Global AIDS Monitoring 2023

Indicators and questions for monitoring progress
on the 2021 Political Declaration on HIV and AIDS

Contents

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Modelled HIV estimates using the updated Spectrum software are due by 31 March 2023.

Please use the Global AIDS Monitoring website (aidsreportingtool.unaids.org) to submit
your indicator data by 31 March 2023.

Introduction

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The indicators and questions in this document are designed for use by national AIDS programmes and partners to assess the state of a country's HIV and AIDS response, and to measure progress towards achieving national HIV targets. Countries are encouraged to integrate these indicators and questions into their ongoing monitoring efforts and to report comprehensive national data through the Global AIDS Monitoring (GAM) process. In this way they will contribute to improving understanding of the global response to the HIV epidemic, including progress that has been made towards achieving the commitments and global targets set out in the new United Nations Political Declaration on HIV and AIDS: Ending Inequalities and Getting on Track to End AIDS by 2030, adopted in June 2021,[1] and the linked Sustainable Development Goals.[2]

This document is a detailed compilation of indicators and a suite of questions on national policies and their implementation. The indicators and policy questions are designed to enable the best use of available data at the national level, to standardize reporting from different HIV epidemics and sociopolitical contexts, and to enable aggregation at the global level. UNAIDS is working with key organizations under the umbrella of the Monitoring Technical Advisory Group (MTAG) to harmonize the indicators to match international standards.

The Global AIDS Strategy 2021–2026: End Inequalities, End AIDS promotes using an inequalities lens and prioritizing best evidence to identify and act to close the gaps that are preventing progress towards ending AIDS.[3] Data reported through 2022 will be used to describe progress towards the new 2026 targets and to hold countries and global partners to account on desired improvements. National and subnational data will inform the increasingly detailed HIV estimates preparation that feeds into GAM reporting.

The data will also be made available for grant and operational plan preparation and review for countries participating in resource mobilization from the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) and the United States President's Emergency Plan for AIDS Relief (PEPFAR).

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[1] The 2021 Political Declaration on AIDS can be found at:
    https://www.unaids.org/sites/default/files/media_asset/2021_political-declaration-on-hiv-and-aids_en.pdf

[2] Details of the Sustainable Development Goals can be found at: Make the SDGs a Reality. United Nations Department of Economic and Social Affairs; c2021 (https://sustainabledevelopment.un.org/).

[3] For more on the The Global AIDS Strategy 2021–2026, please see:
    https://www.unaids.org/sites/default/files/media_asset/global-AIDS-strategy-2021-2026_en.pdf

The GAM process has often been referenced as a benchmark for successful international accountability mechanisms. The lessons from past rounds serve us well for the upcoming reporting—providing an evidence-informed road map for timely, high-quality and complete reporting at an accelerated and streamlined pace. They include the following:

1. The national consultation process during the first quarter of the year speeds up consolidation and validation of the data. This can help avoid additional data validation steps later in the process, such as going back to the original sources of the data.

2. The involvement of civil society in the national consultation is critical, especially for responding to questions related to laws and policies, and for ensuring that all relevant partners are engaged and play their important roles in implementation and reporting.

3. Timely engagement of data providers from the beginning of the year (January) helps to ensure that the data are reported on time, and that they are of the highest quality and accuracy.

The background and technical details for collecting, analyzing, sharing and reporting the data through GAM are contained in the supporting framework document: *Global AIDS monitoring framework 2022– 2026.*[4]

Summary of the changes to the indicator set for 2023 reporting

The 2023 reporting requires submitting data on indicators, the interim NCPI, and the AIDS Medicines and Diagnostics Survey. There is also the option to upload data and documents relating to people and populations in humanitarian situations.

The narrative report is optional.

Based on the recommendations of the MTAG following its review of the GAM—and taking into account inputs from other stakeholders—several indicators have been modified.

The changes for the 2023 reporting round are summarized below:

- The measurement frequency has been harmonized for all indicators for which the recommended source are behavioural surveys:

  - 1.3 HIV prevalence among key populations (A–D).

  - 1.4 HIV testing among key populations (A–D).

  - 1.6 Coverage of HIV prevention programmes among key populations (A–D).

- Terminology has been updated in two indicators from "opioid substitution therapy" to "opioid agonist maintenance therapy":

  - 1.7 HIV prevention programmes in prisons.

  - 1.10 Coverage of opioid substitution therapy.

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[4] All GAM documents can be found at: https://www.unaids.org/en/global-aids-monitoring

- 1.11 People who received PrEP.

  - A category has been added to the disaggregation by PrEP product (to include CAB-LA).

  - The disaggregation by dosing schedule (daily or event-driven) for gay men and other men who have sex with men has been removed based on updated World Health Organization (WHO) guidance on eligibility for event-driven PrEP, which makes monitoring by dosing schedule less relevant for global monitoring.

- 1.13 Annual number of males voluntarily circumcised.

  - A category has been added to the disaggregation by age (to include ages 30–34 years).

- Disaggregations by age, gender and key population have been harmonized for all indicators with the People Living with HIV Stigma Index as the recommended source:

  - 6.2 Internalized stigma reported by people living with HIV.

  - 6.3 Stigma and discrimination experienced by people living with HIV in community settings.

  - 6.4 Experience of HIV-related discrimination in health-care settings.

  - 6.7 People living with HIV seeking redress for rights violations.

- 6.4 Experience of HIV-related discrimination in health-care settings.

  - The disaggregation by length of time living with HIV has been updated to reflect the corresponding question in the People Living with HIV Stigma Index 2.0 questionnaire on length of time knowing HIV-positive status.

The NCPI for 2023 reporting is an interim questionnaire that consists of a subset of questions from Part A that refer to policies that are considered to change more rapidly. The wording of some of the questions has been further refined based on experiences in previous reporting rounds and to reflect developments in policy recommendations and available technologies.

Indicators for GAM

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1.1 HIV incidence

Number of people newly infected with HIV in the reporting period per 1000 uninfected population

What it measures

Progress towards ending the AIDS epidemic

Rationale

The overarching goal of the global AIDS response is to reduce the number of people newly infected to less than 200 000 in 2030. Monitoring the rate of people newly infected over time measures the progress towards achieving this goal. This indicator is one of the 10 global indicators in the WHO consolidated strategic information guidelines.

Numerator

Number of people newly infected during the reporting period

Denominator

Total number of uninfected population (or person-years exposed)

Calculation

Rate: (Numerator x 1000)/denominator

Method of measurement

Methods for monitoring incidence can vary depending on the epidemic setting and are typically categorized either as direct or indirect measures. Direct measurement at a population level is preferred but can often be difficult to obtain. As a result, most if not all countries rely on indirect measures or triangulate direct and indirect methods.

Strategies for directly measuring HIV incidence include longitudinal follow-up and repeat testing among individuals who do not have HIV infection and estimation using a laboratory test for recent HIV infection and clinical data in the population. Longitudinal monitoring is often costly and difficult to perform at a population level. Laboratory testing of individuals to determine the recency of infection also raises cost and complexity challenges since a nationally representative population-based survey is typically required to obtain estimates.

Indirect methods most frequently rely on estimates constructed from mathematical modelling tools, such as Spectrum or the AIDS Epidemic Model. These models may incorporate geographical and population-specific HIV surveys, surveillance, case reporting, mortality, programme and clinical data and, in some instances, assumptions about risk behaviour and HIV transmission. In some instances, countries may wish to triangulate these data with other sources of estimates of the number of people newly infected, including from serial population-based HIV prevalence estimates or estimates of HIV prevalence in young, recently exposed populations.

Note that case-based surveillance systems capturing newly reported people acquiring HIV infection should not be used as a direct source of estimating the number of people newly infected with HIV in the reporting year. Because of reporting delays and underdiagnosis, newly reported cases may not reflect the actual rate of people becoming newly infected. This information may be useful, however, for triangulation or validation purposes, especially when combined with tests for the recency of HIV infection.

Disaggregated data reported for the numerator should be used to monitor progress towards eliminating new child infections and reducing the number of new HIV infections among adolescent girls and young women to below 100 000 per year.

Measurement frequency

Annually

Disaggregation

- Sex (male and female)
- Age (0–14, 15–24, 15–49 and 50+ years)
- Cities and other administrative areas of epidemiologic importance

Additional information requested

The source of the estimate is requested. For countries providing estimates of incidence derived from a source other than Spectrum, please provide any accompanying estimates of uncertainty around the rate and upload an electronic copy of the report describing the calculation if available.

Countries preferably should report a modelled estimate rather than one calculated only from a population-based survey or the number of newly reported cases of HIV infection reported through case-based surveillance. Users now have the option to use their Spectrum estimate or to enter nationally representative population-level data. If Spectrum estimates are chosen, the values will be pulled directly from the software once the national file is finalized.

Please provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city as well as one or two other key cities of high epidemiological relevance: for example, those that have the highest HIV burden or have committed to ending AIDS by 2030.

Strengths and weaknesses

Estimates of the rate of new infections and changes over time in this rate are considered the gold standard for monitoring programme impact. However, even in high-risk populations, people becoming newly infected with HIV is a relatively rare event. The accuracy of estimates of incidence and changes in this rate over time can therefore be uncertain. Such uncertainty should be reported when using HIV incidence rates to monitor programme impact, especially when disaggregated by sex and age and for key populations or in specific geographical areas. Countries should use caution when applying incidence rates from small studies to a population more generally.

Further information

Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/rest/bitstreams/1274308/retrieve).

Spectrum software. Glastonbury (CT): Avenir Health; 2019 (http://www.avenirhealth.org/software-spectrum.php).

1.2 Estimates of the size of key populations (A–E)

What it measures

Number of people engaging in the specific behaviour that put the given population at risk for HIV transmission or a proxy for those types of behaviour:

A. Sex workers.

B. Gay men and other men who have sex with men.

C. People who inject drugs.

D. Transgender people.

E. Prisoners.

Rationale

Programme planning for key populations can be more efficient if the size of these populations can be accurately estimated. The figures enable national AIDS programmes, health ministries, donors and not-for-profit and multilateral organizations to efficiently allocate resources to adequately meet the prevention needs of specific populations at higher risk. Size estimates are also important for modelling the HIV epidemic.

Numerator

Not applicable

Denominator

Not applicable

Calculation

Not applicable

Method of measurement

Several methods for estimation are available, including capture-recapture, service multipliers and network scale-up. See the Further Information section below for specific details.

Measurement frequency

Population size should be estimated every five years. However, any time an integrated biobehavioural survey is implemented, size estimates should be incorporated, if only to add to the database to confirm or refine estimates.

Disaggregation

- Estimating population sizes by age or sex is generally impractical. However, if a survey measures women who inject drugs or male sex workers, for example, a size estimate should be included.
- Cities and other administrative areas of importance.

Additional information requested

To better understand the size estimates submitted, we request that the following additional information be included in the comment box:

- Definition used for the population, and inclusion criteria used in the study/survey, as applicable.
- Method to derive the size estimate.
- Site-specific estimates for all available estimates.

In keeping with efforts to provide more granular data presentations, the latter will offer the opportunity for mapping denominator data with programme data if they are collected in the same survey areas.

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. You may also upload an Excel spreadsheet of these data instead of entering them in the online tool. Submit the digital version of any available size estimation reports using the upload tool.

Strengths and weaknesses

The quality of population size estimates varies according to the methods used and the fidelity with which the methods are implemented. Every effort to assess bias and adjust the estimates accordingly should be attempted and explained. Size estimates for small areas should not be presented as national estimates: either a rational approach to extrapolation should be used and explained or the small area estimates should explicitly be submitted for the relevant areas explicitly. Please indicate in the comment field whether a multi-stakeholder consensus has been reached for the reported size estimates.

Please note that new guidance from the World Health Organization and UNAIDS suggests that size estimates for gay men and other men who have sex with men should not represent less than 1% of the adult male population. If the size estimate is calculated as less than 1%, then the results should be reviewed, as per the guidance.

Technical brief: reasonable population size estimates for men who have sex with men. Geneva: World Health Organization and UNAIDS; 2020. (https://www.unaids.org/sites/default/files/media_asset/2020-recommended-population-size-estimates-of-men-who-have-sex-with-men_en.pdf).

Further information

UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance. Guidelines on estimating the size of populations most at risk to HIV. Geneva: World Health Organization, and UNAIDS; 2010 (https://data.unaids.org/pub/manual/2010/guidelines_popnestimationsize_en.pdf).

1.3 HIV prevalence among key populations (A-E)

Percentage of specific key populations living with HIV

This indicator is divided into five sub-indicators:

A. HIV prevalence among sex workers.

B. HIV prevalence among gay men and other men who have sex with men.

C. HIV prevalence among people who inject drugs.

D. HIV prevalence among transgender people.

E. HIV prevalence among prisoners.

What it measures
Progress on reducing HIV prevalence among key populations

Rationale
A. Sex workers typically have higher HIV prevalence than the general population in both concentrated and generalized epidemics. In many cases, the prevalence among these populations can be more than twice the prevalence among the general population. Reducing the prevalence among sex workers is a critical measure of a national-level response to HIV.

B. Gay men and other men who have sex with men typically have the highest HIV prevalence in countries with either concentrated or generalized epidemics. In many cases, the prevalence among these populations can be more than twice the prevalence among the general population. Reducing the prevalence among gay men and other men who have sex with men is a critical measure of a national-level response to HIV.

C. People who inject drugs often have high HIV prevalence in countries with either concentrated or generalized epidemics. In many cases, the prevalence among these populations can be more than twice the prevalence among the general population. Reducing the prevalence among people who inject drugs is a critical measure of a national-level response to HIV.

D. Transgender communities often have higher HIV prevalence than the general population in many settings. In many cases, the prevalence is more than twice that of the general population. Reducing the prevalence among transgender people is an important measure for monitoring the national HIV response.

E. In many cases, the HIV prevalence among prisoners is greater than the prevalence among the general population. Addressing HIV among prisoners is an important component of the national response.

Countries with generalized epidemics may also have a concentrated subepidemic among one or more key populations at higher risk. If so, calculating and reporting on this indicator for these populations would be valuable for them.

Numerator
Number of people in a specific key population who test positive for HIV

Denominator
Number of people in a specific key population tested for HIV

Calculation
Numerator/denominator

Method of measurement
A–D. UNAIDS and WHO Working Group on Global HIV/AIDS and STI Surveillance. Guidelines among populations most at risk for HIV. Geneva: World Health Organization, and UNAIDS; 2011.

This indicator is calculated using data from HIV tests conducted among respondents in the sentinel site(s) or participants in biobehavioural surveys. The sentinel surveillance sites used for calculating this indicator should remain constant to allow for tracking changes over time.

E. This indicator is calculated using data from HIV tests conducted by prisons and other closed settings. HIV testing programme data are acceptable. Conducting surveys can be challenging and should therefore not be relied on. Testing should be conducted only with the consent of the prisoners.

Measurement frequency
Annual (programme data) or every two years (biobehavioural survey).

Disaggregation
- **A, C and E:** Gender (female, male and transgender) **D:** gender (transman, transwoman, other).
- **A–E:** Age (<25 and 25+ years).
- **A–-E:** Cities and other administrative areas of epidemiologic importance.

A–E: If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. You may also upload an Excel spreadsheet of these data instead of entering them in the online tool. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

In theory, progress in reducing the number of people newly infected with HIV is best assessed by monitoring the changes in incidence over time. In practice, however, prevalence data rather than incidence data are available. In analysing the prevalence data from key populations for assessing the impact of prevention programmes, it is desirable not to restrict analysis to young people but to report on the people newly initiating behaviour that puts them at higher risk of infection, such as by restricting the analysis to people participating in sex work for less than one year, to men who first had sex with another man within the past year or to people initiating injecting drug use within the past year. This type of analysis also has the advantage of not being affected by antiretroviral therapy increasing survival and thereby increasing prevalence.

If prevalence estimates are available, disaggregated by greater than and less than one year in sex work, one year of sexual activity with other men or one year of injecting drugs, countries are strongly encouraged to report this disaggregation in their country progress report and to use the comments field in the reporting tool for this indicator to present disaggregated estimates.

Because of the difficulties in accessing key populations, biases in serosurveillance data are likely to be more significant than in data collected from a less stigmatized population, such as women attending antenatal clinics. If there are concerns about the data, the interpretation should reflect these concerns.

Understanding how the sampled populations relate to any larger populations sharing similar high-risk behaviour is critical to interpreting this indicator. The period during which people belong to a key population is more closely associated with the risk of acquiring HIV than their age. It is therefore desirable not to restrict analysis to young people but to report on other age groups as well.

Trends in HIV prevalence among key populations in the capital city provide a useful indication of the performance of HIV prevention programmes in that city. However, they are not representative of the situation in the country as a whole.

The addition of new sentinel sites will increase the sample's representativeness and therefore provide a more robust point estimate of HIV prevalence. However, adding new sentinel sites reduces the comparability of values over time. As such, using consistent sites when undertaking trend analysis is important.

Surveys exclusively covering transgender people are rare. Most data for transgender communities are drawn from surveys of men who have sex with men or sex workers. The risk environment reported in most transgender communities is great, placing transgender women at especially high risk of becoming HIV- positive and transmitting the infection. Examples from several Latin American countries demonstrate that successful surveys can be conducted in transgender communities. If transgender women are respondents in surveys of sex workers, include the data with sex workers as a disaggregation. If transgender people are respondents in surveys of gay men and other men who have sex with men, include the data under the transgender tab.

Prisoners are easily reached with services, while released individuals can be efficiently linked to appropriate care and prevention services. The HIV prevalence can be readily estimated and quickly provide information that can be acted on.

In settings where high-risk behaviours for HIV transmission are criminalized, there is potential for high HIV prevalence and over-interpreting the results. Full understanding of the prison population is helpful during the analysis, especially the reasons for detention.

Further information

UNAIDS epidemiology publications (http://www.unaids.org/en/dataanalysis/knowyourepidemic/epidemiologypublications).

WHO/UNAIDS Working Group on Global HIV/AIDS and STI Surveillance. Guidelines on surveillance among populations most at risk for HIV. Geneva: World Health Organization; 2011 (http://www.unaids.org/sites/default/files/sub_landing/files/20110518_Surveillance_among_most_at_risk.pdf).

Operational guidelines for monitoring and evaluation of HIV programmes for sex workers, men who have sex with men, and transgender people. Chapel Hill (NC): MEASURE Evaluation; 2012 (http://www.cpc.unc.edu/measure/publications/ms-11-49a).

Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/bitstream/handle/10665/246200/9789241511124-eng.pdf;jsessionid=28C67621504E323967719DE7C880FF01?sequence=1).

1.4 HIV testing among key populations (A–D)

Percentage of people from key populations who report having tested negative for HIV in the past 12 months, or who know that they are living with HIV

This indicator is divided into four sub-indicators:

A. HIV testing among sex workers.

B. HIV testing among gay men and other men who have sex with men.

C. HIV testing among people who inject drugs.

D. HIV testing among transgender people.

What it measures
Progress providing HIV testing services to members of key populations.

Rationale
Ensuring that people living with HIV receive the care and treatment required to live healthy, productive lives and reduce the chance of transmitting HIV, requires that they know their HIV status. In many countries, targeting testing and counselling for locations and populations with the highest HIV burden is the most efficient way to reach people living with HIV and ensure that they know their HIV status. This indicator captures the effectiveness of HIV testing interventions in reaching populations at higher risk of HIV infection.

Numerator
Respondent knows they are living with HIV (answer to Question 3 is "positive")

plus

Respondent reports having tested for HIV in last 12 months and result was negative

(answer to Question 2 is "a" or "b"; answer to Question 3 is "negative").

		Result of last HIV test	
		Positive	**Negative**
When was your last HIV test?	**<6 months**		
	6–12 months		
	>12 months		

The number of respondents in the yellow boxes is the numerator.

If still using the old indicator—HIV test in last 12 months—please note this in the comment field.

Denominator
Number of people in key populations who answered Question 1 (below).

Calculation
Numerator/denominator

Method of measurement
Behavioural surveillance or other special surveys

Respondents are asked the following questions:

1. Do you know your HIV status from an HIV test?

    a. No, I have never been tested

    b. Yes, I have been tested

2. If yes, when were you last tested?

    a. In the last 6 months

    b. In the last 6–12 months

    c. More than 12 months ago

3. Was the result of your last test:

    a. Positive

    b. Negative

Measurement frequency
Every two years.

Disaggregation
A, C: Gender (female, male and transgender) **D:** gender (transman, transwoman, other).

A–D: Age (<25 and 25+ years).

A–D: Cities and other administrative areas of epidemiologic importance.

Additional information requested
If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses
HIV testing and counselling is the necessary first step to addressing a person's HIV infection. People living with HIV need to be aware of their HIV status able to make use of prevention and treatment services for their own health and to prevent transmission of the virus. National programmes aim to have 95% of people who are living with HIV know their HIV status.

HIV-positive respondents may be less willing to accurately report their HIV status than HIV negative respondents, leading to under-reporting of testing coverage among people living with HIV.

Further information
Global HIV Strategic Information Working Group. Biobehavioural survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/bitstream/handle/10665/258924/9789241513012-eng.pdf).

1.5A Condom use among sex workers

Percentage of sex workers reporting using a condom with their most recent client

What it measures

Progress in preventing exposure to HIV among sex workers through unprotected sex with clients

Rationale

Various factors increase the risk of exposure to HIV among sex workers, including multiple, non-regular partners and more frequent sexual intercourse. However, sex workers can substantially reduce the risk of HIV transmission, both from clients and to clients, by consistently and correctly using condoms.

Note: countries with generalized epidemics may also have a concentrated subepidemic among sex workers. If so, calculating and reporting on this indicator for this population would be valuable.

Numerator

Number of sex workers who reported using a condom with their last client

Denominator

Number of sex workers who reported having commercial sex in the past 12 months

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

Respondents are asked the following question:

Did you use a condom with your most recent client with whom you had sexual intercourse?

Whenever possible, data for sex workers should be collected through or with civil society organizations that have worked closely with this population in the field. Access to sex workers and the data collected from them must remain confidential and secure.

Measurement frequency

Every two years

Disaggregation

- Sex (female, male and transgender)
- Age (<25 and 25+ years)

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

Condoms are most effective when they are used consistently rather than occasionally. The current indicator will overestimate the level of consistent condom use. However, the alternative method of asking whether condoms are always, sometimes or never used in sexual encounters with clients in a specified period is subject to recall bias. Further, the trend in condom use in the most recent sexual act will generally reflect the trend in recent consistent condom use.

This indicator asks about commercial sex in the past 12 months. If data are available on another time period, such as the past three or six months, please include the alternate indicator definition in the metadata in the comments section of the reporting tool.

Surveying sex workers can be challenging. Consequently, the data obtained may not be based on a representative national sample of the key populations at higher risk being surveyed. If there are concerns that the data are not based on a representative sample, the interpretation of the survey data should reflect these concerns. If there are different sources of data, the best available estimate should be used. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

To maximize the utility of these data, it is recommended that the same sample used for calculating this indicator be used for calculating the other indicators related to these populations.

Further information

World Health Organization, United Nations Population Fund, UNAIDS, Global Network of Sex Work Projects, The World Bank, United Nations Development Programme. Implementing comprehensive HIV/STI programmes with sex workers: practical approaches from collaborative interventions. Geneva: World Health Organization; 2013 (https://www.nswp.org/sites/nswp.org/files/SWIT_en_UNDP%20logo.pdf).

Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization, 2020 https://apps.who.int/iris/rest/bitstreams/1274308/retrieve

Global HIV Strategic Information Working Group. Biobehavioural survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/bitstream/handle/10665/258924/9789241513012-eng.pdf).

1.5B Condom use among gay men and other men who have sex with men

Percentage of men reporting using a condom the last time they had anal sex with a male partner

What it measures

Progress in preventing exposure to HIV among men who have unprotected anal sex with a male partner

Rationale

Condoms can substantially reduce the risk of sexually transmitting HIV. Consistently and correctly using condoms is therefore important for men who have sex with men because of the high risk of HIV transmission during unprotected anal sex. In addition, men who have anal sex with other men may also have female partners, who could become infected as well. Condom use with the most recent male partner is considered a reliable indicator of longer term behaviour.

Note: countries with generalized epidemics may also have a concentrated subepidemic among gay men and other men who have sex with men. If so, calculating and reporting on this indicator for this population would be valuable.

