV- positive, 85.4 percent (84.9 percent of women and 86.2 percent of men) were on ART. Of those on ART, 89.2 percent (89.7% of women and 88.2% of men) were virally suppressed.¹⁰

The Zambia National Health Strategic Plan 2017–2021 does not specifically address the country's health management information system (HMIS). But two sections of the plan—4.5 Public Health Surveillance and Disease Intelligence and 5.4 Health Information Technology and Research—do address issues with the HMIS. One of the objectives in Section 4.5 is to strengthen the information system by (1) development of an integrated disease surveillance report (IDSR) as part of the DHIS 2 electronic health information platform; (2) strengthening the "health press," or capacity to inform on health matters; and (3) a communication strategy and tools for timely and accurate dissemination of information. Section 5.4 indicates that an eHealth strategy has been developed and disseminated and that the intention is to upgrade DHIS 2 to a web platform.¹¹

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⁷ Central Statistical Office, Ministry of Health, University of Zambia Teaching Hospital Virology Laboratory, University of Zambia Department of Population Studies, Tropical Diseases Research Centre, & ICF International. (2015). Zambia Demographic and Health Survey 2013-14. Rockville, MD, USA: Central Statistical Office/Zambia, Ministry of Health/Zambia, and ICF International. Retrieved from http://dhsprogram.com/pubs/pdf/FR304/FR304 FR304.pdf

⁸ Central Statistical Office, Ministry of Health, Tropical Disease Research Centre, & University of Zambia. 2009. Zambia Demographic and Health Survey 2007. Calverton, MD, USA: Central Statistical Office/Zambia and Macro International. Retrieved from https://dhsprogram.com/publications/publication-fr211-dhs-final-reports.cfm

⁹ National AIDS Council. (2014). Zambia Country Report: Monitoring the Declaration of Commitment on HIV and AIDS and the Universal Access (Reporting Period: January 2012-December 2013). Retrieved from http://www.unaids.org/sites/default/files/country/documents/ZMB_narrative_report_2014.pdf

¹⁰ Ministry of Health. (2016). Zambia Population-Based HIV Impact Assessment: ZAMPHIA 2015-2016, Preliminary Findings Summary Sheet. Retrieved from http://phia.icap.columbia.edu/wp-content/uploads/2016/09/ZAMBIA-Factsheet.FIN_.pdf

¹¹ Ministry of Health. (2016). Zambia National Health Strategic Plan 2017–2021. Retrieved from http://www.moh.gov.zm/docs/ZambiaNHSP.pdf