Numerator

Number of men who have sex with men who reported using a condom the last time they had anal sex

Denominator

Number of men who have sex with men who reported having had anal sex with a male partner in the past six months

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

In a behavioural survey of a sample of gay men and other men who have sex with men, respondents are asked about sexual partnerships in the past six months, about anal sex within these partnerships and about condom use when they last had anal sex. Condom use applies whether the respondent is the receptive and insertive partner.

Whenever possible, data for gay men and other men who have sex with men should be collected with civil society organizations that have worked closely with this population in the field.

Access to gay men and other men who have sex with men and the data collected from them must remain confidential and secure.

Measurement frequency

Every two years

Disaggregation

- Age (<25 and 25+ years).

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

For gay men and other men who have sex with men, condom use at last anal sex with any partner indicates well the overall levels and trends in protected and unprotected sex in this population. This indicator does not give any idea of risk behaviour in sex with women among men who have sex with both women and men. In countries in which men in the subpopulation surveyed are likely to have partners of both sexes, condom use with female as well as male partners should be investigated. In these cases, data on condom use should always be presented separately for the female and male partners.

This indicator asks about sex between men in the past six months. If data are available for a different time period, such as the past three or 12 months, please include this information in the metadata in the comments section of the reporting tool.

The data obtained may not be based on a representative national sample of gay men and other men who have sex with men. If there are concerns that the data are not based on a representative sample, the interpretation of the survey data should reflect these concerns. Where different sources of data exist, the best available estimate should be used. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

To maximize the utility of these data, it is recommended that the same sample used for calculating this indicator be used for calculating the other indicators related to these populations.

Further information

United Nations Population Fund, Global Forum on MSM & HIV, United Nations Development Programme, World Health Organization, United States Agency for International Development, World Bank. Implementing comprehensive HIV and STI programmes with men who have sex with men: practical guidance for collaborative interventions. New York (NY): United Nations Population Fund; 2015 (https://mpactglobal.org/wp-content/uploads/2015/11/MSMIT-for-Web.pdf).

Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization, 2020 https://apps.who.int/iris/rest/bitstreams/1274308/retrieve

Global HIV Strategic Information Working Group. Biobehavioural survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/bitstream/handle/10665/258924/9789241513012-eng.pdf).

1.5C Condom use among people who inject drugs

Percentage of people who inject drugs reporting using a condom the last time they had sexual intercourse

What it measures
Progress in preventing sexual transmission of HIV among people who inject drugs

Rationale
Safer injecting and sexual practices among people who inject drugs are essential, even in countries in which other modes of HIV transmission predominate, because the risk of HIV transmission from contaminated injecting equipment is extremely high, and people who inject drugs can spread HIV (such as through sexual transmission) to the wider population.

Note: countries with generalized epidemics may also have a concentrated subepidemic among people who inject drugs. If so, calculating and reporting on this indicator for this population would be valuable.

Numerator
Number of people who inject drugs who reported using a condom the last time they had sex

Denominator
Number of people who inject drugs who report having injected drugs and having had sexual intercourse in the past month

Calculation
Numerator/denominator

Method of measurement
Behavioural surveillance or other special surveys

People who inject drugs are asked the following sequence of questions:

1. Have you injected drugs at any time in the past month?

2. If yes, have you had sexual intercourse in the past month?

If they answer yes to both 1 and 2:

3. Did you use a condom when you last had sexual intercourse?

Whenever possible, data for people who inject drugs should be collected with civil society organizations that have worked closely with this population in the field.

Access to survey respondents and the data collected from them must remain confidential and secure.

Measurement frequency
Every two years

Disaggregation
- Sex (female, male and transgender).
- Age (<25 and 25+ years).

Additional information requested
If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses
Surveying people who inject drugs can be challenging. Consequently, the data obtained may not be based on a representative national sample of the people who inject drugs being surveyed. If there are concerns that the data are not based on a representative sample, the interpretation of the survey data should reflect these concerns. If there are different sources of data, the best available estimate should be used. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

The extent of HIV transmission associated with injecting drug use within a country depends on four factors: (1) the size, stage and pattern of dissemination of the national AIDS epidemic; (2) the extent of injecting drug use; (3) the degree to which people who inject drugs use contaminated injecting equipment; and (4) the patterns of sexual mixing and condom use among people who inject drugs and between people who inject drugs and the wider population. This indicator provides information on the fourth factor. To maximize the utility of these data, it is recommended that the same sample used for calculating this indicator be used for the calculating the other indicators related to these populations.

Further information

United Nations Office on Drugs and Crime, International Network of People Who Use Drugs, UNAIDS, United Nations Development Programme, United Nations Population Fund, World Health Organization et al. Implementing comprehensive HIV and HCV programmes with people who inject drugs: practical guidance for collaborative interventions. Vienna: United Nations Office on Drugs and Crime; 2017 (https://www.inpud.net/en/iduit-implementing-comprehensive-hiv-and-hcv-programmes-people-who-inject-drugs).

Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization, 2020 https://apps.who.int/iris/rest/bitstreams/1274308/retrieve

Global HIV Strategic Information Working Group. Biobehavioural survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/bitstream/handle/10665/258924/9789241513012-eng.pdf).

1.5D Condom use among transgender people

Percentage of transgender people reporting using a condom during their most recent sexual intercourse or anal sex

What it measures

Progress in preventing exposure to HIV among transgender people through unprotected sex with partners

Rationale

Condoms can substantially reduce the risk of sexually transmitting HIV. Consistently and correctly using condoms is therefore important for transgender people, particularly trans-women, because of the high risk of HIV transmission during unprotected anal sex. Condom use with the most recent penetrative sex partner is considered a reliable indicator of longer-term behaviour.

Note: Countries with generalized epidemics may also have a concentrated subepidemic among transgender people. If so, calculating and reporting on this indicator for this population would be valuable.

Numerator

Number of transgender people who reported using a condom at last sexual intercourse or anal sex

Denominator

Number of transgender people surveyed who reported having sexual intercourse or anal sex in the past six months

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

Respondents are asked the following question:

Did you use a condom with your most recent sexual intercourse or anal sex?

Whenever possible, data for transgender people should be collected with civil society organizations that have worked closely with this population in the field. Access to transgender people and the data collected from them must remain confidential and secure.

Measurement frequency

Every two years

Disaggregation

- Gender (transman, transwoman, other).
- Age (<25 and 25+ years).

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

For transgender people, condom use at last sexual intercourse or anal sex with any partner indicates well the overall levels of and trends in protected and unprotected sex in this population. In countries in which transgender people in the subpopulation surveyed are likely to have cis- and trans-gendered partners, condom use with female, male and transgender partners should be investigated. In these cases, data on condom use should always be presented separately for female, male and transgender partners.

This indicator asks about sexual intercourse or anal sex in the past six months. If you have data available on another time period, such as the last three or 12 months, please include this additional data in the comments section of the reporting tool.

Surveying transgender people can be challenging. Consequently, the data obtained may not be based on a representative national sample of the key populations at higher risk being surveyed. If there are concerns that the data are not based on a representative sample, the interpretation of the survey data should reflect these concerns. If there are different sources of data, the best available estimate should be used. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

To maximize the utility of these data, it is recommended that the same sample used for calculating this indicator be used for calculating the other indicators related to these populations.

Further information

United Nations Development Programme, IRGT: A Global Network of Transgender Women and HIV, United Nations Population Fund, UCSF Center of Excellence for Transgender Health, Johns Hopkins Bloomberg School of Public Health, World Health Organization et al. Implementing comprehensive HIV and STI programmes with transgender people: practical guidance for collaborative interventions. New York (NY): United Nations Development Programme; 2016 (https://www.undp.org/content/dam/undp/library/HIV-AIDS/Key%20populations/TRANSIT.pdf).

Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization, 2020 https://apps.who.int/iris/rest/bitstreams/1274308/retrieve

Global HIV Strategic Information Working Group. Biobehavioural survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/bitstream/handle/10665/258924/9789241513012-eng.pdf).

1.6 Coverage of HIV prevention programmes among key populations (A–D)

Coverage of HIV prevention programmes: percentage of people in a key population reporting having received a combined set of HIV prevention interventions

This indicator is divided into four sub-indicators:

A. Coverage of HIV prevention programmes among sex workers.

B. Coverage of HIV prevention programmes among gay men and other men who have sex with men.

C. Coverage of HIV prevention programmes among people who inject drugs.

D. Coverage of HIV prevention programmes among transgender people.

Each sub-indicator is divided in two parts. Please report both parts. Surveys and programme data are considered complementary.

PART I. Behavioural surveillance or other special survey

What it measures
People in key populations who received at least two HIV prevention interventions in the past three months

Rationale
Successfully confronting the HIV epidemic requires combining preventive behaviour and antiretroviral therapy. Coverage with evidence-informed prevention programming is a critical component of the response, the importance of which is reflected in the UNAIDS Strategy.

Numerator
Number of people in a key population who report receiving two or more of the prevention interventions listed

Denominator
Number of people in a key population responding to the survey

Calculation
Numerator/denominator

Method of measurement
Percentage of respondents who report receiving at least two of the following HIV prevention services from an nongovernmental organization, health-care provider or other sources.

- In the past three months, have you been given condoms and lubricant (for example, through an outreach service, drop-in centre or sexual health clinic)?
- In the past three months, have you received counselling on condom use and safe sex (for example, through an outreach service, drop-in centre or sexual health clinic)?
- Have you been tested for sexually transmitted infections in the past three months? (sex workers, transgender people and gay men and other men who have sex with men)
- Have you received new, clean needles or syringes in the past three months? (people who inject drugs)

Measurement frequency
Every two years.

Disaggregation
- Age (<25 and 25+ years).
- **A, C:** gender (male, female and transgender)
- **D:** gender (transman, transwoman, other).

Strengths and weaknesses
Survey data provide the opportunity to measure the uptake of multiple intervention services by individuals. This indicator shortens the reference period because populations must access services regularly and risky behaviour must be regular. Weaknesses associated with survey data relate to any sampling or response bias and the limited geographical coverage of the information.

Further information
Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations. Supplement to the 2014 consolidated guidelines for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/177992/9789241508995_eng.pdf?sequence=1).

Operational Guidelines for Monitoring and Evaluation of HIV Programmes for People who Inject Drugs. In: MEASURE Evaluation [Internet]. Chapel Hill (NC): MEASURE Evaluation; c2019 (https://www.measureevaluation.org/resources/tools/hiv-aids/operational-guidelines-for-m-e-of-hiv-programmes-for-people-who-inject-drugs).

What it measures

People in key populations who are reached with HIV prevention interventions designed for the intended population

Rationale

Successfully confronting the HIV epidemic requires combining preventive behaviour and antiretroviral therapy. Coverage with evidence-informed prevention programming is a critical component of the response, the importance of which is reflected in the UNAIDS Strategy.

Numerator

Number of people in a key population reached with HIV prevention interventions designed for the intended population

Denominator

Number of people in a key population

Calculation

Numerator/denominator

Method of measurement

For the numerator: Number of people in a key population reached with individual HIV prevention interventions designed for the intended population and the following:

- For sex workers, gay men and other men who have sex with men and transgender people: number of condoms and lubricants distributed.
- For people who inject drugs: number of needles or syringes distributed.

Plus: [1.6.1] Number of service provision sites dedicated to key populations per administrative area.

For the denominator: Validated population size estimate

Measurement frequency

Annual

Disaggregation

- Type of provider (public services, key population-led organization, NGOs, or other entities). Please see page 33 in the complementary document "Global AIDS monitoring Framework 2022-2026"
- for additional guidance.
- Name of the organisation/s **Please indicate the name and URL/website (if available) of the key population-led organization, NGOs, or other entities that are providing these services**

Strengths and weaknesses

Programme data provide a national picture to the extent that programmes offer services nationally. While programme data reflect a national commitment to deliver services to specified key population communities, they do not accurately reflect the individuals served and data cannot typically be deduplicated. Furthermore, analysis of two separate programme data sets can only be considered ecologically: that is, we can see the number of people contacted by programmes and we can see the number of condoms provided by programmes, but we cannot know who among the people contacted received condoms.

Additional information requested

Service provision sites designed specifically for one or more key populations demonstrate commitment to deliver context-sensitive services to communities that are often stigmatized. Please provide the total number of such sites and the total number of first-level (e.g., state/province/oblast) or second-level (e.g., county/district) administrative areas that have at least one service and the total number in the country. For example, Country A reports 10 needle–syringe programmes across five provinces, and it has seven total provinces.

If known, please report if the site is operated by the national programme (government) or the community (civil society or nongovernmental organization).

Please provide the number of peer outreach workers active at the time of reporting for each key population.

Further information

Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations: supplement to the 2014 consolidated guidelines for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/177992/9789241508995_eng.pdf?sequence=1).

Operational Guidelines for Monitoring and Evaluation of HIV Programmes for People who Inject Drugs. In: MEASURE Evaluation [Internet]. Chapel Hill (NC): MEASURE Evaluation; c2019 (https://www.measureevaluation.org/resources/tools/hiv-aids/operational-guidelines-for-m-e-of-hiv-programmes-for-people-who-inject-drugs).

1.7 HIV prevention programmes in prisons

HIV prevention and treatment programmes offered to prisoners while detained

What it measures

The number of prisoners who receive HIV preventive or treatment services while incarcerated

Rationale

Prisoners are often at risk for acquiring HIV when they are released and living in the community. This is especially true for people involved with illicit drug use or where selling sex is illegal. Offering HIV prevention and treatment services in prisons can reduce HIV transmission risk both within the prison and in the community on release. A strong national HIV response will include such services to prisoners.

Numerator

Number of clean needles distributed to prisoners

Number of prisoners receiving opioid agonist maintenance therapy

Number of condoms distributed to prisoners

Number of prisoners receiving antiretroviral therapy

Number of prisoners tested for HIV

Number or percentage of people living with HIV among prisoners

Number or percentage of prisoners with hepatitis C

Number of prisoners co-infected with HIV and hepatitis C virus

Number or percentage of prisoners with TB or co-infected with HIV and TB

Denominator

Not applicable

Calculation

Not applicable

Method of measurement

Routine programme data

Measurement frequency

Annual

Disaggregation

None

Additional information requested

Number of prisons offering any HIV prevention or treatment services

Strengths and weaknesses

Programme data provide a strong picture of services and the burden of HIV among inmates. The indicator informs whether a national programme is taking advantage of serving a readily accessible population at higher risk.

Given the turnover in most prison systems, any programme data provide a snapshot of a given time period. Concerns for confidentiality and the welfare of inmates mitigates against surveys, although they can be useful if they can be conducted safely.

Further information

UNODC, ILO, UNDP, WHO, UNAIDS. HIV prevention, treatment and care in prisons and other closed settings: a comprehensive package of interventions. Vienna: UNODC; 2013.

1.8 Safe injecting practices among people who inject drugs

Percentage of people who inject drugs reporting using sterile injecting equipment the last time they injected

What it measures

Progress in preventing HIV transmission associated with injecting drug use

Rationale

Safer injecting and sexual practices among people who inject drugs are essential, even in countries in which other modes of HIV transmission predominate, because the risk of HIV transmission from contaminated injecting equipment is extremely high, and people who inject drugs can spread HIV (such as through sexual transmission) to the wider population.

Note: countries with generalized epidemics may also have a concentrated subepidemic among people who inject drugs. If so, calculating and reporting on this indicator for this population would be valuable.

Numerator

Number of people who inject drugs who report using sterile injecting equipment the last time they injected drugs

Denominator

Number of people who inject drugs who report injecting drugs in the past month

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

Respondents are asked the following questions:

1. Have you injected drugs at any time in the past month?

If yes:

2. The last time you injected drugs, did you use a sterile needle and syringe?

Whenever possible, data for people who inject drugs should be collected with civil society organizations that have worked closely with this population in the field.

Access to people who inject drugs and the data collected from them must remain confidential and secure.

Measurement frequency

Every two years

Disaggregation

- Gender (female, male and transgender)
- Age (<25 and 25+ years)

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

Surveying people who inject drugs can be challenging. The data obtained may therefore not be based on a representative national sample of the people who inject drugs being surveyed. If there are concerns that the data are not based on a representative sample, the interpretation of the survey data should reflect these concerns. If there are different sources of data, the best available estimate should be used. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

The extent of HIV transmission associated with injecting drug use within a country depends on four factors: (1) the size, stage and pattern of dissemination of the national AIDS epidemic; (2) the extent of injecting drug use; (3) the degree to which people who inject drugs use contaminated injecting equipment; and (4) the patterns of sexual mixing and condom use among people who inject drugs and between people who inject drugs and the wider population. This indicator provides information on the third factor. To maximize the utility of these data, it is recommended that the same sample used for calculating this indicator be used for calculating the other indicators related to these populations.

Further information

Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/177992/9789241508995_eng.pdf?sequence=1&isAllowed=y).

A framework for monitoring and evaluating HIV prevention programmes for most-at-risk populations. Geneva: UNAIDS; 2007 (http://www.unaids.org/sites/default/files/sub_landing/files/17_Framework_ME_Prevention_Prog_MARP_E.pdf).

Practical guidelines for intensifying HIV prevention: towards universal access. Geneva: UNAIDS; 2007 (http://data.unaids.org/pub/Manual/2007/20070306_Prevention_Guidelines_Towards_Universal_Access_en.pdf).

UNAIDS, WHO, Measure Evaluation, CDC, USAID, ICASO, UNODC. Operational Guidelines for Monitoring and Evaluation of HIV Programmes for People who Inject Drugs. https://www.measureevaluation.org/resources/tools/hiv-aids/operational-guidelines-for-m-e-of-hiv-programmes-for-people-who-inject-drugs

UNAIDS, WHO, Measure Evaluation, CDC, USAID, ICASO, UNODC. Operational Guidelines for Monitoring and Evaluation of HIV Programmes for Sex Workers, Men who have Sex with Men, and Transgender People. https://www.measureevaluation.org/resources/tools/hiv-aids/operational-guidelines-for-monitoring-and-evaluation-of-hiv-programmes-for-sex-workers-men-who-have-sex-with-men-and-transgender-people

1.9 Needles and syringes distributed per person who injects drugs

Number of needles and syringes distributed per person who injects drugs per year by needle–syringe programmes

What it measures

Progress in improving the coverage of needles and syringes provided, an essential HIV prevention service for people who inject drugs

Rationale

Injecting drug use is the main route of transmission for about 12% of people acquiring HIV globally. Preventing HIV transmission caused by injecting drug use is one of the key challenges in reducing the burden of HIV.

Needle–syringe programmes are included as an essential health sector intervention in the World Health Organization (WHO) comprehensive package of interventions for HIV prevention and treatment among key populations (see further information below) described in the Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations (2014).

Needle–syringe programmes greatly enhance HIV prevention for people who inject drugs, and a wealth of scientific evidence supports their efficacy in preventing the spread of HIV.

Numerator

Number of needles and syringes distributed in the past 12 months by needle–syringe programmes

Denominator

Number of people who inject drugs in the country

Calculation

Numerator/denominator

Method of measurement

For the numerator: Programme data used to count the number of needles and syringes distributed

For the denominator: Estimation of the number of people who inject drugs in the country

Measurement frequency

Annual.

Disaggregation

- Type of provider (public services, key population-led organization, NGOs, or other entities). **Please see page 33 in the complementary document "Global AIDS monitoring Framework 2022–2026" for additional guidance.**
- Name of the organisation/s **Please indicate the name and URL/website (if available) of the key population-led organization, NGOs, or other entities that are providing these services.**

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. You may also upload an Excel spreadsheet of these data instead of entering them in the online tool. Submit the digital version of any available size estimation reports using the upload tool.

Strengths and weaknesses

Some difficulties in counting needles and syringes are reported. Some commonly used syringes are 1 ml or 2 ml needle and syringe units; others are syringes to which needles need to be fitted. In most cases, only data on the number of syringes distributed by needle–syringe programmes but not pharmacy sales are available.

Estimating the number of people who inject drugs at the country level presents challenges. People who inject drugs are defined in many ways, and the estimates have ranges. The UNODC publishes estimates of the number of people who inject drugs in the World drug report. These estimates may be used. If there is a reason not to use them, please provide the rationale in the comment field.

Countries that have legalized sales of needles and syringes without a prescription may appear to have artificially low coverage with this indicator. Countries can monitor this indicator against the following coverage levels:

- Low: <100 syringes per person who injects drugs per year.
- Medium: 100–200 syringes per person who injects drugs per year.
- High: >200 syringes per person who injects drugs per year.

These levels are based on studies in low- and middle-income countries investigating the levels of syringe distribution and how these affect HIV transmission. The levels required for preventing hepatitis C are likely to be much higher than those presented here.

Further information

Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/177992/9789241508995_eng.pdf?sequence=1&isAllowed=y).

Effectiveness of sterile needle and syringe programming in reducing HIV/AIDS among IDUs. Geneva: World Health Organization; 2004 https://www.who.int/hiv/pub/prev_care/effectivenesssterileneedle.pdf

WHO/UNAIDS Working Group on Global HIV/AIDS and STI Surveillance. Guidelines on estimating the size of populations most at risk to HIV. Geneva: World Health Organization and UNAIDS; 2010 (https://data.unaids.org/pub/manual/2010/guidelines_popnestimationsize_en.pdf).

Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization, 2020 (https://www.who.int/publications/i/item/consolidated-hiv-strategic-information-guidelines).

Global HIV Strategic Information Working Group. Biobehavioural survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/bitstream/handle/10665/258924/9789241513012-eng.pdf).

1.10 Coverage of opioid agonist maintenance therapy

Percentage of people who inject drugs receiving opioid agonist maintenance therapy

What it measures

A programme's ability to deliver opioid agonist maintenance therapy among people who inject drugs as a method of directly reducing injecting frequency. The target coverage is 50%.

Rationale

Opioid agonist maintenance therapy represents a commitment to treat opioid dependence and reduce the frequency of injecting, preferably to zero. It is the most effective, evidence-based public health tool for reducing use among the people who inject opioids. Opioid agonist maintenance therapy provides crucial support for treating other health conditions, including HIV, tuberculosis and viral hepatitis.

Numerator

Number of people who inject drugs and are receiving opioid agonist maintenance therapy at a specified date

Denominator

Number of opioid-dependent people who inject drugs in the country

Calculation

Numerator/denominator

Method of measurement

For the numerator: Programme records: for example, opioid agonist maintenance therapy registries.

For the denominator: Size estimation of opioid dependent people: users or injectors.

Measurement frequency

Annual

Disaggregation

- Gender (male, female and transgender).
- Age (<25 and 25+ years).
- Type of provider (public services, key population-led organization, NGOs, or other entities). **Please see page 33 in the complementary document "Global AIDS monitoring Framework 2022-2026" for additional guidance.**
- Name of the organisation/s **Please indicate the name and URL/website (if available) of the key population-led organization, NGOs, or other entities that are providing these services**

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city or site using the space provided. You may also upload an Excel spreadsheet of these data instead of entering them in the online tool. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

The population size estimate used as the denominator should be appropriate for the numerator: not all opioid agonist maintenance therapy recipients have a history of injecting and not all people who inject drugs use or are dependent on opioids.

Biobehavioural surveys can collect this information but are often biased by an inclusion criterion of being a current injector. This would exclude those people receiving opioid agonist maintenance therapy who may not be injecting anymore or who may deny current injecting in order to access the OAMT programme

Further information

Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/177992/9789241508995_eng.pdf?sequence=1&isAllowed=y).

United Nations Office on Drugs and Crime, International Network of People Who Use Drugs, UNAIDS, United Nations Development Programme, United Nations Population Fund, World Health Organization et al. Implementing comprehensive HIV and HCV programmes with people who inject drugs: practical guidance for collaborative interventions. Vienna: United Nations Office on Drugs and Crime; 2017. (https://www.inpud.net/en/iduit-implementing-comprehensive-hiv-and-hcv-programmes-people-who-inject-drugs).

Operational Guidelines for Monitoring and Evaluation of HIV Programmes for People who Inject Drugs. In: MEASURE Evaluation [Internet]. Chapel Hill (NC): MEASURE Evaluation; c2019 (https://www.measureevaluation.org/resources/tools/hiv-aids/operational-guidelines-for-m-e-of-hiv-programmes-for-people-who-inject-drugs).

1.11 People who received pre-exposure prophylaxis

Number of people who received pre-exposure prophylaxis (PrEP) at least once during the reporting period

What it measures
Progress towards scaling up PrEP globally

Rationale
This indicator is key to assessing the availability and uptake of PrEP, especially among people at higher risk of HIV infection. Through data disaggregation, this indicator will also attempt to monitor the availability and use by population (based on age, gender and key population).

The use of antiretroviral medicine by people who are HIV-negative before they are exposed to HIV can prevent HIV infection. In 2015, the World Health Organization (WHO) recommended that oral PrEP containing tenofovir be offered as an additional prevention choice for people at substantial risk of HIV infection as part of combination HIV prevention approaches. Based on available clinical evidence, in 2022, the eligibility for ED-PrEP to prevent sexual acquisition of HIV was expanded to all cisgender men and trans and gender diverse people assigned male at birth who are not taking exogenous estradiol-based hormones. This shorter dosing strategy has the potential to reduce pill burden, potential toxicity and the cost of drugs, and it may improve continuation among those who find daily pill-taking challenging, but it is not currently recommended for other population groups. In 2021, WHO recommended the dapivirine vaginal ring (DVR) as an additional PrEP option to be offered to cisgender women at substantial risk of HIV infection. In 2022, WHO recommended that long-acting injectable cabotegravir (CAB-LA) may be offered as an additional PrEP option to people at substantial risk of HIV.

Implementation of PrEP should be informed by several factors. These include local service-related information—such as the epidemiological context or trends, feasibility and demand—individual assessment, and consideration of the local societal environment for people living with HIV and key populations and their access to services. The PrEP implementation criteria may vary by country.

Numerator
Number of people who received any PrEP product at least once during the reporting period

Denominator
Not applicable

Calculation
Not applicable

Method of measurement
The numerator is generated by counting the number of people who received PrEP at least once during the reporting period (the previous calendar year), in accordance with national guidelines or WHO/UNAIDS standards. This can include oral PrEP or the DPV-VR. The numerator should only count individuals once: the first time they received any PrEP product during the reporting period. People who received oral PrEP through national programmes, demonstration projects, research or private means should be included.

For the disaggregation by PrEP product (oral PrEP, DVR, or CAB-LA), individuals can be counted for each product (if they received multiple products) and dosing schedule (if they took oral PrEP as daily and event-driven PrEP). The sum of the data disaggregated by PrEP product and dosing schedule can therefore be greater than the total.

Age is defined as the person's age when they received PrEP for the first time during the reporting period.

If a person identifies as belonging to more than one key population, all that are relevant should be recorded. The sum of the data disaggregated by key populations can therefore be greater than the total. As with all types of record-keeping used to disaggregate indicators by key population, efforts must be made to avoid disclosing the identities of PrEP users in the patient records and registers of facilities that offer PrEP.

Measurement frequency
Data should be collected continuously at the facility level and aggregated periodically, preferably monthly or quarterly. The most recent monthly or quarterly data should be used for annual reporting.

Disaggregation
- People who received PrEP for the first time in their lives.
- Gender (male, female or transgender).
- Age (<15, 15+, 15–19, 20–24, 25–49 and 50+ years).
- PrEP product (oral PrEP, DVR, CAB-LA).
- Key population (gay men and other men who have sex with men, sex workers, people who inject drugs, transgender people and prisoners).
- Cities and other administrative areas of epidemiologic importance.

Additional information requested
If there are subnational data available, please provide the disaggregation by administrative area, city or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

This indicator will not capture the number of person-years at risk, since it will not account for how long PrEP is used. It will also not measure the treatment cost, quality, effectiveness or adherence, which vary within and among countries and are likely to change over time.

The availability and use of PrEP will depend on such factors as cost, service delivery infrastructure and quality, legal and policy environment, perceptions of effectiveness and possible side-effects.

Countries with strong monitoring systems that use unique identifiers will likely be able to more accurately estimate the number of people receiving PrEP for the first time during the calendar year than those with aggregate data systems. In countries with weaker monitoring systems, avoiding double-counting of the people receiving PrEP may be difficult, including of people who may transfer to another facility to receive medication during the reporting period. In these cases, the number of people receiving PrEP for the first time during the calendar year may be overstated.

Further information

Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach. Geneva: World Health Organization; 2021 (https://www.who.int/publications/i/item/9789240031593).

WHO implementation tool for pre-exposure prophylaxis (PrEP) of HIV infection. Geneva: World Health Organization; 2017 (http://www.who.int/hiv/pub/prep/prep-implementation-tool/en/).

What's the 2+1+1? Event-driven oral pre-exposure prophylaxis to prevent HIV for men who have sex with men: update to WHO's recommendation on oral PrEP. Technical brief. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/bitstream/handle/10665/325955/WHO-CDS-HIV-19.8-eng.pdf?ua=1).

Differentiated and simplified pre-exposure prophylaxis for HIV prevention: update to WHO implementation guidance. Geneva: World Health Organization; 2022 (https://www.who.int/publications/i/item/9789240053694).

Guidelines on long-acting injectable cabotegravir for HIV prevention. Geneva: World Health Organization; 2022 (https://www.who.int/publications/i/item/9789240054097).

Consolidated guidelines on person-centred HIV strategic information: strengthening routine data for impact. Geneva: World Health Organization; 2022 (https://www.who.int/publications/i/item/9789240055315).

Male circumcision indicators

Indicators 1.12 and 1.13 are required only from 15 countries with high HIV prevalence, low levels of male circumcision and generalized heterosexual epidemics: Botswana, Ethiopia, Eswatini, , Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

1.12 Prevalence of male circumcision

Percentage of men 15–49 that are circumcised

What it measures

Progress towards increased coverage of male circumcision

Rationale

Compelling evidence indicates that male circumcision reduces the risk of men heterosexually acquiring HIV infection by approximately 60%. Three randomized controlled trials have shown that male circumcision provided by well-trained health professionals in properly equipped settings is safe and can reduce the risk of acquiring HIV. Other benefits of medical male circumcision include the reduced risk of some other STIs, including human papillomavirus, the cause of cervical cancer. The World Health Organization (WHO) and UNAIDS recommendations emphasize that voluntary medical male circumcision should continue to be provided as an additional efficacious HIV prevention option within combination prevention for adolescents 15 years and older and adult men in settings with generalized epidemics to reduce the risk of heterosexually acquired HIV infection. Voluntary medical male circumcision services should be provided as part of a package of prevention interventions including safer sex education, condom education and provision, HIV testing and linkages to care and treatment, and management of sexually transmitted infections

Numerator

Number of male respondents aged 15–49 who report that they are circumcised

Denominator

Number of all male respondents aged 15–49 years

Calculation

Numerator/denominator

Method of measurement

Population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Surveys or other representative survey)

Measurement frequency

Every 3–5 years

Disaggregation

- Age (15–19, 20–24, 25–29 and 25–49 years)
- Source or practitioner of circumcision procedure: formal health-care system or traditional

Additional information requested

None.

Strengths and weaknesses

A programme may or may not change the rate of male circumcision. For example, changing societal norms not caused by a programme may lead to changing rates of male circumcision. This indicator measures the total change in the population, regardless of the reasons.

Existing population-based surveys (such as Demographic and Health Surveys) may not accurately measure true male circumcision status because people may lack knowledge of what male circumcision is, be confused about their circumcision status or perceive the social desirability of circumcision status. Other approaches to determining circumcision status might be used: for example, using photographs or drawings (drawings may be more culturally appropriate), prompts or even direct examination. Modelling how changing rates of male circumcision can potential affect HIV incidence requires accurate knowledge of male circumcision status over time.

Further information

Preventing HIV through safe voluntary medical male circumcision for adolescent boys and men in generalized HIV epidemics: recommendations and key considerations. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/rest/bitstreams/1296029/retrieve).

A guide to indicators for male circumcision programmes in the formal health-care system. Geneva: World Health Organization and UNAIDS; 2009 (http://whqlibdoc.who.int/publications/2009/9789241598262_eng.pdf).

1.13 Annual number of males voluntarily circumcised

Number of male circumcisions performed according to national standards during the past 12 months

What it measures

Progress in scaling up male circumcision services

Rationale

Compelling evidence indicates that male circumcision reduces the risk of men heterosexually acquiring HIV infection by about 60%. Three randomized controlled trials—plus post-trial studies—have shown that male circumcision provided by well-trained health professionals in properly equipped settings is safe and can reduce the risk of acquiring HIV. Other benefits of medical male circumcision include the reduced risk of some other STIs, including human papillomavirus, the cause of cervical cancer. The World Health Organization (WHO) and UNAIDS recommendations emphasize that voluntary medical male circumcision should be provided as part of a package of prevention interventions including safer sex education, condom education and provision, HIV testing and linkages to care and treatment, and management of sexually transmitted infections

Numerator

Number of males circumcised during the past 12 months according to national standards

Denominator

Not applicable

Calculation

Not applicable

Method of measurement

Health facility recording and reporting forms, programme data, health information system. It is important to ensure that voluntary male medical circumcision is provided with an ethics and human rights approach. The procedure should be voluntary and include procedures for informed consent and assent.

Measurement frequency

Annual

Disaggregation

- Age (<1, 1–9, 10–14, 15–19, 20–24, 25–29, 30–34, 25–49 and 50+ years).

WHO recommends that voluntary medical male circumcision should continue to be provided as an additional efficacious HIV prevention option within combination prevention for adolescents 15 years and older and adult men in settings with generalized epidemics. Decisions on offering voluntary medical male circumcision to younger adolescents 10–14 years must consider several factors based on new evidence, human rights and national and local context.

Additional information requested

Optional to estimate coverage: Estimated number of uncircumcised, HIV-negative males.

Strengths and weaknesses

The total number of men and boys circumcised indicates either change in the supply of services or change in demand. Comparing the results against previous values shows where male circumcision services have been newly instituted or where male circumcision volume has changed.

As countries successfully scale up voluntary medical male circumcision (VMMC), the number of uncircumcised adolescent boys and men eligible for the procedure will decrease and the number of procedures performed becomes more difficult to interpret. It can be helpful to estimate the coverage of circumcisions performed relative to need; in this instance, need can be understood as the number of uncircumcised, HIV-negative adolescent boys and men who would be eligible for the procedure. These estimates can be derived from models such as those used for the purposes of monitoring progress against HIV Fast-Track Targets and the VMMC Decision Makers' Program Planning Toolkit (DMPPT) 2.

Further disaggregation is recommended at the country level:

- HIV-positive by test(s) on site, HIV-negative by test(s) on site, HIV-indeterminate results by test(s) on site, or unknown/refused HIV test(s).
- Groups identified as being at increased risk of HIV infection (for example, men seeking services for STI management, male clients of sex workers or occupational groups).
- Type and location of health facility.
- Cadre of the provider.
- Surgical versus device-based procedure.

Disaggregating the number of male circumcisions by HIV status and age will enable the impact of male circumcision programmes on HIV incidence to be determined using models. If a country has given priority to specific age groups, this disaggregation will help to determine whether age-specific communication strategies are creating demand. If the data are available by the type and location of health-care facility where the circumcision was performed, resource allocation needs can be assessed. Disaggregating these data by the cadre of health-care provider will determine whether task-shifting efforts are succeeding and help to determine resource allocation.

Some programmes will work closely with voluntary HIV testing services to provide HIV testing. A man desiring circumcision may have been recently tested, and an on-site HIV test may be unnecessary. In these cases, the facility may request a written verified result to verify HIV status. There is no specific length of time before male circumcision that the test should have been done, but within three months is suggested. The purpose of testing is not to identify every man who might be HIV-positive, but to provide HIV testing to men seeking health care and to identify men living with HIV who, if they choose to be circumcised, are likely to be at higher risk of surgical complications (men with chronic infections and low CD4 counts).

Further information

Preventing HIV through safe voluntary medical male circumcision for adolescent boys and men in generalized HIV epidemics: recommendations and key considerations. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/rest/bitstreams/1296029/retrieve).

A guide to indicators for male circumcision programmes in the formal health care system. Geneva: World Health Organization and UNAIDS; 2009 (http://whqlibdoc.who.int/publications/2009/9789241598262_eng.pdf).

1.14 Condom use at last high-risk sex

The percent of respondents who say they used a condom the last time they had sex with a non-marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months

What it measures

Progress towards preventing exposure to HIV through unprotected sexual intercourse among people with non-marital non-cohabiting partners.

Rationale

Condom use is an important way of protecting against HIV, especially among people with non-regular sexual partners.

Numerator

The number of respondents who report using a condom the last time they had sex with a non-marital, non-cohabiting partner.

Denominator

Total number of respondents who report that they had sex with a non-marital, non-cohabiting partner in the last 12 months.

Calculation

Numerator/denominator

Method of measurement

Population-based surveys (Demographic Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey)

Respondents' sexual histories are obtained. Analysis of sexual history is used to determine whether the respondent had sex with a non-marital, non-cohabiting partner in the past 12 months and, if so, whether the respondent used a condom the last time the respondent had sexual intercourse with such a partner.

Measurement frequency

3–5 years

Disaggregation

- Gender (male, female)
- Age (15–19, 20–24 and 25–49 years)

Strengths and weaknesses

A rise in this indicator is an extremely powerful indication that condom promotion campaigns are having the desired effect among their principle target market.

Since condom promotion campaigns aim for consistent use of condoms with non-regular partners rather than simply occasional use, some surveys have tried to ask directly about consistent use, often using an always/sometimes/never question. While this may be useful in sub-population surveys, it is subject to recall bias and other biases and is not sufficiently robust for use in a general population survey. Asking about the most recent act of non-cohabiting sex minimises recall bias and gives a good cross-sectional picture of levels of condom use. It is recognised that consistent use of condoms is an important goal. But inevitably, if consistent use rises, this indicator will also rise.

Further information

Demographic and Health Survey or AIDS Indicator Survey methods and survey instruments (http://dhsprogram.com/What-We-Do/Survey-Types/AIS.cfm); http://hivdata.dhsprogram.com/ind_tbl.cfm

1.15 Annual number of condoms distributed

Number of condoms distributed during the past 12 months

This indicator is divided into two sub-indicators:

A. Number of male condoms distributed in the past 12 months.

B. Number of female condoms distributed in the past 12 months.

What it measures
Progress in scaling up distribution of male and female condoms.

Rationale
Condoms have been shown to be one of the most effective methods in preventing the sexual transmission of HIV, other sexually transmitted infections (STIs) and unintended pregnancy, with effectiveness that increases with consistent and correct use. The World Health Organization (WHO) and UNAIDS recommendations emphasize that condom distribution and promotion is an efficacious intervention and a critical component of combination HIV prevention.

Numerator
A. Number of male condoms distributed in the past 12 months.

B. Number of female condoms distributed in the past 12 months.

Denominator
A. Not applicable.

B. Not applicable.

Calculation
A. Not applicable.

B. Not applicable.

Method of measurement
Count of the number of male and female condoms that left the central or regional warehouses for onward distribution in the previous calendar year. Data should include condoms distributed for free (public providers), condoms sold at subsidized rates through social marketing (nongovernmental organizations as providers) and condoms sold through the commercial sector (private sector providers). There should be no double-counting of condoms in case of overlap. If condoms from public sector warehouses are given to nongovernmental organizations or community workers for distribution, condoms should be accounted for in the public sector.

Measurement frequency
Annual

Disaggregation
▪ Provider (public, private and nongovernmental organizations).

Additional information requested
None.

Strengths and weaknesses

A count of the number of condoms that have left the central or regional warehouses can provide useful information on the supply of condoms. Since condom use is only tracked through surveys every three to five years, it is important to monitor distribution closely to be able to track uptake of condoms in real time. Analyzing these data jointly with condom needs estimates can provide information on supply gaps. Countries can also use this indicator for comparing subnational distribution per male aged 15–64 years in order to understand inequities in supply and uptake. The indicator requires countries to aggregate and analyze data from different distribution channels, including the public or private sectors and social marketing, making this indicator critical for building a total market approach and exploring complementarity between different market segments.

Distribution from central or regional warehouses will not capture whether condoms are reaching facilities, are being distributed before expiry and are being used. To obtain more accurate information on uptake of condoms, countries should ideally track condom consumption, which is the number of condoms that left distribution points like health facilities, shops or community outreach teams. This is usually done through stock counts at each distribution point at the time of replacing supply. However, since such consumption data are not available in aggregated form in most countries, distribution from central and regional warehouses is recommended as a proxy indicator.

Further information

United Nations Population Fund, World Health Organization, UNAIDS. Position statement on condoms and the prevention of HIV, other sexually transmitted infections and unintended pregnancy. 2015 (https://hivpreventioncoalition.unaids.org/wp-content/uploads/2018/01/Condom-position-statement-WHO-UNFPA-UNAIDS-final-logo-clearance-26-June-2015-1.pdf).

Condoms: the prevention of HIV, other sexually transmitted infections and unintended pregnancies. Geneva: UNAIDS; 2016 (https://hivpreventioncoalition.unaids.org/wp-content/uploads/2018/01/JC2825-7-1.pdf).

1.16 Young people: knowledge about HIV prevention

Percentage of women and men 15–24 years old who correctly identify both ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission

What it measures
Progress towards universal knowledge of the essential facts about HIV transmission

Rationale
HIV epidemics are perpetuated primarily through the sexual transmission of infection to successive generations of young people. Sound knowledge about HIV and AIDS is necessary (although often insufficient) for adopting behaviour that reduces the risk of HIV transmission.

Numerator
Number of respondents 15–24 years old who correctly answered all five questions

Denominator
Number of all respondents 15–24 years old

Calculation
Numerator/denominator

Method of measurement
Population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey)

This indicator is constructed from responses to the following set of prompted questions:

1. Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?

2. Can a person reduce the risk of getting HIV by using a condom every time they have sex?

3. Can a healthy-looking person have HIV?

4. Can a person get HIV from mosquito bites?

5. Can a person get HIV by sharing food with someone who is infected?

Measurement frequency
Preferred: every two years; minimum: every 3–5 years

Disaggregation

- Age (15–19 and 20–24 years)
- Gender (male, female)

Explanation of the numerator
The first three questions should not be altered. Questions 4 and 5 ask about local misconceptions and may be replaced by the most common misconceptions in your country. Examples include: "Can a person get HIV by hugging or shaking hands with a person who is infected?" and "Can a person get HIV through supernatural means?"

Those who have never heard of HIV and AIDS should be excluded from the numerator but included in the denominator. An answer of "don't know" should be recorded as an incorrect answer.

Scores for each of the individual questions (based on the same denominator) are required as well as the score for the composite indicator.

Strengths and weaknesses
The belief that a person who looks healthy cannot be living with HIV is a common misconception that can result in unprotected sexual intercourse with infected partners. Rejecting major misconceptions about the modes of HIV transmission is as important as correct knowledge of the actual modes of transmission. For example, belief that HIV is transmitted through mosquito bites can weaken motivation to adopt safer sexual behaviour, and belief that HIV can be transmitted through sharing food reinforces the stigma faced by people living with HIV.

This indicator is especially useful in countries in which knowledge about HIV and AIDS is poor because it enables easy measurement of incremental improvements over time. However, it is also important in other countries, since it can be used to ensure that pre-existing high levels of knowledge are maintained.

Further information
Demographic and Health Survey and AIDS Indicator Survey methods and survey instruments (http://dhsprogram.com).

2.1 People living with HIV who know their HIV status

Percentage of people living with HIV who know their HIV status at the end of the reporting period

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What it measures

Progress towards increasing the proportion of people living with HIV who know their HIV status and the efficacy of HIV testing interventions

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Rationale

People living with HIV who know their HIV status will be able to access the HIV care and treatment services required to live healthy, productive lives and to reduce the potential of transmitting HIV to other people. The most effective way to ensure that people living with HIV are aware of their HIV status is to offer HIV testing services at locations and among populations with the highest HIV burden.

This measure is the first 95 of the UNAIDS 95–95–95 target: that 95% of the people living with HIV know their HIV status by 2025.

Numerator

Number of people living with HIV who know their HIV status

Denominator

Number of people living with HIV

Calculation

Numerator/denominator

Note: Countries with a population of more than 250 000 will report on this indicator by broad and detailed age and sex groups within their national Spectrum estimation file. Those indicator results will get imported into the Global AIDS Monitoring reporting tool directly from the final national Spectrum file, along with all other Spectrum-based indicators. Reporting on the indicator for cities and/or other administrative areas of importance will be done into the Global AIDS Monitoring reporting tool.

Method of measurement

There are two recommended methods for estimating the proportion of people living with HIV who know their status. The method used depends on the availability of data in the country.

1. **Direct estimates from HIV case surveillance systems**

   For the numerator. In countries with well-functioning HIV case surveillance systems, the number of people living with HIV who know their status is the same as the number of people diagnosed with HIV and reported to the surveillance system who are still alive.

   For the denominator. Estimation models such as Spectrum are the preferred source for the number of people living with HIV. If models other than Spectrum are used, documentation of the estimation method and uncertainty bounds should be provided.

   On case surveillance methods. An HIV case surveillance system is considered to be functioning well if reporting from all facilities providing confirmatory HIV testing, care and treatment services has been in place since at least 2015, and if people who have died, been lost to follow-up or emigrated are removed from the numerator. Only confirmed HIV diagnoses should be counted, although countries should be sure to adjust for reporting delays by including an estimate of the number of people diagnosed but not yet reported during the latest calendar year (if necessary). Mechanisms should be in place to deduplicate individuals diagnosed and reported multiple times or from multiple facilities.

2. **Modelled estimates**

   For the numerator: The approach to modelling the estimate of the number of people who know their HIV status among those living with HIV will depend on the availability of data in the country.

   For countries with robust case surveillance and vital registration systems, the number of people who know their HIV status can be derived using the Case Surveillance and Vital Registration (CSAVR) HIV prevalence estimation tool in Spectrum. A similar estimation method is available through the European Centres for Disease Control (ECDC) HIV Modelling Tool (https://ecdc.europa.eu/en/publications-data/hiv-modelling-tool). Estimates from other country-specific approaches to modelling this count that are based on case surveillance and clinical data may also be reported where these methods have been peer-reviewed and published.

   For countries with household population survey data that either directly capture the number of HIV-positive respondents who report that they know their status or the number of HIV-positive people who report ever having been tested, UNAIDS recommends (as of 2018) that knowledge of HIV-positive status be modelled using the Shiny90 model. More information about the tool, including the required inputs, can be found at https://shiny90.unaids.org/.

   Estimates of knowledge of HIV-positive status that are based only on self-reported knowledge of status or on historical household population survey data about testing history should not be reported.

   For the denominator. Estimation models such as Spectrum are the preferred source for the number of people living with HIV. UNAIDS will work with countries to develop a Spectrum model that matches the estimates of people living with HIV if estimates other than those produced through Spectrum are used.

   On estimating the number of children who know their status in countries with modelled estimates based on household survey data. Since household surveys are often restricted to respondents of reproductive age, a separate estimate of knowledge of HIV status among children (0–14 years old) may need to be constructed using programme data in order to produce an overall (i.e., all ages) estimate. In this case, UNAIDS recommends that countries use the number of children on treatment, as reported in Indicator 2.2, as a proxy measure. This approach represents the most conservative measure of knowledge of status in the population.

Measurement frequency
Annually

Disaggregation
- 0–14 years for children and 15 years and older by sex (men and women) for adults.
- As available: Disaggregation by detailed age and sex: <1 year, 1–4 years, 5–9 years and 10–14 years for children and 15–19 years, 20–24 years, 25–49 years and 50+ years by sex (men and women) for adults; by gender (men, women, other gender) for adults.
- Cities and other administrative areas of importance.

Additional information requested
Please provide subnational or city-specific data for this indicator. Space has been created in the Global AIDS Monitoring reporting tool to provide information for the capital city and one or two other key cities of high epidemiological relevance: such as those with the highest HIV burden or those that have committed to ending AIDS by 2030.

Strengths and weaknesses

Case-based reporting method
Case-based surveillance provides reasonable measures of knowledge of HIV status in the following instances:

- The system has been in place for long enough that all people diagnosed and still alive have been reported.
- There are timely and complete mechanisms for reporting newly diagnosed cases to the system from all facilities that offer HIV diagnostic testing.
- Mechanisms are in place to de-duplicate repeat diagnoses among individuals reported multiple times and/or from multiple facilities.
- There is sufficient continuous or periodic follow-up of individuals to identify that they are still alive, as opposed to having died or moved out of the country.

Countries relying on weak systems may overestimate or underestimate knowledge of HIV status in the following cases:

- De-duplication of case reports has not occurred (leading to overestimation).
- Deaths or out-migration among people diagnosed and reported to the system have not been removed (overestimation).
- Case reporting is not routine from all HIV testing facilities with confirmatory capacity (underestimation).

Modelled estimates
The accuracy of modelled estimates of knowledge of HIV-positive status will depend on the quality of the data inputs in each country and the accuracy of the assumptions underpinning each model. Countries should review the quality of the data inputs with UNAIDS and the selected modelling approach to determine the extent to which modelled estimates might overstate or understate knowledge of status among people living with HIV in the country.

Further information
Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization, 2020 (https://www.who.int/publications/i/item/consolidated-hiv-strategic-information-guidelines)

Spectrum. In: Avenir Health [Internet]. Glastonbury (CT): Avenir health; 2016 (http://www.avenirhealth.org/software-spectrum.php).

The DHS Program: Demographic and Health Surveys [webpage]. Rockville (MD): ICF; c2019 (http://dhsprogram.com).

2.2 People living with HIV on antiretroviral therapy

Percentage and number of adults and children on antiretroviral therapy among all adults and children living with HIV at the end of the reporting period

What it measures

Progress towards providing antiretroviral therapy to all people living with HIV

Rationale

Antiretroviral therapy has been shown to reduce HIV-related morbidity and mortality among people living with HIV, and to halt onward transmission of the virus. Studies also show that early initiation, regardless of a person's CD4 cell count, can enhance treatment benefits and save lives. The World Health Organization (WHO) currently recommends treatment for all people living with HIV.

The percentage of people on antiretroviral therapy among all people living with HIV provides a benchmark for monitoring global targets over time and comparing progress across countries. When considered as a proportion of Indicator 2.1, this indicator monitors progress toward the second 95 of the UNAIDS 95–95–95 targets: that 95% of people who know their HIV-positive status are accessing treatment by 2025.

Numerator

Number of people on antiretroviral therapy at the end of the reporting period

Denominator

Estimated number of people living with HIV (to determine treatment coverage)

OR

Number of people among all people living with HIV who know their HIV-positive status (to determine the second 95)

Calculation

Numerator/denominator

Note: Starting in 2018, countries with a population of more than 250 000 will report on this indicator by broad and detailed age groups within Spectrum. Results will be imported into the Global AIDS Monitoring reporting tool once the national file is finalized. Reporting on cities and other administrative areas of importance will still be done using the Global AIDS Monitoring reporting tool.

Method of measurement

For the numerator. The numerator is generated by counting the number of adults and children who are on antiretroviral therapy at the end of the reporting period. The numerator should include people on antiretroviral therapy in the private sector (if these data are available). The count should include pregnant women living with HIV who are receiving lifelong antiretroviral therapy.

Protocols should be in place to avoid duplicate counting of individuals across facilities or over time, and to ensure that all facility-level data are reported in a timely manner. The count should not include people who have stopped treatment, died or emigrated to another country, or those who were otherwise lost to follow-up at the facility during this period. People are considered lost to follow-up if they have not been seen within 28 days of the last expected clinical contact (for either an appointment or drug pick-up). Some people pick up several months of antiretroviral medicines at one visit; if the duration of the medicine picked up covers the last month of the reporting period, these people should still be counted as receiving antiretroviral therapy (as opposed to having stopped treatment or having been lost to follow-up).

Important: Countries should routinely conduct data quality reviews to determine the accuracy of the count data. This should include triangulation of the programme data with national procurement and drug monitoring systems and other pharmacy or drug distribution data. Estimates of coverage of antiretroviral therapy from surveys can also be used to inform or validate the numerator based on programme data, although survey results should be based on drug testing and not self-reported data since self-reported data has been shown to be of limited quality.

Countries that have undertaken data quality assessments or reviews should adjust current and historical reported data to account for these inconsistencies. UNAIDS will work with countries to agree on a set of best practices for adjusting reported programme data specific to the country.

For the denominator. Models such as Spectrum are the preferred source for estimating the number of people living with HIV. UNAIDS will work with countries to develop a Spectrum model that matches the estimate of people living with HIV if estimates other than those produced through Spectrum are used. For numbers of people living with HIV who know their status, please see Indicator 2.1 for more information about the denominator.

Measurement frequency

Data should be collected continually at the facility level and aggregated periodically, preferably monthly or quarterly. The most recent monthly or quarterly data with the count of the number of people currently on treatment should be used for annual reporting.

Disaggregation

- 0–14 years for children, and 15 years and older by sex (men and women) for adults. Data reported for unknown age or sex should be allocated to the age- and sex-disaggregated data cells using the same distribution of the data with known age and sex.
- Disaggregation by detailed age groups for children : <1 year, 1–4 years, 5–9 years and 10–14 years for children; and by detailed age sex groups for adults: 15–19 years, 20–24 years, 25–49 years and 50+ years.
- Cities and other administrative areas of importance.
- Numbers of people newly initiating antiretroviral therapy during the current reporting year. This disaggregation should only count people who were previously treatment naïve (had not previously been on antiretroviral therapy). These data should be available from the same sources as the total number of people receiving antiretroviral therapy.
- Numbers of people reinitiating antiretroviral therapy during the current reporting year after previously having stopped treatment or being classified as lost to follow-up. These data should be available from the same sources as the total number of people receiving antiretroviral therapy.

Additional information requested

For countries with populations less than 250 000 that are reporting through Global AIDS Monitoring, please provide information about the source of the treatment data. Options include the following:

- Programme data, primarily reported in aggregate: choose this option if counts are provided to the Ministry of Health, disaggregated only by age and sex. Data may typically be reported as coming from national or programme reports with the original source being patient registers, pharmacy records or other routine aggregate reporting forms.
- Programme data, primarily reported using health identifiers: choose this option if counts reported to the Ministry of Health can be deduplicated over time and across facilities using health or uniquely identifying person-level information.
- National estimates based on population survey results: choose this option if you have used estimates from a national survey to derive an estimate of the number of people on treatment.
- National estimates based on cohort monitoring data: choose this option if you have derived estimates based on cohort data.
- Other: please use this option only in consultation with UNAIDS.

More detailed age-specific data are requested for: (a) children; and (b) separately, by sex, for adults. The subset of people newly initiating antiretroviral therapy and reinitiating treatment during the last reporting year is requested.

For all countries, please provide subnational data (where available) disaggregated by administrative areas, as well as city-specific data. Provide information for the capital city and one or two other key cities of high epidemiological relevance, such as those with the highest HIV burden or those that have committed to ending AIDS by 2030. The data entry screen has separate space for this. You also may submit the digital version of any related reports using the upload tool.

Strengths and weaknesses

This indicator monitors trends in antiretroviral therapy coverage in a comparable way across countries and over time. It does not, however, measure treatment cost, quality, effectiveness or adherence, which vary within and between countries and are likely to change over time.

The accuracy of the number of people on antiretroviral therapy will depend on the quality of the underlying reporting system. Numbers of people on antiretroviral therapy may be under-reported due to missing or delayed reporting of facility data to the national level. Numbers of people on antiretroviral therapy also may be over-reported as a result of not removing from registries people who stopped treatment, died, transferred facilities or were lost to follow-up. Other errors—such as incorrectly abstracting data from facility-based registries or completing reporting forms—can lead to over- and under-reporting to varying degrees of magnitude.

Further information

Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach: Geneva: World Health Organization 2021. https://www.who.int/publications/i/item/9789240031593

2.3 People living with HIV who have suppressed viral loads

Percentage and number of adults and children living with HIV who have suppressed viral loads at the end of the reporting period

What it measures
Individual-level viral load is the recommended measure of antiretroviral therapy efficacy and indicates treatment adherence and the risk of transmitting HIV. A viral load threshold of <1000 copies/mL defines treatment success according to the 2016 World Health Organization (WHO) *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection*. People with viral load test results below the threshold should be considered as having suppressed viral loads.

Rationale
Viral suppression among people living with HIV provides a benchmark for monitoring global targets over time and a standardized indicator of HIV treatment and prevention success, critical to ending the AIDS epidemic. When considered as a proportion of the number of people on treatment (the numerator of Indicator 2.2), this indicator monitors the third 95 of the UNAIDS 95–95–95 targets: that 95% of the people receiving antiretroviral therapy will have suppressed viral loads by 2025.

Numerator
Number of people living with HIV in the reporting period with suppressed viral loads (<1000 copies/mL)

Denominator
Estimated number of people living with HIV (to estimate viral load suppression coverage);

OR

Estimated number of people living with HIV who are on treatment (to determine progress towards the third 95).

Calculation
Numerator/denominator

Note: Countries with a population of more than 250 000 will report on this indicator by broad age groups, in the Spectrum HIV estimates file. Results are imported from the final Spectrum file into the Global AIDS Monitoring reporting tool, alongside all other Spectrum-estimated indicators l. Reporting on cities and other administrative areas of importance will still be done in parallel, using the Global AIDS Monitoring reporting tool.

Method of measurement

Viral suppression is defined as <1000 copies/mL. Some countries use other thresholds (such as undetectable, <50 copies/mL or <400 copies/mL), and require adjustment for comparability with other countries and for monitoring the global 95-95-95 target. UNAIDS recommends that countries adjust for lower threshold detection. This is done using the formula:

$$y^{\left(\frac{6-log\,(1000)}{6-log\,(t_1)}\right)^{\phi}}$$

In this instance, **y** is the standard (1000 copies/mL) viral suppression level, **t**$_1$ is the country's alternative threshold that was used, and φ is the region-specific adjustment factor. This adjustment will be done automatically in Spectrum, where required.

Viral load suppression may be reported from three different data sources: (1) clinical and programme data; (2) nationally representative surveys (such as the Population-based HIV Impact Assessment [PHIA] and HIV drug resistance surveys); or (3) early warning indicators of HIV drug resistance surveys. Countries should report data from whichever source is most recent and nationally representative.

1. **Routine viral load suppression tests from people on antiretroviral treatment collected through clinical or laboratory registers or case surveillance.**
   For the numerator. Countries should report the estimated number of people nationally who have suppressed viral loads during the reporting period if viral load testing coverage (i.e., the number of people routinely tested during the reporting period, as per WHO guidance, among all people on treatment) is 50% or greater.

   Countries that report viral load testing coverage of less than 50% should, in contrast, only report the number of routine viral load tests – but not the number where the viral load is below the threshold, because this then is not a good, representative estimate for the overall population on treatment. Countries still wishing to use viral load result data despite viral load testing coverage below 50% should discuss with UNAIDS, to determine whether the percentage of people suppressed in the tested population can be considered representative for the population on ART with no access to testing.

   Countries should only include testing data that result from routine testing among those on treatment, and not targeted testing to a select subgroup of patients on treatment. For example, a person's results should not be included if testing was done prior to treatment initiation or for the reason of a suspected treatment failure. If viral load is tested repeatedly for a person within the year, only the last routine test result should be used.

   For countries where annual viral load testing coverage is 50% or over, an estimated number of people with suppressed viral loads should be reported. This is calculated from the number suppressed among those tested, multiplied by the total number of people on treatment. This assumes that levels of suppression in the untested population are the same as those in the tested population. This assumption is supported by evidence from South Africa, which shows that although viral load information was frequently missing, estimates of viral suppression did not change substantially after adjusting for missing data.

   Example: A country with an estimate of 100 000 people living with HIV has routine viral load tests for 12 000 of the 24 000 people receiving antiretroviral therapy. The viral load testing coverage is 50%, and the country deems the level of viral load suppression in the untested population to be like that among the tested population of people on treatment. Of the 12 000 people tested, 10 000 people have suppressed viral loads. The estimated national number of people living with HIV who have suppressed viral loads is 20 000 [(10 000/12 000) x 24 000].

   Where viral load suppression in the untested population on treatment is likely to not equal that in the tested population, please contact UNAIDS for further discussion about approaches for estimating this count.

   For the denominator. Estimation models such as Spectrum are the preferred source for the number of people living with HIV. UNAIDS will work with countries to develop a Spectrum model that matches the estimate of people living with HIV if national estimates other than those produced through Spectrum are used.

   For more information on estimating the number of people living with HIV who are on treatment, as part of calculating the third 95, please see Indicator 2.2.

2. **Recent nationally representative population surveys (including household, acquired HIV drug resistance surveys or early warning indicators (EWI) surveys of HIV drug resistance)**
   For the numerator. The proportion reported to have suppressed viral loads among people testing positive in the survey should be multiplied by the total number of people estimated to be living with HIV nationally to obtain the total number of people who have a suppressed viral load. This value may slightly overstate the number of people who are virally suppressed among those on treatment, since it will include some people who are not on treatment but naturally suppress the virus. If using data from an acquired HIV drug resistance survey, either the 12- or 48-month cohort data may be used. Data from early warning indicators should only be used to generate national aggregate statistics if:

   a) all clinics in a country—or a random sampling of clinics—reported early warning indicators data that includes at least 70% of all people on ART from the sampled clinics.

   OR

   b) if convenience sampling of clinics was used, a national aggregate statistic can be reported if the data from the sampled clinics includes at least 70% of the eligible population on ART in the country (see page 8 of the Early Warning Indicators (EWI) annex - sampling guidance – see References below).

   Note: Countries using survey data should still report on the number of people on treatment with *routine* viral load tests during the reporting period. Survey data should only be used if conducted in both children and adults.

   For the denominator. Estimation models such as Spectrum are the preferred source for the number of people living with HIV. UNAIDS will work with countries to develop a Spectrum model that matches the estimate of people living with HIV if estimates other than those produced through Spectrum are used. For more information on estimating the number of people living with HIV who are on treatment as part of calculating the third 95 target, please see Indicator 2.2

Measurement frequency

Annually

Disaggregation
- 0–14 years for children and 15 years and older by sex (men and women) for adults; data reported for unknown age or sex should be allocated to the age and sex disaggregated data cells using the same distribution of the data with known age and sex. These adjustments should be noted in the box providing additional information.
- As available. Disaggregation by detailed age and sex: <1 year, 1–4 years, 5–9 years and 10–14 years for children and 15–19 years, 20–24 years, 25–49 years and 50+ years by sex (men and women) for adults; by gender (men, women, other gender) for adults.
- Cities and other administrative area of importance.

Additional information requested
Provide city-specific data for this indicator. Space has been created in the Global AIDS Monitoring data entry tool to provide information for the capital city and one or two other key cities of high epidemiological relevance, such as those with the highest HIV burden or those that have committed to ending AIDS by 2030.

Strengths and weaknesses
When viral load suppression testing data are collected from all people receiving antiretroviral therapy or a nationally representative sample, this measurement provides important information on adherence, treatment efficacy and transmission risk at the individual and programme levels. Despite the indicator's importance, several challenges may arise in accurately monitoring it using currently available programme data. First, because viral load monitoring capacity is being scaled up but remains limited in low-income settings, estimates of viral load suppression in the tested population may not be representative of the untested population when measured through programme data. This is especially the case if scale-up of testing is biased to higher or lower performing sites. By assuming that the levels of viral load suppression are the same in the tested and untested population when testing coverage is not complete, progress toward the 95–95–95 targets may be under- or overstated.

A second challenge arising from the currently available programme data is that viral load testing may be performed selectively to confirm suspected treatment failures. The data reported from the viral load testing of people suspected of treatment failure will underestimate population-level viral load suppression. UNAIDS recommends that countries closely review reported data to exclude targeted, non-routine testing.

A third challenge when using routine programme data is that viral load testing data are only reported for the subset of people who are on antiretroviral treatment. This may underestimate overall population-level suppression, since people not on treatment who naturally suppress the virus will not be included in the numerator. UNAIDS is examining available evidence from cohorts and population surveys to better quantify and adjust for this effect, when reporting on global and regional progress towards the third 95.

Further information
UNAIDS, WHO. Guidelines on monitoring the impact of the HIV epidemic using population-based surveys. Geneva: World Health Organization; 2015 (http://www.who.int/hiv/pub/guidelines/si-guidelines-population-survey/en).

Consolidated strategic information guidelines for HIV . Geneva: World Health Organization; 2020
https://www.who.int/publications/i/item/9789240000735

Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach
Geneva: World Health Organization 2021. https://www.who.int/publications/i/item/9789240031593

References
Consolidated guidelines on person-centred HIV patient monitoring and case surveillance. Annex 2.4.6: HIVDR EWI sampling, abstraction and reporting guidance. Geneva: World Health Organization; 2017 (https://www.who.int/hiv/pub/guidelines/WHO_Consolidated_Guidelines_Annexes_2.4.6.pdf).

Pillay T, Cornell M, Fox MP, Euvrard J, Fatti G, Technau KG et al. Recording of HIV viral loads and viral suppression in South African patients receiving antiretroviral treatment: a multicentre cohort study. Antivir Ther. 2020;25(5): 257–266 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7982353/

2.4 Late HIV diagnosis

Percentage and number of adults and children newly diagnosed with HIV with an the initial CD4 cell count <200 cells/mm3 and <350 cells/mm3 during the reporting period

What it measures
People living with HIV who were diagnosed late.

Rationale
As countries scale up HIV services, it is important to monitor whether people are diagnosed at an earlier stage and what percentage of the people living with HIV are still diagnosed at a late stage. Late diagnosis is detrimental to people's health, and those with low CD4 counts are more likely to transmit the virus.

Numerator
1. Numbers of adults living with HIV with an initial CD4 cell count <200 cells/mm3 at the time of diagnosis, and number of children living with HIV, by age, with an initial CD4 cell count or percentage of:

  ▪ Age 5–14 years: 200 cells/mm3 or CD4<15%.

  ▪ Age 36–59 months: 350 cells/mm3 or CD4<15%.

  ▪ Age 12–35 months: 750 cells/mm3 or CD4<20%.

2. Numbers of adults (15 years and older) living with HIV with an initial CD4 cell count <350 cells/mm3 at the time of diagnosis.

Denominator
Total number of people living with HIV diagnosed during the reporting period and with an initial CD4 cell count (or, for children, percentage) recorded.

Calculation
Numerator/denominator

Method of measurement
Based on data from laboratory information systems and from the records of people in treatment. Data can be compiled from health services registries, case report forms or laboratory information systems. Individuals with CD4 count results should only be included if the CD4 test was conducted within one month of the HIV diagnosis date.

Measurement frequency
Annual

Disaggregation
0–14 years (disaggregated by ages 12–35 months, 36–59 months and 5–14 years) for children, and 15 years and older by sex (men and women) for adults.

Explanation of the numerator
Adults living with HIV whose initial CD4 lymphocyte count was less than 200 cells/mm3, **and** adults living with HIV whose initial CD4 lymphocyte count was less than 350 cells/mm3 in the reporting period. Reporting on the number of adults with a CD4 lymphocyte count less than 350 cells/mm3 should include those with a CD4 lymphocyte count less than 200 cells/mm3. Among children, CD4 count thresholds indicating severe immunosuppression vary by age, so additional disaggregation is required.

Explanation of the denominator
Number of people living with HIV who had an initial CD4 lymphocyte count within one month of the time of diagnosis in the reporting period.

Strengths and weaknesses
This indicator may not distinguish between people given a late diagnosis and those who arrived late for care and treatment in a setting where CD4 testing is available, and so accessed CD4 testing later than one month after their initial HIV diagnosis. Differentiating these two situations requires knowing the diagnosis date and the date of the initial CD4 lymphocyte count. Dates differing by more than one month may indicate a delay in being linked to care, although it is possible that late diagnosis and late linkage to care may occur in the same person. Previous HIV testing history and clinical records should be reviewed to the extent possible to exclude counting people who were previously diagnosed at some earlier date and are only seeking a second or confirmatory diagnosis later. Finally, this indicator may not include all individuals diagnosed during the reporting period if there are substantial reporting delays in the diagnosis data or CD4 count test result.

2.5 HIV testing volume and positivity

The number of HIV tests conducted (testing volume) and the percentage of HIV-positive results returned to people (positivity) in the calendar year

What it measures

Trends in the uptake of HIV testing services, including through different modalities, and their effectiveness at identifying people living with HIV.

Rationale

Testing volume and data on positivity are useful for programme monitoring. Knowing the numbers of people tested annually and the modality of testing or uptake of self-tests is critical to commodity forecasting and staff resource planning. Positivity data among those tested who have received a result can help to validate the number of people reported as newly diagnosed through routine reporting systems and estimates of HIV prevalence from survey data. Finally, when disaggregated by age, sex, testing modality and HIV status, these data are useful in assessing the effectiveness of delivering HIV testing services and addressing gaps in various settings, contexts and populations.

In addition to programme monitoring activities, annual testing volumes and positivity rates are inputs into the UNAIDS model that estimates progress towards the first 95 (95% of people living with HIV know their HIV status). This model is used primarily in countries that have national surveys to measure the population's historic testing coverage by HIV serostatus, but weak HIV case reporting systems (see Indicator 2.1).

Numerator

Number of tests conducted where an HIV-positive result was returned to the person (positivity)

Denominator

Number of tests performed where results were received by the person (testing volume)

Calculation

Numerator/denominator

Method of measurement

The numerator and denominator should be collected from HIV testing services programme registers, log books and reporting forms on a quarterly or annual basis. Reported data should be a count of the number of tests conducted where results were returned to a person and not the number of unique persons who tested at least once during the calendar year. For example, if a person who is HIV-positive tests once at a mobile testing van and then again at a clinic during the same calendar year, they should be counted twice in the numerator and twice in the denominator. In an alternative scenario, if a person tests negative at a voluntary counselling and testing (VCT) centre and then positive through provider-initiated testing, she should be reported once in the numerator and twice in the denominator.

Please note that only tests conducted where the results are returned to the person should be counted. Also, a person should only be counted as testing once in the numerator and the denominator, even if up to three different assays are performed to confirm an HIV-positive diagnosis according to the national testing algorithm.

Please separately report numbers of self-test kits procured and distributed in the calendar year (where available). Procured self-test kits refers to the total number of self-test kits purchased (not distributed or used) in a year by the national government, including (but not limited to) donors. Test kits procured via other channels, such as the private sector, should not be counted; rather, they should be detailed in the comments. Self-test kits distributed refers to the total number of individual self-test kits that were distributed in a year; it is not the total number of people self-tested, nor is it the total number of people who received a self-test (as individuals may obtain more than one kit in a year). No sex- or age-disaggregation or information on positivity is required for self-test procurement or distribution data.

Measurement frequency

Annually

Disaggregation

- 0–14 years for children and 15 years and older by sex (men and women) for adults.
- Testing modality (for all populations including Key Population services).
    - Community-level HIV testing services reporting:
        - o Mobile testing (e.g., through vans or temporary testing facilities).
        - o Voluntary counselling and testing centres (not within a health-facility setting).
        - o Other community-based testing.
    - Facility-level testing:
        - o Provider-initiated testing in clinics or emergency facilities.
        - o Antenatal care clinics (including labour and delivery).
        - o Voluntary counselling and testing (within a health-facility setting).
        - o TB clinic (if available)
        - o Family planning clinic.
        - o Other facility-level testing.

Note: If testing volume and positivity cannot be disaggregated by modality, please report overall numbers.

Additional information requested

Please provide information in the comments box about any national testing campaigns or shifts in testing strategies or practices that might explain changes to testing volumes when compared to previous years. People who test positive may seek additional confirmatory testing and people who are HIV-negative may test repeatedly during the year. If data on retesting among HIV-positive or HIV-negative individuals (volumes or rates/proportions) are available, please also provide this in the comments box.

Strengths and weaknesses

Not all countries have unique identifiers or underlying systems to deduplicate first and repeat testing among individuals nor to differentiate by HIV status of the person re-testing. As a result, this indicator is not directly comparable to knowledge of status (as measured in Indicator 2.1).

As HIV information systems evolve, it will be important to be able to disaggregate tests by previous testing history (e.g., people who have never been tested, people who were HIV-negative at their last test, and people who already know their HIV-positive status and are seeking or otherwise requiring confirmatory testing) as well as by the year of previous testing. In future years, this indicator could be extended to request this information so as to better understand testing patterns and capture the valid numbers of new diagnoses to better assess the effectiveness of HIV testing services.

Further information

Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/rest/bitstreams/1274308/retrieve)

2.6 Antiretroviral therapy coverage among people living with HIV in key populations (A–E)

Percentage of the people living with HIV in a key population receiving antiretroviral therapy in the past 12 months

This indicator is divided into five sub-indicators:

A. Antiretroviral therapy coverage among sex workers living with HIV

B. Antiretroviral therapy coverage among gay men and other men who have sex with men living with HIV

C. Antiretroviral therapy coverage among people who inject drugs living with HIV

D. Antiretroviral therapy coverage among transgender people living with HIV

E. Antiretroviral therapy coverage among prisoners living with HIV

What it measures
Progress towards providing antiretroviral therapy to people living with HIV in key populations

Rationale
Antiretroviral therapy has been shown to reduce HIV-related morbidity and mortality among people living with HIV and to reduce the transmission of HIV. People living with HIV in key populations should be able to access mainstream services that provide antiretroviral therapy without fear of facing stigma or discrimination and to be able to receive care from health-care workers who have the clinical knowledge to meet their specific needs. Ideally, all of these mainstream services should meet the standards for becoming sensitized to the need of key populations. Accordingly, antiretroviral therapy coverage is a crucial way of assessing access to mainstream services.

In recent years, the guidelines on eligibility for antiretroviral therapy have changed several times. National guidelines do not always match global guidelines. As a result, antiretroviral therapy coverage has been reported using numerous definitions, including those based on global guidelines, or national guidelines, or both. When guidelines are modified to increase eligibility among people who are living with HIV, coverage estimates will decrease. To avoid multiple antiretroviral therapy coverage values, the number of key population members living with HIV receiving antiretroviral therapy will be presented in relation to the total number of key population members living with HIV.

This indicator will be aligned with the indicator on antiretroviral therapy coverage among all people living with HIV.

Numerator
Number of respondents living with HIV who report receiving antiretroviral therapy in the past 12 months

Denominator
Number of respondents living with HIV

Calculation
Numerator/denominator

Method of measurement
Behavioural surveillance or other special surveys.

Most treatment programmes do not collect behavioural risks in medical charts, so programme data are of limited use.

Measurement frequency
Every two years for behavioural surveys

Annual if special programme data are available

Disaggregation
A, C and E: Sex (female, male and transgender) **D:** gender (transman, transwoman, other)

A-E: Age (<25 and 25+ years)

A-E: Cities and other administrative areas of epidemiologic importance

Additional information requested
If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

This is a new indicator that recognizes the importance of antiretroviral therapy and the need to achieve equity in access to ART. This has not been a standard question in biobehavioural surveys. It is, however, increasingly asked in surveys, including household surveys. Treatment programmes do not collect data on risk behaviour and therefore do not comprise a routine source for this information. Data on treatment distribution permit measurement of the second 95 of the 95–95–95 target and provide information to advocate for equity for treatment access for all key population communities.

It remains unclear how many people will respond accurately to this question in a survey. Additional analysis and research is required to assess the validity of the responses and to improve the elicitation of valid responses in the future.

Further information

Global HIV Strategic Information Working Group. Biobehavioural survey guidelines for populations at risk for HIV. Geneva, Switzerland; (https://apps.who.int/iris/bitstream/handle/10665/258924/9789241513012-eng.pdf).

Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations: supplement to the 2014 consolidated guidelines for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/177992/9789241508995_eng.pdf?sequence=1).

2.7 AIDS mortality

Total number of people who have died from AIDS-related causes per 100 000 population

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What it measures

Impact of HIV prevention, care and treatment programmes

Rationale

Recent efforts to scale up access to life-saving antiretroviral therapy, including the 2016 WHO guidelines that recommend treatment for all, should significantly reduce the number of people dying from AIDS-related causes, if these services are accessible and delivered effectively. The impact of the HIV response should be assessed by monitoring changes in AIDS-related mortality over time. This indicator, modified as the total number of people who have died from AIDS-related causes in the reporting period divided by the population (per 100 000), is also included in the WHO consolidated strategic information guidelines for HIV in the health sector.

Numerator

Number of people dying from AIDS-related causes during the calendar year

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Denominator

Total population regardless of HIV status

Calculation

Numerator/denominator times 100 000

Method of measurement

The number of people dying from AIDS-related causes can be obtained using a variety of measures, including through a vital registration system adjusted for misreporting, as part of a facility- or population-based survey that may include verbal autopsy and through mathematical modelling using such tools as Spectrum. Modelling tools typically use demographic data, HIV prevalence from survey and surveillance, the number of people receiving antiretroviral therapy, HIV incidence and assumptions around survival patterns to estimate the number of people dying. In some instances, data from vital reporting systems and estimates of underreporting and misclassification also may be incorporated into these models to derive estimates of the number of AIDS-related deaths.

Measurement frequency

Annual

Disaggregation

- Sex.
- Age (<5, 5–14 and 15+ years).

Additional information requested

The source of the estimate is requested. Countries providing the number of people dying from AIDS-related causes derived from a source other than Spectrum should provide any accompanying estimates of uncertainty around this number and upload an electronic copy of the report describing how the number was calculated.

Countries should preferably report a modelled estimate rather than one derived from their vital registration system unless this system has been recently evaluated as one of high quality. Users can now opt to use their Spectrum estimate or enter nationally representative population-level data. If Spectrum estimates are chosen, the values will be pulled directly from the software once the national file is finalized.

Strengths and weaknesses

For countries with strong vital registration systems, changes in AIDS-related mortality estimates provide an accurate measure of the impact of prevention, care and treatment programmes. Even in these systems, periodic evaluation is useful to measure delays or underreporting and misclassification of the cause of death.

For countries that do not have strong systems in place, estimates of AIDS-related deaths are an important programme monitoring tool but subject to more uncertainty. In particular, information about survival patterns for those receiving or not receiving antiretroviral therapy is important. Estimates of AIDS-related deaths should be reported along with the ranges of uncertainty. The estimate will only be as reliable as the data entered into the models and the assumptions made in the model.

Further information

Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization, 2020 (https://www.who.int/publications/i/item/consolidated-hiv-strategic-information-guidelines)

Spectrum software. Glastonbury (CT): Avenir Health; 2019 (https://www.avenirhealth.org/software-spectrum.php).

3.1 HIV testing in pregnant women

Percentage of pregnant women with known HIV status

What it measures

Coverage of the first step in the prevention of vertical transmission cascade.[5] High coverage enables early initiation of care and treatment for HIV-positive mothers. The total number of identified HIV-positive women provides the facility-specific number of pregnant women with HIV to start a facility-based prevention of vertical transmission cascade.

Rationale

The risk of vertical transmission can be reduced significantly by: (a) providing antiretroviral medicines—either as lifelong therapy or as prophylaxis—for the mother during pregnancy and delivery; (b) supplying antiretroviral prophylaxis for the infant and antiretroviral medicines for the mother or child during breastfeeding (if applicable); (c) instigating safe delivery practices and safer infant feeding.

Data will be used in the following ways: (a) to track progress towards global and national goals of eliminating vertical transmission; (b) to inform policy and strategic planning; (c) to contribute to advocacy efforts; and (d) to leverage resources for accelerated scale-up. It will help measure trends in coverage of antiretroviral prophylaxis and treatment, and when disaggregated by regimen type, will assess progress in implementing more effective regimens and antiretroviral therapy.

Numerator

Number of pregnant women attending antenatal clinics and/or giving birth at a facility who were tested for HIV during pregnancy, at labour and/or delivery, or those who already knew they were HIV-positive at the first antenatal care visit.

Denominator

Population-based denominator: Number of pregnant women giving birth in the past 12 months.

Programme-based denominator: Number of pregnant women who attended an antenatal clinic or gave birth at a facility in the past 12 months.

Calculation

Numerator/denominator

Method of measurement

Numerator: programme records, such as antenatal care registers or labour and delivery registers. Some people pick up several months of antiretroviral medicine at one visit. If the duration of the medicine picked up covers the last month of the reporting period, these people should still be counted as receiving antiretroviral therapy (as opposed to having stopped treatment).

Population-based denominator: estimates from central statistics office, UN Population Division or vital statistics.

Facility-based denominator: programme records, such as antenatal care registers or labour and delivery registers.

Measurement frequency

Annual or more frequently, depending on a country's monitoring needs

Disaggregation

HIV status/test results:

- Known (positive) HIV infection at antenatal clinic entry.

- Tested HIV-positive at first antenatal care during current pregnancy, labour and/or delivery. This excludes women who already knew their HIV-positive status prior to current pregnancy.

- Tested HIV-negative at first antenatal care during current pregnancy, labour and/or delivery. This should be based on the latest test result in the case of repeat testing.

The sum of the above three counts should equal the number of women tested for HIV. The total identified HIV-positive women should equal the sum of known HIV-positive women at their first antenatal clinic entry plus those who tested HIV-positive at antenatal care during pregnancy, labour and/or delivery.

- Pregnant women who inject drugs.

Additional information requested

Look at trends over time: if disaggregated data are available by region, see whether any lower performing areas can be identified. Review if data are available on the percentage of antenatal care attendees who know their status, including those with previously confirmed HIV status and those tested and the percentage of labour and delivery attendees who know their status.

Strengths and weaknesses

This indicator enables a country to monitor trends in HIV testing among pregnant women. The points at which dropouts occur during the testing and counselling process—and the reasons why they occur—are not captured by this indicator. This indicator does not measure the quality of the testing or counselling. It also does not capture the number of women who received pre-test counselling.

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[5]   In this document, vertical transmission includes transmission to the child that occurs during pregnancy, delivery or breastfeeding. "Vertical transmission" in this document is used as a neutral, non-stigmatising alternative to "mother-to-child" transmission.

Further information

Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis. Second edition. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/bitstream/handle/10665/259517/9789241513272-eng.pdf;jsessionid=015C03A78EC01FA22E13641A3DE9B3E3?sequence=1).

3.2 Early infant diagnosis

Percentage of infants born to women living with HIV receiving a virological test for HIV within two months of birth

What it measures

Progress in the extent to which infants born to women living with HIV are tested within the first two months of life to determine their HIV status and eligibility for antiretroviral therapy disaggregated by test results

Rationale

Infants acquiring HIV during pregnancy, delivery or early postpartum often die before they are recognized as having HIV infection. The World Health Organization (WHO) recommends that national programmes establish the capacity to provide early virological testing of infants for HIV at six weeks or as soon as possible thereafter to guide clinical decision-making at the earliest possible stage. HIV disease progresses rapidly among children; they need to start treatment as early as possible because, without early treatment, almost 50% of children would be dead by the second year.

Numerator

Number of infants who received an HIV test within two months of birth during the reporting period. Infants tested should only be counted once. The numerator should not include infants tested after two months.

Denominator

Number of pregnant women living with HIV giving birth in the past 12 months

Calculation

Numerator/denominator

Method of measurement

For the numerator. Early infant diagnosis testing from laboratories.

For the denominator. Estimation models such as Spectrum or antenatal clinic surveillance surveys in combination with demographic data and appropriate adjustments related to the coverage of antenatal clinic surveys.

Measurement frequency

Annual or more frequently, depending on a country's monitoring needs

Disaggregation

The numerator should be disaggregated by the result: positive, negative, indeterminate or rejected for testing.

Explanation of the numerator

To be collected from the databases held at early infant diagnosis testing laboratories. The numerator should represent the number of infants who received virological testing within two months of birth; it should not represent the number of samples tested at the laboratory. Data should be aggregated from the laboratory databases. Where possible, double counting should be minimized when the data are aggregated to produce national-level data.

The number of infants receiving more than one virological test in the first two months of life is expected to be low. Efforts should be made to include all health facilities operated by public, private and nongovernmental organizations that are providing HIV testing for HIV-exposed infants. Where antenatal care coverage, health facility deliveries and HIV screening in antenatal care and delivery are high and reporting is complete, program data can be used to triangulate with data from either source.

The test results should be reported as positive, negative, indeterminate or rejected for testing by the laboratory. This information should only include the most recent test result for an infant tested in the first two months of life.

Explanation of the denominator

This is a proxy measure for the number of infants born to women living with HIV. Two methods can be used to estimate the denominator:

1. An estimation model, such as Spectrum software, using the output, the number of pregnant women needing services to prevent vertical transmission[5] as a proxy.

2. If Spectrum projections are unavailable, multiplying the total number of women giving birth in the past 12 months (which can be obtained from central statistics office estimates of births or United Nations Population Division estimates) by the most recent national estimate of HIV prevalence for pregnant women (which can be derived from HIV sentinel surveillance in antenatal clinics after appropriate adjustments related to the coverage of antenatal clinic surveys).

To ensure comparability, the Spectrum output will be used for the denominator for global analysis.

Strengths and weaknesses

This indicator allows countries to monitor progress in providing early HIV virological testing to HIV-exposed infants two months or younger, which is critical for appropriate follow-up care and treatment. Limiting the age to two months or younger also eliminates the potential for repeat tests for the same infant, which can lead to double counting. The only three fields needed for this indicator—date of sample collection, age at collection (actual or calculated based on the date of birth) and results—are systematically entered into central early infant diagnosis testing databases at testing laboratories.

Because of the small number of testing laboratories and the electronic format of testing databases, this indicator should not have a heavy collection burden. The data quality of the laboratories is generally high, resulting in a robust indicator. The indicator does not capture the number of children with a definitive diagnosis of HIV infection or measure whether appropriate follow-up services were provided to the child based on interpretation of the test results. It also does not measure the quality of testing or the system in place for testing. A low value of the indicator could, however, signal systemic weaknesses, including poor country-level management of supplies of HIV virological test kits, poor data collection, poor follow-up and mismanagement of testing samples.

Disaggregation by test results should not be used as a proxy for early vertical transmission rates. If early infant diagnosis testing coverage in the first two months of life is low, low positivity rates among the infants tested will not necessarily mean programme success, since this sample does not include infants who were not tested and who likely have higher transmission rates.

Although early virological testing is a critical intervention for identifying infants living with HIV, countries should also strengthen the quality of follow-up of HIV-exposed infants and train health providers to recognize the signs and symptoms of early HIV infection among exposed infants, especially if access to virological testing is limited. Inappropriate management of supplies can negatively affect the value of the indicator and significantly reduce access to HIV testing for the infants born to women living with HIV. Countries should ensure that appropriate systems and tools, especially tools for logistics management information systems, are in place to procure, distribute and manage supplies at the facility, district and central levels.

Additional information

The numerator for this indicator is a subset of the United States Government MER indicator on PMTCT Early Infant Diagnosis (PMTCT_EID). The MER indicator is disaggregated to include the number of children with an HIV outcome between 0 and two months and two and 12 months. The Global AIDS Monitoring indicator described here includes only those diagnosed by two months of age, and it uses a denominator of births to women living with HIV, including those women who were not in the prevention of vertical transmission programme.

Further information

MER indicator reference guide, version 2.4 [Internet]. Washington (DC): United States President's Emergency Plan for AIDS Relief (PEPFAR); 2019 (https://datim.zendesk.com/hc/en-us/articles/360000084446-MER-Indicator-Reference-Guides).

Measuring the impact of national PMTCT programmes: towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive. A short guide on methods. Geneva: World Health Organization; 2012 (http://apps.who.int/iris/bitstream/10665/75478/1/9789241504362_eng.pdf).

3.3 Vertical transmission of HIV

Estimated percentage of children newly infected with HIV in the past 12 months due to vertical transmission[5]

What it measures

When compared with values from previous years, this indicator shows the impact of providing women with antiretroviral medicines and retaining them in care to reduce vertical transmission of HIV.

Rationale

Efforts have been made to increase access to interventions that can significantly reduce vertical transmission of HIV, including treatment regimens and strengthening counselling on infant feeding. The impact of interventions for preventing vertical transmission in reducing the number of children newly infected with HIV through vertical transmission needs to be assessed.

The percentage of children who are living with HIV should decrease as the coverage of interventions for preventing vertical transmission and the use of more effective regimens increase.

Numerator

Estimated number of children newly infected with HIV in the previous 12 months from vertical transmission (Although the denominator is limited to births in the past 12 months, the numerator can include children infected by HIV during the breastfeeding period and thus the birth might have occurred more than 12 months earlier. The indicator is thus actually a ratio and not a true percentage.)

Denominator

Estimated number of births to women living with HIV in the previous 12 months

Calculation

Numerator/denominator

Method of measurement

Ideally, this indicator would be measured through programmes identifying HIV infection in young children. However, these programmes often are not able to identify infections among children of 1) women who seroconvert while they are pregnant or breastfeeding 2) women who do not continue in care during either antenatal or post natal services or 3) those women who never received services. Modelled estimates are used for global reporting in settings where final outcomes of vertical transmission at the population level are not available.

The probability of vertical transmission differs depending on the timing of initiating antiretroviral therapy, the antiretroviral drug regimen received and infant feeding practices. The transmission can be calculated using Spectrum. The Spectrum computer programme uses information on the following:

- The distribution of pregnant women living with HIV who are receiving antiretroviral medicines by the timing of treatment initiation (before conception, early in the pregnancy or late in the pregnancy).
- The proportion of pregnant women retained on antiretroviral medicines at the time of delivery.
- Estimated HIV incidence among pregnant women and breastfeeding women.
- The distribution of women receiving antiretroviral medicines after delivery (postpartum).
- Among women receiving antiretroviral medicines, the percentage whose infants have stopped breastfeeding by age of the child in months (from 0–35 months)
- Among women *not* receiving antiretroviral medicines, the percentage whose infants have stopped breastfeeding by age of the child in months (from 0–35 months)
- Among breastfeeding women receiving antiretroviral medicine, the percentage who drop out each month.
- Estimated incidence among breastfeeding women.
- Probabilities of vertical transmission of HIV based on various categories of antiretroviral medicine regimen and infant feeding practices.
- The estimated number of women living with HIV giving birth by age group.

The summary display for preventing vertical transmission in Spectrum reports the estimated national population-level transmission rate. This variable can also be calculated in Spectrum by dividing the number of children newly infected with HIV through vertical transmission by the number of women who need services for preventing vertical transmission.

Not enough information is available about other HIV transmission routes for children to include such infections in Spectrum. In addition, other modes of transmission are believed to cause a small fraction of the overall number of children acquiring HIV. The Spectrum output variable "new HIV infections for children 0–1 years" is not used because some children older than one year will acquire HIV from breastfeeding.

Global AIDS Monitoring users have the option to use their Spectrum estimate or to enter nationally representative population-level data. If Spectrum estimates are chosen, the values will be pulled directly from the software once the national file is finalized. If programme data are included, report the data based on equal birth cohorts for the numerator and denominator and not by the year of diagnosis.

Measurement frequency

Annually

Disaggregation

None.

Additional information requested

This indicator is different from the United States Government MER indicator on PMTCT Final Outcome (PMTCT_FO), as the MER indicator is a cohort measure that does not capture child infections among women who seroconvert during breastfeeding or those who did not participate in (or who dropped out of) prevention of vertical transmission programmes. The denominator is also different: the MER indicator attempts to estimate the number of women who will seroconvert during breastfeeding.

Strengths and weaknesses

Strengths. Over time, this indicator assesses the ability of programmes to prevent vertical transmission . The modelled estimate is preferred as directly measuring this indicator is very difficult. The modelled estimate overcomes multiple challenges:

1. Following up mother–child pairs is difficult, especially at the national level, because of the lag in reporting and the multiple health facility sites that mother–child pairs can visit for the wide range of services for preventing vertical transmission and child care interventions delivered over a time span.

2. Children (especially those living with HIV) may die before they are tested to determine whether transmission has occurred.

3. A directly measured indicator will not capture women and their children who do not attend programmes, possibly because of high levels of stigma.

4. Most directly measured values will not include women who seroconvert while breastfeeding.

Weaknesses. This indicator is generated from a model that provides estimates of HIV infection among children. The estimated indicator is only as good as the assumptions and data used in the model. In countries where caesarean section is widely practised, the indicator will overestimate vertical transmission. It also relies on programme data that often capture the antiretroviral medicine regimens provided rather than those consumed and could therefore underestimate vertical transmission.

This indicator does not capture efforts to reduce the risk of vertical transmission by reducing the number of reproductive-age women acquiring HIV or by reducing unintended pregnancies among women living with HIV.

In countries in which data are available, facility attendance is high and confirmatory tests are conducted systematically, efforts should be made to monitor the impact by directly assessing the percentage of children living with HIV among those born to mothers living with HIV. All countries should make efforts to monitor the HIV status and survival of children born to women living with HIV, gathered during follow-up health-care visits.

Further information

 Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization, 2020 (https://www.who.int/publications/i/item/consolidated-hiv-strategic-information-guidelines)

3.4 Preventing vertical transmission of HIV

Percentage of pregnant women living with HIV who received antiretroviral medicine to reduce the risk of vertical transmission[5] of HIV

What it measures

Progress in preventing vertical transmission of HIV during pregnancy and delivery by providing antiretroviral medicine.

This indicator allows countries to monitor the coverage of initiation of antiretroviral medicines among pregnant women living with HIV to reduce the risk of transmitting HIV to infants during pregnancy and delivery and breastfeeding. Since the indicator usually measures the antiretroviral medicines dispensed and not those consumed, adherence to the regimen cannot be determined in most cases.

Rationale

Providing antiretroviral medicines to a woman living with HIV—either before conception or during pregnancy and during breastfeeding—can significantly reduce the risk of vertical transmission. This intervention is most effective if antiretroviral medicine is provided before conception and carefully adhered to throughout breastfeeding. . This indicator can be used to: (a) track progress towards global and national goals of eliminating vertical transmission; (b) inform policy and strategic planning; (c) contribute to advocacy efforts; and (d) leverage resources for accelerating scale-up.

Numerator

Number of pregnant women living with HIV who delivered during the past 12 months and received antiretroviral medicines to reduce the risk of vertical transmission of HIV. Global reports summarizing the coverage of antiretroviral medicine for preventing vertical transmission will exclude women who received single-dose nevirapine, since it is considered a suboptimal regimen. However, the country should report the number of women who only received single-dose nevirapine.

This count should include all women who delivered in the past 12 months, regardless of which year they started on antiretroviral medicines.

Denominator

Estimated number of women living with HIV who delivered within the past 12 months

Calculation

Numerator/denominator

Method of measurement

For the numerator. National programme records aggregated from programme monitoring tools, such as patient registries and summary reporting forms.

For the denominator. Estimation models such as Spectrum or antenatal clinic surveillance surveys combined with demographic data and appropriate adjustments related to the coverage of antenatal clinic surveys.

Measurement frequency

Annually or more frequently, depending on a country's monitoring needs

Disaggregation

▪ The numerator should be disaggregated across the regimens described below.

Additional information requested

None.

Explanation of the numerator

The numerator should be disaggregated by the categories below. Each woman should only be counted once in one of the cells:

1. Newly initiated on antiretroviral therapy during the current pregnancy.

2. Already receiving antiretroviral therapy before the current pregnancy.

3. Other (please specify regimen).

Categories	Further clarification	Common examples
The first two options include women receiving lifelong antiretroviral therapy (including Option B+): 1. Newly initiating treatment during the current pregnancy. 2. Already receiving treatment before the pregnancy.	A three-drug regimen intended to provide antiretroviral therapy for life: 1. Number of pregnant women living with HIV identified in the reporting period newly initiating lifelong antiretroviral therapy. 2. Number of pregnant women living with HIV who were already receiving antiretroviral therapy at their first antenatal clinic visit. If a woman initiates lifelong antiretroviral therapy during labour, she would be counted in Category 1. If the number of women receiving antiretroviral therapy is not available by the timing of when they started, the number can be included in the cell entitled "total number of pregnant women receiving lifelong antiretroviral therapy."	Standard national treatment regimen, for example: ▪ TDF + 3TC + EFV.

3. If another regimen that does not include lifelong therapy was provided, please enter the other regimen (using one of the options below) and the number of women receiving that alternative regimen.

Categories	Further clarification	Common examples
Maternal triple antiretroviral medicine prophylaxis (prophylaxis component of World Health Organization (WHO) Option B during pregnancy and delivery)	A three-drug regimen provided for prophylaxis of vertical transmission started during pregnancy—or as late as during labour or delivery—with the intention of stopping at the end of the breastfeeding period (or stopping at delivery, if not breastfeeding). If a woman is receiving triple antiretroviral medicines for the first time at labour or delivery, then she should still be counted in this category if the facility is implementing Option B.	▪ TDF + 3TC + EFV. ▪ AZT + 3TC + EFV. ▪ AZT + 3TC + LPV/r.
Maternal AZT (prophylaxis component of WHO Option A during pregnancy and delivery)	A prophylactic regimen that uses AZT (or another nucleoside reverse-transcriptase inhibitor (NRTI)) started as early as 14 weeks—or as late as during labour or delivery—to prevent HIV transmission. If a woman is receiving antiretroviral medicines for the first time at labour or delivery, then she should still be counted in this category if the facility is implementing Option A.	▪ AZT at any point before labour + intrapartum NVP. ▪ AZT at any point before labour + intrapartum NVP + 7-day postpartum tail of AZT + 3TC.
Single-dose nevirapine to the mother during pregnancy or delivery	▪ Count this if nevirapine is the only regimen provided to a pregnant woman living with HIV during pregnancy, labour or delivery. Do not count as single-dose nevirapine if: ▪ Nevirapine is provided as part of Option A during pregnancy. ▪ A pregnant woman living with HIV initiates Option A, B or B+ at labour and delivery.	▪ Single-dose nevirapine for mother only at onset of labour. ▪ Single-dose nevirapine + 7-day AZT + 3TC tail only. ▪ Single-dose nevirapine for mother at onset of labour and single-dose nevirapine for baby only.

Explanation of the denominator

Two methods can be used to estimate the denominator: an estimation model, such as Spectrum, using the output: the number of pregnant women needing services for preventing vertical transmission. This indicator is calculated as births to women living with HIV

Or, if Spectrum estimates are not available, by multiplying the number of women giving birth in the past 12 months (which can be obtained from estimates of the central statistics office, United Nations Population Division or pregnancy registration systems with complete data) by the most recent national estimate of HIV prevalence among pregnant women (which can be derived from HIV sentinel surveillance in antenatal clinic and appropriate adjustments related to coverage of antenatal clinic surveys).

To ensure comparability, the Spectrum output will be used for the denominator for global analysis.

Strengths and weaknesses

Countries are encouraged to track and report the number of women receiving treatment by the timing of ART initiation so that the impact of antiretroviral medicines on vertical transmission of HIV can be modelled (see indicator 2.2 on MTCT rate). The numerator should be deduplicated to remove women attending multiple clinics over the course of the pregnancy.

Further information

The prevention of vertical transmission is a rapidly evolving programme area, and methods for monitoring coverage of this service are likewise evolving. To access information, please consult the following:

Publications on vertical transmission of HIV. Geneva: World Health Organization; c2020
https://www.who.int/reproductivehealth/congenital-syphilis/emtc-gvac/en/

Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization, 2020 (https://www.who.int/publications/i/item/consolidated-hiv-strategic-information-guidelines)

3.5 Syphilis among pregnant women

Percentage of women accessing antenatal care services who were tested for syphilis, tested positive and were treated

What it measures

A. Percentage of women attending antenatal care services who received syphilis testing.

B. Percentage of women attending antenatal care services who received syphilis testing and who had a positive syphilis serology.

C. Percentage of women attending antenatal care services who had a positive syphilis serology and who were treated adequately.

Rationale

Testing (screening) coverage, the prevalence of syphilis in women attending antenatal care services, and treatment coverage are all key indicators for assessing a country's progress towards eliminating vertical transmission[5] of syphilis. At the country level, these data can be used to identify areas with the greatest need for comprehensive congenital syphilis prevention interventions. At the global level, these data are also used to estimate the perinatal mortality and morbidity caused by syphilis that could be averted with effective programmes to eliminate vertical transmission of syphilis.

A. Testing all pregnant women for syphilis early in pregnancy is important for the pregnant woman's health and that of the foetus. This indicator also contributes to monitoring the quality of antenatal care and services to prevent sexually transmitted infections (including HIV) among pregnant women.

B. The prevalence of syphilis in antenatal care attendees can be used to highlight areas within a country that require additional support, and it may provide early warning of potential changes in HIV and sexually transmitted infection transmission in the general population. The data are also an important source of information for generating national, regional and global incidence and prevalence estimates for syphilis and congenital syphilis.

C. Treating antenatal care attendees who test positive for syphilis is essential for reducing vertical transmission of syphilis.

Numerator

A. Number of women attending antenatal care services who were tested for syphilis.

B. Number of women attending antenatal care services who tested positive for syphilis.

C. Number of women attending antenatal care services with a positive syphilis test who received at least one dose of benzathine penicillin 2.4 million units intramuscularly.

Denominator

A. Number of women attending antenatal care services.

B. Number of women attending antenatal care services who were tested for syphilis.

C. Number of women attending antenatal care services who tested positive for syphilis.

Calculation

Numerator/denominator (for A, B and C, respectively)

Method of measurement

A. All pregnant women should be tested for syphilis at their first antenatal care visit. Ideally, countries will report on testing at every visit (including the first one). Countries unable to distinguish the first visit from testing at any visit should still report data on this indicator, but they should ensure that it is clearly reported as data for any visit. This indicator should be measured annually.

Testing (screening) may be done using either a nontreponemal test (e.g., venereal disease research laboratory [VDRL] or rapid plasma reagin [RPR]) or a treponemal test (e.g., Treponema pallidum haemagglutination assay [TPHA], Treponema pallidum particle agglutination assay [TPPA], enzyme immunoassay or rapid treponemal test). For this indicator, having either type of test (treponemal or nontreponemal) is sufficient, although being tested with both is preferred.

Ideally, national programme records aggregated from health-facility data should be used. However, if such data are not available, data from sentinel surveillance or special studies can be reported. Specify the source and coverage of your data (e.g., national programme data from all 12 provinces) in the comments section.

B. Syphilis positivity can either be a positive treponemal test, a reactive nontreponemal test or a combination of both. It is important to report the testing (screening) algorithm generally used in the country. The type of test is factored into data analysis. For this indicator (intended to measure seropositivity), reporting positivity based on a single test result is acceptable. If both treponemal and nontreponemal test results on an individual person are available, then syphilis positivity should be defined as having positive results in both tests.

The following sources of data may be used: national programme records aggregated from health-facility data, sentinel surveillance or special surveys. In the comments section, specify the source and coverage of your data: for example, sentinel surveillance of all antenatal care attendees in two of 10 provinces.

Countries are encouraged to use unique identifiers or registries that separate first and subsequent tests to avoid double counting and that reflect the true prevalence or incidence of syphilis rather than test positivity. Please specify the source and coverage of your data in the comments section.

C. Pregnant women with positive syphilis serology should be treated with benzathine penicillin, ideally on the same day as they are tested in order to prevent vertical transmission. For the purposes of this indicator, documentation of a single dose of penicillin is sufficient. Treatment of syphilis in pregnant women should be based on national treatment guidelines. Knowledge of treatment policies and practices should be used to interpret trends in treatment.

Please specify the source and coverage of your data in the comments section.

Measurement frequency
Annual

Disaggregation
- Tested at any visit, tested at first visit.
- Age (15–24 and 25+ years).

Additional information requested
Please document in the comments section the tests or algorithm used to define positivity among pregnant women and if this is the same across the country, or if it has changed since the last Global AIDS Monitoring report.

Please comment on whether the data you are providing are deemed to be representative of the entire country. If there are subnational data available for A, B or C, please provide the disaggregation by administrative area, city or site in the space provided. You may also upload an Excel spreadsheet of these data instead of entering them in the online tool. Submit the digital version of any available survey reports using the upload tool.

If data are available on the stage of pregnancy when a woman receives testing, and on the time between testing and treatment, please provide them.

Strengths and weaknesses
Programmes that test pregnant women separately for syphilis and HIV should collaborate to align and enhance the effectiveness of their work. Preventing congenital syphilis requires testing early in pregnancy, since stillbirth may occur in the second trimester. Knowing that women are being tested late in pregnancy indicates that women are not accessing antenatal care early or that testing is not occurring early in pregnancy.

Knowledge of testing practices within the country (such as the proportion of treponemal versus nontreponemal testing used) and any changes over time are key to interpreting disease trends.

Further information
National-level monitoring of the achievement of universal access to reproductive health: conceptual and practical considerations and related indicators. Geneva: World Health Organization; 2008 (http://www.who.int/reproductivehealth/publications/monitoring/9789241596831/en).

Methods for surveillance and monitoring of congenital syphilis elimination within existing systems. Geneva: World Health Organization; 2011 (http://www.who.int/reproductivehealth/publications/rtis/9789241503020/en).

Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis. Geneva: World Health Organization; 2017 (http://apps.who.int/iris/handle/10665/112858).

WHO guidelines on syphilis screening and treatment of pregnant women. Geneva: World Health Organization; 2017 (https://www.who.int/publications/i/item/9789241550093).

Dual HIV/syphilis rapid diagnostic tests can be used as the first test in antenatal test. Geneva: World Health Organization; 2019 (https://www.who.int/publications/i/item/WHO-CDS-HIV-19.38).

Consolidated HIV strategic information guidelines. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240000735).

3.6 Congenital syphilis rate (live births and stillbirth)

Reported congenital syphilis cases per 100 000 live births in the 12-month reporting period

What it measures

Progress in eliminating vertical transmission[5] of syphilis

Rationale

Untreated syphilis infection in pregnancy can result in stillbirth, neonatal death and congenital disease (collectively defined as "congenital syphilis"). Untreated syphilis infection in pregnancy also increases the risk of vertical transmission of HIV. Given the high efficacy, appropriate simplicity and low cost of syphilis testing and treatment, global and regional initiatives to eliminate the vertical transmission of syphilis are well established. The rate of congenital syphilis is a measure of national surveillance and the impact of programmatic interventions to eliminate vertical transmission of syphilis.

Numerator

Number of reported congenital syphilis cases (live births and stillbirths) in the past 12 months

Denominator

Number of live births in the past 12 months

Calculation

Numerator/denominator

Method of measurement

Routine health information systems.

Measurement frequency

Annual

Disaggregation

None

Additional information requested

It is important to indicate in the comment section the case definition of congenital syphilis used in your country and to highlight any major differences between the national case definition and the global surveillance case definition (see page 13 of the World Health Organization [WHO] *Global guidance on criteria and processes for validation: elimination of vertical transmission of HIV and syphilis*, available at https://www.who.int/reproductivehealth/publications/emtct-hiv-syphilis/en/).

In particular, countries should note whether or not their national case definition counts stillbirths.

Please comment on the extent to which the data are deemed representative of the national population. If a country is unable to report on the denominator, WHO will use the denominator from the United Nations Population Division.

If there are subnational data available, please provide the disaggregation by administrative area or city in the space provided. You may also upload an Excel spreadsheet of these data instead of entering them in the online tool.

Strengths and weaknesses

Diagnosing congenital syphilis is most reliable when specific diagnostic tests are used, but these are unfortunately seldom available. In most countries, therefore, diagnosis relies on clinical history of maternal testing and treatment and clinical examination of the infant, which makes surveillance challenging. Although WHO has a global case definition for surveillance purposes, the actual case definition may vary between and within countries and regions.

Given the difficulties in diagnosing congenital syphilis—and depending on the case definition used—underreporting and overreporting can be a problem. The likely magnitude of such reporting errors should always be considered when looking at rates of congenital syphilis over time.

Further information

Methods for surveillance and monitoring of congenital syphilis elimination within existing systems. Geneva: World Health Organization; 2011 (https://extranet.who.int/iris/restricted/handle/10665/44790).

Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis. Geneva: World Health Organization; 2017 (https://www.who.int/reproductivehealth/publications/emtct-hiv-syphilis/en/).

3.7 Hepatitis B virus among pregnant women attending antenatal care services

Proportion of women attending antenatal care services who were tested for hepatitis B virus (HBV), found to be living with HBV, assessed for treatment eligibility and treated for HBV

What it measures

A. Percentage of women attending antenatal care services who were tested for HBV surface antigen (HBsAg).

B. Percentage of women attending antenatal care services who were tested for HBsAg and had a positive HBsAg test.

C. Percentage of women attending antenatal care services with a positive HBsAg test who receive additional testing for HBV DNA or, where this is not available, HBV envelope antigen (HBeAg).

D. Percentage of eligible women attending antenatal care services who were treated according to national policy, in line with World Health Organization (WHO) guidelines.

Rationale

A. Testing pregnant women for HBV in pregnancy is important for their own health, and it is also the first step in the prevention of mother-to-child transmission of HBV. Knowing the testing coverage contributes to quality assessment across the full scope of antenatal care services. This indicator also monitors programmatic targets used for validation in countries with a targeted HBV vaccination birth dose policy.

B. HBsAg positivity rate in antenatal care attendees can be used to monitor the prevalence of HBV in the population and give an indication of the HBV burden in pregnant women.

C. Additional testing for different HBV markers can identify women who are eligible for treatment where there is an increased risk of mother-to-child transmission of HBV that necessitates extra interventions.

D. Not all pregnant women who test positive for HBsAg are eligible for treatment to reduce the risk for mother-to-child transmission of HBV. Treatment coverage is a further measure of sustained service quality throughout antenatal care. This indicator also monitors programmatic targets used for validation in countries with a targeted HBV vaccination birth dose policy.

Numerator

A. Number of pregnant women attending antenatal care services who were tested for HBsAg.

B. Number of pregnant women attending antenatal care services who tested positive for HBsAg.

C. Number of pregnant women attending antenatal care services with a positive HBsAg who then received HBV DNA testing and/or HBeAg.

D. Number of pregnant women attending antenatal care services who met eligibility criteria and received antiviral treatment.

Denominator

A. Number of pregnant women attending antenatal care services.

B. Number of pregnant women attending antenatal care services who were tested for HBsAg.

C. Number of pregnant women attending antenatal care services who tested positive for HBsAg.

D. Number of pregnant women attending antenatal care services who were eligible for antiviral treatment.

Calculation

Numerator/denominator

Method of measurement

A. Ideally, national programme records aggregated from health-facility data should be used. However, if such data are not available, data from sentinel surveillance or special studies can be reported. In this case, please give the source and coverage of your data, and provide a comment on how far they are thought to be representative of the national situation.

B. The following sources of data may be used: national programme records aggregated from health-facility data, sentinel surveillance or special surveys that use serological tests. In the comments section, specify the source and coverage of your data: for example, sentinel surveillance of all antenatal care attendees in two of 10 provinces.

C. Ideally, national programme records aggregated from health-facility data should be used. However, if such data are not available, data from sentinel surveillance or special studies can be reported. In this case, please give the source and coverage of your data, and make a comment on how far they are thought to be representative of the national situation.

D. Not all pregnant women who are positive for HBsAg are eligible for treatment. Treatment eligibility is based on available supplementary tests (see the resources under "Further information"). Thus, treatment coverage is based on the number of pregnant women eligible for this treatment.

Measurement frequency

Data should be recorded daily, and reported quarterly to the national or subnational level. They should also be consolidated annually and reported to WHO.

Disaggregation
Age (15–24 and 25+ years)

Strengths and weaknesses
High indicator values indicate well-integrated services for antenatal care and the prevention of mother-to-child transmission of HBV.

Low indicator values suggest low uptake, availability or integration of testing and follow-up, but they do not provide an indication of where the problem lies.

Programme data will not provide information on key population access to services.

Specific points for the sub-indicators

A. Programmes should align antenatal testing for HBV, syphilis and HIV to enhance the effectiveness of their work.

B. Data on HBsAg positivity among pregnant women are not readily available in many of the most affected countries through routine health-system reporting. Knowledge of testing practices within the country should be used to interpret and compare disease trends.

C. Tests to identify eligibility for treatment and risk of mother-to-child transmission of HBV among antenatal care attendees are not always available or routinely monitored in health facilities.

D. Evaluating treatment coverage depends on the appropriate use of eligibility criteria.

Additional information requested
As per "Method of measurement" (above), please comment on whether the data you are providing are routine programme data deemed to be representative of the entire country.

Further information
Guidelines for the prevention, care and treatment of persons with chronic hepatitis B infection. Geneva: World Health Organization; 2015 (https://www.who.int/publications/i/item/policy-brief-prevention-care-treatment-persons-chronic-hep-b-WHO-HIV-2015-5).

Prevention of mother-to-child transmission of hepatitis B virus: guidelines on antiviral prophylaxis in pregnancy. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/bitstream/handle/10665/333391/9789240002708-eng.pdf?sequence=1&isAllowed=y).

4.1 Physical and/or sexual violence experienced by key populations (A–D)

Percentage of people in a key population who report having experienced physical and/or sexual violence in the last 12 months

This indicator is divided into four sub-indicators:

A. Experience of physical and/or sexual violence among sex workers.

B. Experience of physical and/or sexual violence among gay men and other men who have sex with men.

C. Experience of physical and/or sexual violence among people who inject drugs.

D. Experience of physical and/or sexual violence among transgender people.

What it measures
Progress towards reducing physical and sexual violence among key populations

Rationale
Globally, high rates of HIV infection among key populations—including sex workers, gay men and other men who have sex with men, people who inject drugs and transgender people—have brought into sharp focus the problem of gender-based violence. There is growing recognition that deep-rooted, pervasive gender inequalities, reflected in gender-based violence, shape their risk of and vulnerability to HIV infection.

Violence and HIV have been linked through direct and indirect pathways, and studies in a range of countries indicate that many sex workers, gay men and other men who have sex with men, people who inject drugs and transgender people have experienced violence in some form or another at some point in their lives. Violence has also been demonstrated to impede HIV prevention, care and treatment services among key populations.

Numerator
Number of people in a key population group (sex workers, gay men and other men who have sex with men, people who inject drugs or transgender people) who reported that either of the incidents happened to them at least once in the last 12 months

Denominator
Total number of respondents from a key population group

Calculation
Numerator/denominator

Method of measurement
Behavioural surveillance or other special surveys. Indicators A–D are constructed from responses to the following questions among respondents who report belonging to a key population group (i.e., sex workers, gay men and other men who have sex with men, people who inject drugs and transgender people).

- In the last 12 months, how many times has anyone physically hurt you, such as hit or choked you or threatened you with a knife or other weapon? (this has not happened in the last 12 months, once, 2–5 times, 6–10 times, 10 or more times, don't know, refuse to answer)

and/or

- In the last 12 months, how many times has someone tricked you, lied to you or threatened you in order to make you have sex when you didn't want to? (this has not happened in the last 12 months, once, 2–5 times, 6–10 times, 10 or more times, don't know, refuse to answer)

Measurement frequency
Every two years

Disaggregation
- **A, B, C, D:** age (<25 years, 25+years).
- **A and C:** gender (male, female, transgender)
- **D:** gender: transman, transwoman, other.

Additional information requested
Submit the digital version of any available survey reports using the upload tool. The report submitted with this indicator should include information on the sample size, quality and reliability of the data, and any related issues.

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided.

Strengths and weaknesses

These indicators directly measure the experience of physical and/or sexual violence among key populations (i.e., sex workers, gay men and other men who have sex with men, people who inject drugs and transgender people). The indicators are calculated from responses to two questions. The questions were developed by technical experts based on previously validated measures of violence among key populations. Changes in the indicator should be interpreted as follows: an increase in the prevalence indicates a rise in physical and/or sexual violence among key populations, signaling the need for mitigating actions, whereas a decrease in the prevalence indicates progress towards reducing violence against key populations.

Respondent-driven sampling (RDS) is used to implement integrated biobehavioural surveys. This sampling methodology allows researchers to access, in a systematic way, members of typically hard-to-reach populations who may not otherwise be accessible. Because RDS is a probability sampling method, researchers are able to provide unbiased population estimates and measure the precision of those estimates. RDS can be especially successful at rapid recruitment in dense urban environments, but in contexts where the hard-to-reach populations are not well-networked—or in contexts where the stigma associated with some key populations is severe—recruitment rates using RDS may be unpredictable.

Other disadvantages to using RDS relate to the difficulties that may arise when analyzing collected data. For instance, since RDS must take into account weighting for network size and recruitment patterns, the statistical strength of the sample as it applies to the target population decreases if participants only recruit people who share the same characteristics as themselves.

Further information

Buller AM, Devries KM, Howard LM, Bacchus LJ. Associations between intimate partner violence and health among men who have sex with men: a systematic review and meta-analysis. PLoS Med. 2014 (Mar);11(3):e1001609.

Bhattacharjee P, Morales G, Kilonzo T, Dayton R, Musundi R, Mbole J et al. Can a national government implement a violence prevention and response strategy for key populations in a criminalized setting? A case study from Kenya. J Intl AIDS Soc. 2018. 21(S5):e25122.

Deering KN, Amin A, Shoveller J, Nesbitt A, Garcia-Moreno C, Duff P et al. A systematic review of the correlates of violence against sex workers. Am J Public Health. 2014 (May);104(5):e42-e54.

For more on the methods, including RDS, and the survey instruments for the integrated biobehavioural survey, see:
https://www.who.int/publications/i/item/978-92-4-151301-2

4.2 Attitudes towards violence against women

The percentage of women and men aged 15 to 49 years who agree that a husband is justified in hitting or beating his wife for specific reasons

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What it measures
Progress towards achieving gender equality

Rationale
Gender inequality continues to stand in the way of global goals to end AIDS by 2030. Inequitable gender norms that confine women and men to specific roles in society—together with gender disparities in education and employment—greatly limit HIV prevention strategies among women, girls, and gender and sexual minorities. Fear, experiences of violence and power imbalances in relationships also increase vulnerability to HIV among these groups, limiting their access to HIV services and reducing their adherence to HIV prevention or treatment technologies. This leaves them disproportionately affected by HIV. Scaling up programmes to increase gender equity and intensifying efforts to achieve gender equality is therefore critical for ending AIDS as a global public health threat by 2030.

Numerator
Number of respondents who agree with at least one of the statements

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Denominator
Total number of respondents

Calculation
Numerator/denominator

Method of measurement
Population-based surveys. The indicator is constructed from responses to the following question among respondents:

In your opinion, is a husband justified in hitting or beating his wife in the following situations?

a. If she goes out without telling him? (yes, no, don't know)

b. If she neglects the children? (yes, no, don't know)

c. If she argues with him? (yes, no, don't know)

d. If she refuses to have sex with him? (yes, no, don't know)

e. If she burns the food? (yes, no, don't know)

The numerator included respondents who expressed agreement with one or more of the situations.

Measurement frequency
Every 3-5 years

Disaggregation
- Age (15–19, 20–24, 25–49 years).
- Gender (male, female).

Additional information requested
None

Strengths and weaknesses
This indicator indirectly assesses inequitable gender norms, which have been associated with a higher risk of HIV infection and violence. The indicator is calculated from responses to a validated question that has been asked for many years in population-based surveys. This indicator will be generalizable to adults within a given country, as it is based on data from a random sample of the general population. Changes in the indicator should be interpreted as follows: an increase in the prevalence indicates a rise in harmful gender norms that may indicate a widening of gender inequalities in a country, signaling the need for mitigating actions, whereas a decrease in the prevalence indicates progress towards achieving gender equality.

The indicator only examines one aspect of inequitable norms: attitudes about the appropriateness of physical abuse in marital relationships. It does not capture other inequitable gender norms among men and women (e.g., power in the relationship, control of financial resources and so on), nor does it capture inequitable norms towards sexual and gender minorities.

The list of reasons and/or wording of the reasons that justify hitting a wife may vary slightly between specific country surveys in order to better reflect the country context. In some countries, the questions are only asked of married women or married men.

Further information

Asaolu I, Alaofè H, Gunn JKL, Adu A, Monroy A, Ehiri J et al. Measuring women's empowerment in sub-Saharan Africa: exploratory and confirmatory factor analyses of the Demographic and Health Surveys. Front Psychol. 2018;9:994.

Das M, Ghosh S, Miller E, O'Connor B, Verma R. Engaging coaches and athletes in fostering gender equity: findings from the Parivartan program in Mumbai, India. New Dehli; 2012.

Hanmer L, Klugman J. Exploring women's agency and empowerment in developing countries: where do we stand? Feminist Economics. 2016;22(1):237-63.

Jennings L, Na M, Cherewick M, Hindin M, Mullany B, Ahmed S. Women's empowerment and male involvement in antenatal care: analyses of Demographic and Health Surveys (DHS) in selected African countries. BMC Pregnancy Childbirth. 2014;14(1):297.

Jewkes R, Nduna M, Levin J, Jama N, Dunkle K, Puren A et al. Impact of Stepping Stones on incidence of HIV and HSV-2 and sexual behaviour in rural South Africa: cluster randomised controlled trial. BMJ. 2008;337.

Kishor S, Subaiya L. Understanding women's empowerment: a comparative analysis of Demographic and Health Surveys (DHS) data. DHS Comparative Reports. No. 20. Calverton (MD): Macro International Inc; 2008 (https://dhsprogram.com/publications/publication-cr20-comparative-reports.cfm).

Pulerwitz J, Gottert A, Kahn K, Haberland N, Julien A, Selin A et al. Gender norms and HIV testing/treatment uptake: evidence from a large population-based sample in South Africa. AIDS Behav. 2019;23(Suppl 2):162-71.

For more on the methods and survey instruments for the Demographic and Health Survey and AIDS Indicator Survey, see: http://dhsprogram.com

6.1 Discriminatory attitudes towards people living with HIV

Percentage of women and men 15–49 years old who report discriminatory attitudes towards people living with HIV

What it measures

Progress towards reducing discriminatory attitudes and support for discriminatory policies

Rationale

Discrimination is a human rights violation prohibited by international human rights law and most national constitutions. Discrimination in the context of HIV refers to unfair or unjust treatment (an act or an omission) of an individual based on his or her real or perceived HIV status. Discrimination exacerbates risks and deprives people of their rights and entitlements, fueling the HIV epidemic. This indicator does not directly measure discrimination but rather measures discriminatory attitudes that may result in discriminatory acts (or omissions). One item in the indicator measures the potential support by respondents for discrimination that takes place at an institution and the other measures social distancing or behavioural expressions of prejudice. The composite indicator can be monitored as a measure of a key manifestation of HIV-related stigma and the potential for HIV-related discrimination within the general population. This indicator could provide further understanding and improve interventions in HIV discrimination by: showing change over time in the percentage of people with discriminatory attitudes; allowing comparisons between national, provincial, state and more local administrations; and indicating priority areas for action.

Numerator

Number of respondents (15–49 years old) who respond no to either of the two questions

Denominator

Number of all respondents (15–49 years old) who have heard of HIV

Calculation

Numerator/denominator

Method of measurement

Population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey). This indicator is constructed from responses to the following questions in a general population survey from respondents who have heard of HIV.

- Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV? (yes, no, don't know/not sure/it depends)
- Do you think that children living with HIV should be able to attend school with children who are HIV negative? (yes, no, don't know/not sure/it depends)

Measurement frequency

Every 3–5 years

Disaggregation

- Age (15–19, 20–24 and 25–49 years)
- Gender (male, female)
- Responses for each question (based on the same denominator) are required as well as the consolidated response for the composite indicator

Explanation of the numerator

The respondents who have never heard of HIV and AIDS should be excluded from the numerator and denominator. Participants who respond don't know/not sure/it depends and those who refuse to answer should also be excluded.

Yes and no responses to each question may not add up to 100% if any participants respond "don't know" or values are missing. Calculating the percentage of people responding no to this question by subtracting the percentage of yes responses from 100% would therefore be inaccurate.

Strengths and weaknesses

This indicator directly measures discriminatory attitudes and support for discriminatory policies.

The question about buying vegetables is virtually identical to one used in a Demographic and Health Survey for monitoring "accepting attitudes" towards people living with HIV, enabling continued monitoring of trends. This question, however, focuses on "no" (discriminatory attitudes) rather than "yes" (accepting attitudes) responses, improving the previous measures for the "accepting attitudes" indicator, since it is applicable in settings with both high and low HIV prevalence and in high-, middle- and low-income countries and is relevant across a wide cultural range. Individual measures and the composite indicator do not rely on the respondent having observed overt acts of discrimination against people living with HIV, which are rare and difficult to characterize and quantify in many contexts. Rather, the individual measures and the composite indicator assess an individual's attitudes, which may more directly influence behaviour.

The recommended questions assess agreement with hypothetical situations rather than measuring events of discrimination witnessed. Social desirability bias may therefore occur, leading to underreporting of discriminatory attitudes. There is no mechanism for examining the frequency with which discrimination occurs or its severity.

Ideally, in addition to conducting surveys that measure the prevalence of discriminatory attitudes in a community, qualitative data should be collected to inform about the origins of discrimination. It would also be advisable to routinely collect data from people living with HIV on their experiences of stigma and discrimination via the People Living with HIV Stigma Index process (www.stigmaindex.org) and to compare the findings with the data derived from the discriminatory attitudes indicator.

Further information

Stangl A, Brady L, Fritz K. Technical brief: measuring HIV stigma and discrimination. STRIVE. Washington DC and London: International Center for Research on Women and London School of Hygiene and Tropical Medicine; 2012 (http://strive.lshtm.ac.uk/system/files/attachments/STRIVE_stigma%20brief-A4.pdf).

Stangl A, Lloyd JK, Brady LM, Holland CE, Baral S. A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? J Int AIDS Soc. 2013;16(3 Suppl. 2) (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3833106/).

Thematic segment: non-discrimination. Background note. In: Thirty-first meeting of the UNAIDS Programme Coordinating Board, Geneva, 11–13 December 2012. Geneva: UNAIDS; 2012 (http://www.unaids.org/en/media/unaids/contentassets/documents/pcb/2012/20121111_PCB%2031_ Non%20Discrimination_final_newcoverpage_en.pdf).

For more on the methods and survey instruments for the Demographic and Health Survey and AIDS Indicator Survey: http://dhsprogram.com .

This indicator provides an important measure of prevalence of discriminatory attitudes towards people living with HIV. More completely assessing progress towards eliminating HIV-related stigma and discrimination and the success or failure of efforts to reduce stigma requires measuring other domains of stigma and discrimination.

6.2 Internalized stigma reported by people living with HIV

Percentage of people living with HIV who report internalized stigma

What it measures

Progress towards reducing internalized, also known as self-, stigma among people living with HIV

Rationale

Internalized stigma, where people living with HIV cognitively or emotionally absorb negative messages or stereotypes about HIV and then apply these negative feelings to themselves, has been linked with the refusal to accept antiretroviral therapy among newly diagnosed people living with HIV. Internalized stigma also impedes antiretroviral therapy adherence among people living with HIV by compromising social support and adaptive coping, and it has been linked to lower viral suppression among people living with HIV who are taking antiretroviral therapy.

This indicator can be monitored as a measure of a key manifestation of HIV-related stigma among people living with HIV.

Numerator

Source: Population-based survey

Number of people living with HIV who report receiving a positive HIV test result and agreed with the statement

Or

Source: People Living with HIV Stigma Index

Number of respondents who agreed with the statement

Denominator

Source: Population-based survey

Number of respondents who report receiving a positive HIV test result

Or

Source: People Living with HIV Stigma Index

Number of all respondents

Calculation

Numerator/denominator

Method of measurement

Population-based surveys. This indicator is constructed from responses to the following question among respondents who report receiving a positive HIV test result.

- I have felt ashamed because of my HIV status (agree/disagree).

People Living with HIV Stigma Index study. This indicator is constructed from responses to the following question among respondents.

- I am ashamed that I am HIV-positive (agree/disagree/prefer not to answer).

Measurement frequency

Population-based surveys: every 3-5 years.

People Living with HIV Stigma Index study: every 2-3 years.

Disaggregation

- Age (15–19, 20–24, 25–49, and 50+). Data from People Living with HIV Stigma Index are from respondents aged 18 years and older.
- Gender (male, female, transgender, other, prefer not to say). The last three options are only available for data from People Living with HIV Stigma Index Version 2.0.
- Key population (gay men and other men who have sex with men, sex workers, transgender people, people who use drugs).

Additional information requested

None

Strengths and weaknesses

This indicator directly measures internalized stigma, an important manifestation of stigma that has been demonstrated to impede HIV care and treatment among people living with HIV. It is calculated from responses to a single question, which assesses internalized stigma among respondents living with HIV. The question is drawn from a validated measure of internalized stigma.

Changes in the indicator should be interpreted as follows: an increase in the prevalence indicates an increase in internalized stigma and a need for mitigating actions, whereas a decrease in the prevalence indicates progress towards and a reduction in internalized stigma.

Using population-based survey data to construct this indicator will enhance comparison across countries and contexts, as the indicator will be based on data from people who self-report living with HIV drawn from a random sample of the general public. This reduces potential response and selection biases that are possible when using a snowball sampling approach, as is done with the People Living with HIV Stigma Index. However, in countries where HIV prevalence is low, or where HIV stigma is very high, population-based surveys may not achieve large sample sizes of self-reported people living with HIV. In these instances, targeted studies like the People Living with HIV Stigma Index may be more appropriate.

Typically, internalized stigma is captured with a composite indicator composed of agreement with one of at least three items. As this indicator is based on responses to only one question, it is possible that internalized stigma may be underestimated, but the single item recommended to construct this indicator had the highest level of agreement of the three items previously validated together.

Further information

Hargreaves J, Pliakas T, Hoddinott G, Mainga T, Mubekapi-Musadaidzwa C, Donnell D et al. HIV stigma and viral suppression among people living with HIV in the context of universal test and treat: analysis of data from the HPTN 071 (PopART) trial in Zambia and South Africa. J Acquir Immune Defic Syndr. 2020;85(5):561-570 (https://pubmed.ncbi.nlm.nih.gov/32991336/).

Stangl AL, Lilleston P, Mathema H, Pliakas T, Krishnaratne S, Sievwright K et al. Development of parallel measures to assess HIV stigma and discrimination among people living with HIV, community members and health workers in the HPTN 071 (PopART) trial in Zambia and South Africa. J Int AIDS Soc. 2019;22(12):e25421 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6912047/).

For more on the methods and survey instruments for the Demographic and Health Survey and the AIDS Indicator Survey, see: http://dhsprogram.com

For more on the methods and survey instrument for the People Living with HIV Stigma Index, see: https://www.stigmaindex.org/

6.3 Stigma and discrimination experienced by people living with HIV in community settings

Percentage of people living with HIV who report experienced stigma and discrimination in the general community in the last 12 months

What it measures
Progress towards reducing experiences of stigma and discrimination among people living with HIV in community settings

Rationale
Stigma is a negative stereoptype based on distinguishing characteristics, such as behaviour, gender or health status. It is a well-documented barrier to the HIV care continuum, creating gaps across the prevention and treatment cascades. HIV stigma results from a range of drivers and facilitators, including negative and judgmental attitudes towards people living with HIV, shame of an HIV-positive status, and social, cultural and gender norms. These manifest in a range of stigmatizing practices and experiences, including discrimination, that deny people living with HIV full social acceptance. This consequently deters them from accessing essential services and fueling social inequalities. Reducing HIV stigma and discrimination experienced by people living with HIV is critical for increasing uptake of and adherence to antiretroviral therapy and increasing viral suppression, all of which will improve health outcomes for people living with HIV.

Previous research suggests that it is import to measure community stigma separately from stigma experienced in health-care settings. This is due to the differing impacts of stigma experienced in these settings and the different programmatic responses needed to address them.

Numerator
Source: Population-based survey

- Number of people living with HIV who report receiving a positive HIV test result and who agreed that one or more of the three experiences happened to them because of their HIV status in the last 12 months.

Or

Source: People Living with HIV Stigma Index

- Number of respondents living with HIV who agreed that one or more of the eight experiences happened to them because of their HIV status in the last 12 months.

Denominator
Source: Population-based survey

- Number of respondents who report receiving a positive HIV test result.

Or

Source: People Living with HIV Stigma Index

- Number of all respondents.

Calculation
Numerator/denominator

Method of measurement
From population-based surveys: this indicator is constructed from responses to the following questions among respondents who report receiving a positive HIV test result.

- Please tell me if the following things have happened to you, or if you think they have happened to you, because of your HIV status in the last 12 months:
    - People have talked badly about me because of my HIV status (yes/no).
    - Someone else disclosed my HIV status without my permission (yes/no).
    - I have been verbally insulted, harassed, or threatened because of my HIV status (yes/no).

Or

From the People Living with HIV Stigma Index: this indicator can also be constructed from responses to the following questions among all respondents.

- Thinking about the last 12 months:
    - Have you felt excluded from social gatherings or activities (e.g., weddings, funerals, parties, clubs) because of your HIV status? (yes, no, don't know, prefer not to answer)
    - Have you felt excluded from religious activities or places of worship because of your HIV status? (yes, no, don't know, prefer not to answer)
    - Have you felt excluded from family activities because of your HIV status? (yes, no, don't know, prefer not to answer)
    - Have you felt that family members have made discriminatory remarks or gossiped about you because of your HIV status? (yes, no, don't know, prefer not to answer)
    - Has someone verbally harassed you (e.g., yelled, scolded or was otherwise verbally abusive) because of your HIV status? (yes, no, don't know, prefer not to answer)
    - Has someone physically harassed you (e.g., pushed, hit or was otherwise physically abusive) because of your HIV status? (yes, no, don't know, prefer not to answer)
    - Have you been refused employment or a work opportunity because of your HIV status? (yes, no, don't know, prefer not to answer)
    - Have you lost a source of income or job because of your HIV status? (yes, no, don't know, prefer not to answer)

Measurement frequency
Population-based surveys: every 3-5 years.

People Living with HIV Stigma Index study: every 2-3 years.

Disaggregation
- Age (15–19, 20–24, 25–49 and 50+ years). Data from People Living with HIV Stigma Index are from respondents aged 18 years and older.
- Gender (male, female, transgender, other, prefer not to say). The last three options are only available for data from People Living with HIV Stigma Index Version 2.0.
- Key population (gay men and other men who have sex with men, sex workers, transgender people, people who use drugs).

Additional information requested
None

Strengths and weaknesses
This indicator directly measures experienced stigma and discrimination in the community setting, an important manifestation of stigma that has been demonstrated to impede HIV care and treatment among people living with HIV.

This indicator is calculated from responses to three questions collected in population-based surveys. The questions are drawn from a validated measure of experienced stigma and discrimination. The indicator can also be constructed from eight questions included in the People Living with HIV Stigma Index 2.0. The alternative questions capture a broader range of stigmatizing experiences, use slightly different phrasing and have different response categories. However, they were recommended for inclusion in the People Living with HIV Stigma Index 2.0 by technical experts and should provide a good indication of the level of experienced stigma and discrimination in the absence of population-level data.

Changes in the indicator should be interpreted as follows: an increase in the percentage indicates an increase in experienced stigma and discrimination among people living with HIV in a community setting and the need for mitigating action, whereas a decrease in the percentage indicates progress and a reduction in experienced stigma and discrimination among people living with HIV.

Using population-based data to construct this indicator will enhance comparison across countries and contexts, as the indicator will be based on data from people who self-report living with HIV drawn from a random sample of the general public. This reduces potential response and selection biases that are possible when using a snowball sampling approach, as is done with the People Living with HIV Stigma Index 2.0. Selection bias is still a possibility, though, as the experiences of people living with HIV who are willing to self-report their HIV status in population-based surveys may be significantly different from those who choose not to self-report. In countries where HIV prevalence is low, or where HIV stigma is very high, population-based surveys may not achieve large sample sizes of self-reported people living with HIV. In these instances, targeted studies like the People Living with HIV Stigma Index 2.0 may be more appropriate.

The questions about experiences of stigma in the population-based survey focus mainly on verbal abuse and unwanted disclosure. Typically, measures of experienced stigma and discrimination include several items that capture different types of stigma in each of these settings, so it is possible that estimates of experienced stigma and discrimination may be underestimates. The questions about experiences of stigma from the People Living with HIV Stigma Index cover a wider range of experienced stigmas, including social exclusion, verbal abuse, physical harassment, refusal of employment and job loss. As such, constructing this indicator using data from the People Living with HIV Stigma Index 2.0 may provide a more robust indication of the level and types of experienced stigma and discrimination. However, the data are not generalizable beyond the people living with HIV sampled, as respondents are selected using snowball sampling versus random sampling methods.

Further information
Stangl AL, Lilleston P, Mathema H, Pliakas T, Krishnaratne S, Sievwright K et al. Development of parallel measures to assess HIV stigma and discrimination among people living with HIV, community members and health workers in the HPTN 071 (PopART) trial in Zambia and South Africa. J Int AIDS Soc. 2019;22(12):e25421 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6912047/).

For more on the methods and survey instruments for the Demographic and Health Survey and AIDS Indicator Survey, see: http://dhsprogram.com

For more on the methods and survey instrument for the People Living with HIV Stigma Index, see: https://www.stigmaindex.org/

6.4 Experience of HIV-related discrimination in health-care settings

Percentage of people living with HIV who report experiences of HIV-related discrimination in health-care settings

What it measures
Progress in reducing HIV-related discrimination experienced by people living with HIV when seeking health-care services.

Rationale
Discrimination is a human rights violation and is prohibited by international human rights law and most national constitutions. In the context of HIV, discrimination refers to unfair or unjust treatment of an individual (either through actions or by failure to act) based on his or her real or perceived HIV status. Discrimination exacerbates risks and deprives people of their rights and entitlements, thus fueling the HIV epidemic.

Stigma is the attribution of undesirable characteristics to an individual or group that reduces their status in the eyes of society. It frequently drives experiences of discrimination.

The health sector is one of the main settings where people living with HIV—and those perceived to be living with HIV—experience discrimination. This indicator directly measures discrimination experienced by people living with HIV when seeking services in health-care settings.

The composite indicator can be monitored as a measure of the prevalence of HIV-related discrimination experienced in the health sector by people living with HIV. This indicator could provide further understanding of HIV-related health outcomes and improve interventions to reduce and mitigate HIV-related stigma and discrimination experienced along the treatment and care cascade by (a) showing change over time in the percentage of people living with HIV who experience discrimination in health-care settings and (b) indicating priority areas for action.

Numerator
Number of respondents who respond in the affirmative ("Yes") to at least one of the seven items per question.

Denominator
Number of all respondents

Calculation
Numerator/denominator

Method of measurement
People Living with HIV Stigma Index

Respondents of the study are asked if they experienced any of the following forms of HIV-related discrimination when seeking HIV and non-HIV-specific health services in the last 12 months:

- Denial of care due to HIV status.
- Advised not to have sex because of HIV status.
- Being the subject of gossip or negative talk because of HIV status.
- Verbal abuse because of HIV status.
- Physical abuse because of HIV status.
- Avoidance of physical contact because of HIV status.
- Sharing of HIV status without consent.

Measurement frequency
Every 2–3 years

Disaggregation
Responses for each question are required, as is the consolidated response for the composite indicator. The composite indicator can be disaggregated by the following:

- Type of health service (HIV, non-HIV).
- Gender (male, female, transgender, other, prefer not to say).
- Key population (gay men or other men who have sex with men, sex workers, transgender people, people who use drugs).
- Age group (18–19 years, 20–24 years, 25–49 years, 50+ years).
- Length of time knowing HIV-positive status (0–<1 years, 1–4 years, 5–9 years, 10–14 years, or 15+ years).

Explanation of the individual items

The proposed indicator combines 14 items that capture discrimination experienced by people living with HIV when seeking HIV care (seven items) and non-HIV care (seven items). During the 2016 consultation process to update the People Living with HIV Stigma Index survey, people living with HIV highlighted the importance of separately measuring discrimination experienced when seeking HIV and non-HIV care. In response, the new version of the survey asks about experiences of discrimination when seeking both HIV care and non-HIV care (whereas the original survey only asked about stigma experienced when seeking health services in general). When reporting on this indicator with data from People Living with HIV Stigma Index surveys conducted prior to 2017, it will not be possible to disaggregate by the type of health service sought.

Strengths and weaknesses

This indicator directly measures experiences of discrimination among people living with HIV who sought health services.

The recommended questions assess whether specific forms of discrimination have been experienced in a health-care setting. The experience of discrimination may be dependent on whether the health-care provider is aware of the person's HIV status. Given this, disclosure of HIV status to the health-care provider should be collected whenever possible in order to help interpret the indicator.

In addition, people seeking HIV services at specialty HIV clinics may report fewer experiences of discrimination than people seeking HIV services that are integrated within general health-care services. Thus, capturing the type of clinic is recommended where possible. It also would be advisable to compare the findings from this indicator with Indicators 6.1 (Discriminatory attitudes towards people living with HIV) and 6.6 (Avoidance of health care among key populations) for a broader understanding of the stigma environment and the discrimination that can result in a given context.

Findings from this indicator should also be analysed in conjunction with the NCPI responses on programmes to address stigma and discrimination in health care and their scale, as well as programs to train health-care providers on human rights and medical ethics.

Further information

The indicator measures HIV-related discrimination experienced in health-care settings. HIV is often associated with a range of behaviours that are viewed as socially deviant or immoral, such as injecting drug use and sexual promiscuity. Because of these underlying societal beliefs, people living with HIV often are viewed as shameful and are thought to be responsible for having contracted HIV. This shaming process has repercussions beyond the individual because it greatly reduces incentives to be tested for HIV or, in the event the test result is positive, to disclose HIV status to sexual partners or family members.

Mahajan AP, Sayles JN, Patel VA, Remien RH, Sawires SR, Ortiz DJ et al. Stigma in the HIV/AIDS epidemic: a review of the literature and recommendations for the way forward. AIDS. 2008;22(Suppl 2):S67–79.

Nyblade L, Stangl A, Weiss E, Ashburn K. Combating HIV stigma in health care settings: what works? J Int AIDS Soc. 2009;12(1):15.

Confronting discrimination: overcoming HIV-related stigma and discrimination in health-care settings and beyond. Geneva: UNAIDS; 2017 (http://www.unaids.org/sites/default/files/media_asset/confronting-discrimination_en.pdf).

For more on the methods and survey instrument for the People Living with HIV Stigma Index, see: https://www.stigmaindex.org/

6.5 Stigma and discrimination experienced by key populations

Percentage of people who are members of a key population who report having experienced stigma and discrimination in the last 6 months

This indicator is divided into four sub-indicators:

A. Experience of stigma and discrimination among sex workers

B. Experience of stigma and discrimination among gay men and other men who have sex with men

C. Experience of stigma and discrimination among people who inject drugs

D. Experience of stigma and discrimination among transgender people

What it measures
Progress towards reducing experiences of stigma and discrimination among key populations.

Rationale
Key population stigma is a negative streotype based on an individual belonging to a key population group. Stigma is a well-documented barrier to the HIV care continuum, creating gaps across the prevention and treatment cascades, particularly for key populations including sex workers, gay men and other men who have sex with men, people who inject drugs and transgender people. Key population stigma results from a range of drivers and facilitators, including: negative and judgmental attitudes towards key populations; shame related to an individual's occupation, drug use, or sexual and gender identity; and social, cultural and gender norms. These manifest in a range of stigmatizing practices and experiences, including discrimination, that deny key populations full social acceptance, consequently reducing their life chances, deterring access to essential services, and fuelling social inequalities.

Reducing HIV stigma and discrimination experienced by sex workers, gay men and other men who have sex with men, people who inject drugs and transgender people is critical for increasing HIV testing, uptake of and adherence to antiretroviral therapy, and viral suppression, all of which will improve health outcomes for key populations.

Numerator
Number of people in the key population group (sex workers, gay men and other men who have sex with men, people who inject drugs or transgender people) who report that one or more of the three experiences has happened to them in the last 6 months because of their key population status.

Denominator
Total number of respondents from the key population group

Calculation
Numerator/denominator

Method of measurement
Behavioural surveillance or other special surveys. This indicator is constructed from responses to the following questions among respondents who report belonging to a key population group (i.e. sex workers, gay men and other men who have sex with men, people who inject drugs, and transgender people).

▪ Have you ever felt excluded from family activities because you [sell sex; have sex with men; inject drugs; are transgender]? (No, Yes, in the last 6 months, yes, but not in the last 6 months, don't know)

▪ Has someone ever scolded you because you [sell sex; have sex with men; inject drugs; are transgender]? (No, Yes, in the last 6 months, yes, but not in the last 6 months, don't know)

▪ Has someone ever blackmailed you because you [sell sex; have sex with men; inject drugs; are transgender]? (No, Yes, in the last 6 months, yes, but not in the last 6 months, don't know)

Measurement frequency
Every two years

Disaggregation
▪ **A, B, C, D:** age (<25 years, 25+years).
▪ **A and C:** gender (male, female, transgender).
▪ **D:** gender (transman, transwoman, other).

Additional information requested
Submit the digital version of any available survey reports using the upload tool. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided.

Strengths and Weaknesses

These indicators directly measure experienced stigma and discrimination among sex workers, gay men and other men who have sex with men, people who inject drugs and transgender people, important manifestations of stigma that have been demonstrated to impede HIV prevention, care and treatment services among key populations. The indicators are calculated from responses to three questions. The questions were developed by technical experts based on previously validated measures of key population stigma and discrimination used in primary research studies. Changes in the indicator should be interpreted as follows: an increase in the percentage indicates an increase in experienced stigma and discrimimantion among key populations and a need for mitigating action, whereas a decrease in the percentage indicates progress and a reduction in experienced stigma and discrimination among key populations.

Respondent-driven sampling (RDS) is used to implement integrated bio-behavioral surveys. This sampling methodology allows researchers to access, in a systematic way, members of typically hard-to-reach populations who may not otherwise be accessible. Because RDS is a probability sampling method, researchers are able to provide unbiased population estimates as well as measure the precision of those estimates. RDS can be especially successful at rapid recruitment in dense urban environments. However, in contexts where the hard-to-reach populations are not well-networked, or in contexts where the stigma associated with some key populations is severe, recruitment rates using RDS may be unpredictable. Other disadvantages to using RDS relate to the difficulties that may arise when analyzing collected data. For instance, since RDS must take into account weighting for network size and recruitment patterns, the statistical strength of the sample as it applies to the target population decreases if participants only recruit people who share the same characteristics as themselves.

Further information

Friedland, B, Sprague, L, Nyblade, L, Baral, S, Pulerwitz, J, Gottert, A, et al. Measuring intersecting stigma among key populations living with HIV: implementing the people living with HIV Stigma Index 2.0. J Int AIDS Soc. 2018;21(S5):e2513.1 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6055043/).

Stahlman, S, Hargreaves, J, Sprague, L, Stangl, A, Baral, S. Measuring sexual behavior stigma to inform effective HIV prevention and treatment programmes for key populations. JMIR Public Health Surveill. 2017;3(2):e23. (https://publichealth.jmir.org/2017/2/e23/).

For more on the methods and survey instruments for the Integrated Bio-Behavioral Survey:
https://apps.who.int/iris/bitstream/handle/10665/258924/9789241513012-eng.pdf

6.6 Avoidance of health care among key populations because of stigma and discrimination (A–D)

Avoidance of health care among key populations because of stigma and discrimination

This indicator is divided into four sub-indicators:

A. Avoidance of health care by sex workers because of stigma and discrimination.

B. Avoidance of health care by gay men and other men who have sex with men because of stigma and discrimination.

C. Avoidance of health care by people who inject drugs because of stigma and discrimination.

D. Avoidance of health care by transgender people because of stigma and discrimination.

What it measures
Progress towards reducing discriminatory attitudes and support for discriminatory policies in health-care settings.

Rationale
Discrimination is a human rights violation and is prohibited by international human rights law and most national constitutions. In the context of HIV, discrimination refers to unfair or unjust treatment of an individual (either through actions or by failure to act) based on his or her real or perceived HIV status. Discrimination exacerbates risks and deprives people of their rights and entitlements, thus fueling the HIV epidemic. HIV-related stigma refers to negative beliefs, feelings and attitudes towards people living with HIV, groups associated with people living with HIV (e.g., the families of people living with HIV) and other key populations at higher risk of HIV infection, such as people who inject drugs, sex workers, gay men and other men who have sex with men and transgender people. In addition to HIV-related stigma, people from key populations experience further discrimination because of the stigma relating to same-sex attraction and sexual behaviour, engagement in sex work, drug use and non-conforming or diverse gender expression.

This indicator is important for providing a measure of the proportion of members of key populations who have avoided accessing general health-care services, HIV testing, HIV medical care and HIV treatment due to fear of stigma and discrimination. Related reasons for avoiding such services may include (but are not limited to) the following: a lack (or perceived lack of) confidentiality within health-care settings; negative attitudes and behaviours among health-care providers; and fears of disclosing or hinting at individual behaviours and sexual preference/orientation.

Data related to the avoidance of health-care services are important in measuring the proportion of key populations who are not fulfilling their basic health-care needs (such as routine medical check-ups) and thus may be less likely to attend health-care settings for more specialized services and care (such as HIV testing, treatment and medical care).

Data related to the avoidance of HIV testing services are important for addressing barriers to health-seeking behaviours, especially when health-care facilities are available and accessible.

This indicator is important for understanding and addressing the barriers to achieving the 95–95–95 targets among members of key populations. Data from this indicator directly measure fear of stigma or discrimination. This indicator could provide further understanding and improve interventions in reducing HIV stigma and discrimination by (1) showing change over time in the percentage of people who fear experiencing stigma, (2) enabling comparisons between national, provincial, state and more local administrations, and (3) indicating priority areas for action.

This indicator aims to capture avoidance of four characterisations of health-care services:

1. Avoidance of health-care services in general among all respondents.

2. Avoidance of HIV testing among all respondents who report not having had an HIV test in the past 12 months.

3. Avoidance of HIV-specific health-care among respondents who have indicated they are living with HIV and have not received or have stopped receiving HIV care.

4. Avoidance of HIV treatment among respondents who have indicated they are living with HIV and have never taken or have stopped taking HIV treatment.

Numerator
Number of respondents who answer yes to one of the following:

Have you ever avoided seeking (i) health-care, / (ii) HIV testing, / (iii) HIV medical care* or (iv) HIV treatment* in the last 12 months due to any of the following:

1. Fear of or concern about stigma?

2. Fear or concern someone may learn you [insert behaviour]?

3. Fear of or concern about or experienced violence?

4. Fear of or concern about or experienced police harassment or arrest?

Avoidance of services due to fear of stigma and discrimination may be asked in different ways across countries/surveys. Those provided here are examples of how these questions may be worded.

* Among respondents who have indicated they are living with HIV, in surveys that ask the HIV status of respondents

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Denominator
Number of respondents

Calculation
Numerator/denominator

Method of measurement
Behavioural surveillance or other special surveys

Measurement frequency
Every two years

Disaggregation
- **A–D:** Age (<25 and 25+ years).
- **A and C:** Gender (female, male and transgender).
- **D:** gender (transman, transwoman, other)

Additional information requested
Please provide the questions included in the survey instruments.

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses
As a measure of stigma and discrimination, this indicator focuses on the outcomes of such behaviour. If perceived or experienced stigma and discrimination is sufficiently severe enough to dissuade people from seeking necessary health services, not only can it readily be identified as a problem, but it also affects critical service uptake. Some respondents, however, may experience and perceive important stigmatizing and discriminatory behaviour in their communities but, because of their own resilience or discrete or specialized services, may still seek out services. The indicator is not going to measure achieving zero discrimination but can inform on whether discrimination is reducing service uptake.

Further information
For further information on stigma and discrimination, and efforts to measure their prevalence, please see: Thematic segment on non-discrimination, 31st meeting of the UNAIDS Programme Coordinating Board. Background note. Geneva UNAIDS; 2012 (http://www.unaids.org/en/media/unaids/contentassets/documents/pcb/2012/20121111_PCB%2031_Non%20Discrimination_final_newcoverpage_en.pdf, accessed 21 November 2017).

Confronting discrimination: Overcoming HIV-related stigma and discrimination in health-care settings and beyond. Geneva: UNAIDS; 2017 (http://www.unaids.org/sites/default/files/media_asset/confronting-discrimination_en.pdf, accessed 21 November 2017).

Stangl A, Brady L, Fritz K. Technical brief: measuring HIV stigma and discrimination. Washington (DC) and London: International Center for Research on Women and London School of Tropical Medicine, STRIVE; 2012 (https://www.icrw.org/wp-content/uploads/2017/07/STRIVE_stigma-brief-A4.pdf).

Stangl A, Lloyd JK, Brady LM, Holland CE, Baral S. A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? J Int AIDS Soc. 2013;16(3 Suppl. 2). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3833106/pdf/JIAS-16-18734.pdf

6.7 People living with HIV seeking redress for violation of their rights

Proportion of people living with HIV who have experienced rights abuses in the last 12 months and have sought redress

What it measures
Progress towards upholding the rights of people living with HIV

Rationale
The existence of formal and informal redress mechanisms, and mechanisms for accessing affordable legal support services, are critical to ensuring that people living with HIV and key populations are able to access justice in the event that their rights are not upheld. However, availability does not necessarily equal use. It is important to capture the percentage of people living with HIV and key populations who are availing themselves of such services in order to identify potential challenges to access or acceptability of these mechanisms, including geographical location, sociodemographics or key population status.

Numerator
Number of respondents who experienced one or more rights abuses in the last 12 months and reported seeking redress

Denominator
Total number of respondents who reported having experienced one or more rights abuses in the last 12 months

Calculation
Numerator/denominator

Method of measurement
People Living with HIV Stigma Index. The indicator is calculated based on responses to a series of questions that first assess whether rights abuses have occurred in the last 12 months. Those who reported that rights abuses did occur in the past 12 months are asked if they tried to do anything about the matter, with those who answer "yes" asked specifically about what they did.

The indicator is constructed based on the response to the following question:

- If yes, what did you try to do about the matter?
    - Filed a complaint (yes/no).
    - Contacted a lawyer (yes/no).
    - Contacted a government official or politician (yes/no).
    - Spoke out publicly (yes/no).
    - Contacted a community organization/network of persons living with HIV for support (yes/no).
    - Other (please specify).

Agreement with any of these response options would constitute seeking formal or informal redress.

Measurement frequency
Every 2-3 years

Disaggregation
- Age group (18–19 years, 20–24 years, 25–49 years, 50+ years).
- Key population (gay men or other men who have sex with men, sex workers, transgender people, people who use drugs).
- Gender (male, female, transgender, other, prefer not to say).
- Type of redress sought (**formal** = filed a complaint and/or contacted a lawyer; **informal** = contacted a politician, spoke out publicly and/or contacted a community organization/network of persons living with HIV for support; or **other** = other).

Additional information requested
None

Strengths and weaknesses

This indicator directly captures whether people living with HIV have sought redress following rights abuses experienced in the last 12 months.

Changes in the indicator should be interpreted as follows: an increase in the percentage indicates progress towards ensuring that redress mechanisms are available and utilized in response to rights abuses, whereas a decrease in the percentage indicates a reduction in redress sought after rights abuses and suggests the need for interventions to ensure availability, access to, use and effectiveness of redress mechanisms.

Such data will provide important information on whether people living with HIV are accessing available legal support services, and if they are using formal or informal redressal mechanisms that are in place in country. The indicator does not capture whether a resolution to the rights abuse was achieved. While they are indicative of redress sought by people living with HIV in a given country or context, the data used to calculate the indicator are not generalizable beyond the people living with HIV sampled, as respondents to the People Living with HIV Stigma Index are selected using snowball sampling (versus random sampling methods).

Further information

Evidence for eliminating HIV-related stigma and discrimination: guidance for countries to implement effective programmes to eliminate HIV-related stigma and discrimination in six settings. Geneva: UNAIDS; 2020 (https://www.unaids.org/sites/default/files/media_asset/eliminating-discrimination-guidance_en.pdf).

For more on the methods and study instrument for the People Living with HIV Stigma Index, see: https://www.stigmaindex.org/

7.1 Viral hepatitis among key populations

Prevalence of hepatitis and coinfection with HIV among key populations

What it measures
Comorbidity with HIV and potential need for appropriate treatment

Rationale
Appreciation of hepatitis and HIV coinfection has improved recently. Many people living with HIV receiving antiretroviral therapy are dying from liver disease resulting from untreated viral hepatitis. HIV treatment regimens can be adjusted to treat chronic hepatitis B infection as well. New, highly effective hepatitis C treatment is available and has a high rate of virus clearance regardless of hepatitis C virus subtype. Measuring the hepatitis burden among key populations living with HIV can help national planners determine the resources needed to address the syndemic.

Numerator
Number of people in a key population who test positive for antibody to hepatitis C virus

or

Number of people in a key population who test positive for hepatitis B surface antigen

and

Number of people in a key population who also test positive for HIV together with one of the above

Denominator
Number of respondents tested for both HIV and one or both of hepatitis B and C

Calculation
Numerator/denominator

Method of measurement
Behavioural surveillance or other special surveys

Measurement frequency
Every two years

Disaggregation
- Age (<25 and 25+ years).
- Gender (male, female and transgender).
- Key population.

Additional information requested
If the testing algorithm is available for hepatitis C screening, please include this information, especially if complementary or PCR testing is conducted.

Strengths and weaknesses
Probability-based estimates of coinfection with HIV and hepatitis C virus or HIV and hepatitis B virus among key populations are generally unavailable, although several biobehavioural surveys have conducted hepatitis antibody testing. Improving knowledge about coinfection will help to improve treatment programmes and help to maximize the survival of the affected populations. The numbers of people coinfected are likely to be small, with the possible exception of people who inject drugs, so the confidence intervals will be large.

Further information
Global HIV Strategic Information Working Group. 2017. Biobehavioural survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/bitstream/handle/10665/258924/9789241513012-eng.pdf).

United Nations Office on Drugs and Crime, International Network of People Who Use Drugs, UNAIDS, United Nations Development Programme, United Nations Population Fund, World Health Organization et al. Implementing comprehensive HIV and HCV programmes with people who inject drugs: practical guidance for collaborative interventions. Vienna: United Nations Office on Drugs and Crime; 2017 (https://www.inpud.net/en/iduit-implementing-comprehensive-hiv-and-hcv-programmes-people-who-inject-drugs).

7.2 Hepatitis C testing

Proportion of people starting antiretroviral therapy who were tested for hepatitis C virus (HCV)

What it measures

It monitors trends in hepatitis C testing, a critical intervention for assessing needs related to managing hepatitis C.

Hepatitis C testing provides information on the prevalence of HIV and HCV coinfection, informing clinicians on the need for further clinical and laboratory evaluation and treatment.

Rationale

Testing for hepatitis C identifies HIV and HCV coinfection to adapt treatment

Numerator

Number of adults and children starting antiretroviral therapy who were tested for hepatitis C during the reporting period using the sequence of anti-HCV antibody tests followed by HCV polymerase chain reaction (PCR) for those who are anti-HCV positive.

Denominator

Number of adults and children starting antiretroviral therapy during the reporting period

Calculation

Numerator/denominator

Method of measurement

Clinical and/or laboratory records

Measurement frequency

Annual

Disaggregation

- Sex
- Age (<15 and 15+ years)
- People who inject drugs

Additional information requested

None.

Strengths and weaknesses

Patients who are anti-HCV positive have serological evidence of past or present infection. People who are anti-HCV positive must be tested for HCV RNA (detects HCV circulating in the blood) to differentiate resolved infections from current infections that require treatment.

This indicator monitors progress in hepatitis C testing activities on a regular basis but does not reflect the overall proportion of people coinfected HIV and HCV receiving HIV care who are aware of their hepatitis C coinfection. Indicator C.6 of the viral hepatitis monitoring and evaluation framework, disaggregated by HIV status, would reflect this.

Collecting information on past or current injecting drug use allows reporting of disaggregated data for PWID. Recording information on stigmatised and commonly criminalised behaviours such as illicit drug use poses a risk where an individual can be identified. Efforts must be made to ensure patient records and registers avoid disclosing information that would allow for identification of individuals engaged in stigmatised or criminalised behaviour.

Further information

Driving impact through programme monitoring and management. Consolidated HIV strategic information guidelines. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240000735).

Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/bitstream/handle/10665/246200/9789241511124-eng.pdf)

7.3 People coinfected with HIV and Hepatitis C virus starting Hepatitis C virus treatment

Proportion of people coinfected with HIV and Hepatitis C virus (HCV) starting HCV treatment

What it measures
Initiation of HCV treatment for people coinfected with HIV and HCV among people enrolled in HIV care

Rationale
The prevalence of HCV coinfection is especially high among people living with HIV in the WHO European Region because of injecting drug use. Treating people living with HIV for hepatitis C influences quality of life, life expectancy and mortality.

Numerator
Number of people diagnosed with HIV and HCV coinfection starting treatment for HCV during a specified time frame (such as 12 months)

Denominator
Number of people diagnosed with HIV and HCV coinfection enrolled in HIV care during a specified time period (such as 12 months)

Calculation
Numerator/denominator

Method of measurement
The numerator and denominator are calculated from clinical records of health-care facilities providing HIV treatment and care.

Measurement frequency
Annual

Disaggregation
People who inject drugs

Strengths and weaknesses
This indicator monitors access to hepatitis C treatment for people living with HIV coinfected with HCV. The weakness is that it reflects only one year of activity. Describing the cumulated effect of people coinfected with HIV and HCV starting treatment, requires compiling cumulative data on the people starting treatment and accounting for people newly infected with HCV and reinfected with HCV in the denominator.

Collecting information on past or current injecting drug use allows reporting of disaggregated data for PWID. Recording information on stigmatised and commonly criminalised behaviours such as illicit drug use poses a risk where an individual can be identified. Efforts must be made to ensure patient records and registers avoid disclosing information that would allow for identification of individuals engaged in stigmatised or criminalised behaviour.

Further information
Monitoring and evaluation for viral hepatitis B and C: recommended indicators and framework. Geneva: World Health Organization; 2016 (http://apps.who.int/iris/bitstream/handle/10665/204790/9789241510288_eng.pdf?sequence=1).

Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/bitstream/handle/10665/246200/9789241511124-eng.pdf;jsessionid=28C67621504E323967719DE7C880FF01?sequence=1).

7.4 Syphilis prevalence among key populations (A, B, D)

Prevalence of syphilis in specific key populations

This indicator is divided into three sub-indicators:

A. Syphilis prevalence among sex workers.

B. Syphilis prevalence among gay men and other men who have sex with men.

D. Syphilis prevalence among transgender people.

What it measures
Progress towards reducing syphilis prevalence among key populations

Rationale
The prevalence of syphilis is typically much higher in key populations than in the general population. Reducing the prevalence of syphilis among key populations is important for the health of the populations and also a critical measure of the national-level response to syphilis.

The increasing use of rapid tests for testing (screening) individuals for syphilis has increased access to syphilis testing in settings that were previously without capacity. As a result, this indicator has been expanded to syphilis prevalence rather than focusing solely on active syphilis.

Testing for syphilis in key populations is a component of second-generation HIV surveillance.

Numerator
Number of people in a key population who test positive for syphilis

Denominator
Number of people in a key population tested for syphilis

Calculation
Numerator/denominator

Method of measurement
This indicator is calculated using data from syphilis tests conducted among respondents in sentinel site(s) or participants in biobehavioural surveys or regular sexually transmitted infection screening services. The sentinel surveillance sites used for calculating this indicator should remain constant to allow for tracking changes over time.

Screening may be done with either a nontreponemal test (e.g., venereal disease research laboratory [VDRL] or rapid plasma reagin [RPR]) or a treponemal test (e.g., Treponema pallidum haemagglutination assay [TPHA], Treponema pallidum particle agglutination assay [TPPA], enzyme immunoassay or rapid treponemal test). While nontreponemal serologic tests are sensitive, they lack specificity and can result in false positive cases. Treponemal tests are more specific, but cannot differentiate between current and past infection or treated and untreated infection. For the purpose of this indicator (intended to measure seropositivity), reporting positivity based on a single test result is acceptable. However, if both treponemal and nontreponemal test results for an individual person are available, then syphilis positivity should be defined as having positive results on both tests. Countries are required to report the testing algorithm used to determine positivity so prevalence estimates can be adjusted to look at trends over time and generate regional and global estimates.

Frequency of measurement
Annual (programme data) or every two years (biobehavioural survey).

Disaggregation
A,B,D: age (<25 and 25+ years).

A: gender (male, female and transgender).

D: gender (transman, transwoman and other).

Additional information requested
Please document in the comments section the algorithm for testing for syphilis in the different key populations and if this has changed since the last Global AIDS Monitoring report.

Please comment on the extent to which the data are deemed representative of the national population. If there are subnational data available, please provide the disaggregation by administrative area, city or site in the space provided. You also may upload an Excel spreadsheet of these data instead of entering them in the online tool. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

Understanding how the sampled populations relate to any larger populations sharing similar high-risk behaviour is critical to interpreting this indicator. Trends in syphilis prevalence among key populations in the capital city provide a useful indication of the performance of HIV and sexually transmitted infection prevention programmes in that city, but they may not be representative of the situation in the country as a whole. The addition of new sentinel sites increases the sample's representativeness and therefore provides a more robust point estimate of syphilis prevalence. However, adding new sentinel sites reduces the comparability of values over time. As such, any changes in number of sites providing data needs to be documented in the comments section.

Surveys exclusively covering transgender people are rare. Most data for transgender communities are drawn from surveys of gay men and other men who have sex with men or sex workers. The risk environment reported for most transgender communities is high, placing transgender women at especially high risk of acquiring a sexually transmitted infection and of transmitting that infection. If transgender women are respondents in surveys of sex workers, include the data with sex workers as a disaggregation. If transgender people are respondents in surveys of gay men and other men who have sex with men, include the data under the transgender tab.

Testing using both nontreponemal and treponemal tests enhances the likelihood that the reported numbers of positive tests represent active infection. Some countries, however, only have information for one test type. Please note in the comment fields if syphilis testing practices have changed, as this will need to be considered when interpreting the disease trends.

Further information

Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key population. Geneva: World Health Organization; 2016 (https://www.who.int/publications/i/item/9789241511124).

Consolidated HIV strategic information guidelines. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240000735).

7.5 Men with urethral discharge

Number of men reporting urethral discharge in the past 12 months

What it measures

Progress in reducing unprotected sex among men.

Rationale

Urethral discharge among men is a sexually transmitted infection syndrome generally most commonly caused by *Neisseria gonorrhoeae* or *Chlamydia trachomatis*. Presentation with an acute sexually transmitted infection syndrome, such as urethral discharge, is a marker of unprotected sexual intercourse, and urethral discharge facilitates HIV transmission and acquisition. Surveillance for urethral discharge therefore contributes to second-generation HIV surveillance by providing early warning of the epidemic potential of HIV from sexual transmission and ongoing high-risk sexual activity that may require more aggressive programme interventions to reduce the risk. Untreated urethral discharge can result in infertility, blindness and disseminated disease. Increasing resistance to the recommended treatment options for *Neisseria gonorrhoeae* may render this infection untreatable.

Numerator

Number of men reported with urethral discharge during the reporting period

Denominator

Number of men 15 years and older

Calculation

Numerator/denominator

Method of measurement

Routine health information systems

Measurement frequency

Data should be recorded daily and reported quarterly to the national or subnational level. They should also be consolidated annually and reported to WHO.

Disaggregation

None

Strengths and weaknesses

Although WHO has provided a global case definition, the actual case definition may vary between and within countries, as may clinical diagnostic capacity. Although this indicator may be underreported, in the absence of changes in case definition or major changes in screening practices, these data can generally be used for following trends over time within a country.

Countries reporting on urethral discharge should communicate the extent to which the data are deemed representative of the national population.

Following trends in urethral discharge is a feasible means to monitor incident sexually transmitted infection in a population. Data on vaginal discharge among women, although useful for monitoring purposes at the local and national levels, are not requested at the global level because, in many settings, sexually transmitted infections do not cause most vaginal discharge cases.

Countries should periodically assess the causes of urethral discharge syndrome to understand the predominant causes of urethral discharge and, therefore, the appropriate therapy.

If a country is unable to report on the denominator, WHO will use the denominator from the United Nations Population Division. Examine trends in comparable groups over time.

Further information

Strategies and laboratory methods for strengthening surveillance of sexually transmitted infection 2012. Geneva: World Health Organization; 2012 (http://www.who.int/reproductivehealth/publications/rtis/9789241504478/en).

7.6 Gonorrhoea among men

Rate of laboratory-diagnosed gonorrhoea among men in countries with laboratory capacity for diagnosis

What it measures
Progress in reducing the number of men engaging in unprotected sex.

Rationale
Infection with an acute bacterial sexually transmitted infection such as gonorrhoea is a marker of unprotected sexual intercourse and facilitates HIV transmission and acquisition. Surveillance for gonorrhoea therefore contributes to second-generation HIV surveillance by providing early warning of the epidemic potential of HIV from sexual transmission and ongoing high-risk sexual activity that may require more aggressive programme interventions to reduce risk. Further, untreated gonorrhoea can result in pelvic inflammatory disease, ectopic pregnancy, infertility, blindness and disseminated disease. Increasing resistance to currently recommended treatment options may render this infection untreatable.

Numerator
Number of men reported with laboratory-diagnosed gonorrhoea in the past 12 months

Denominator
Number of men 15 years and older

Calculation
Numerator/denominator

Method of measurement
Routine health information systems

Disaggregation
None

Strengths and weaknesses
Although WHO has provided a global case definition, the actual case definition may vary between and within countries. Further, diagnostic capacity may vary between and within countries. Although this indicator may be underreported, in the absence of changes in case definition or major changes in screening practices, these data can generally be used for following trends over time within a country.

Further information
Countries reporting on gonorrhoea should communicate the extent to which the data are representative of the national population. Data on gonorrhoea among women, although useful for monitoring purposes at the local and national levels, are not requested at the global level because most women infected with *Neisseria gonorrhoeae* are asymptomatic, and sensitive diagnostic tests for gonorrhoea among women are not widely available in low- and middle-income countries. Data on gonorrhoea among women are therefore too dependent on diagnostic resources and screening practices to be monitored appropriately at the global level. If a country cannot report on the denominator, WHO will use the denominator from the United Nations Population Division.

Strategies and laboratory methods for strengthening surveillance of sexually transmitted infection 2012. Geneva: World Health Organization; 2012 (http://www.who.int/reproductivehealth/publications/rtis/9789241504478/en).

7.7 Co-management of tuberculosis and HIV treatment

Percentage of estimated HIV-positive incident tuberculosis (TB) cases that received treatment for both TB and HIV

What it measures
Progress in detecting and treating TB and HIV among people with HIV-associated TB

Rationale
TB is a leading cause of morbidity and mortality among people living with HIV, including those receiving antiretroviral therapy. Prompt TB treatment and early antiretroviral therapy are critical for reducing the mortality due to HIV-associated TB and must be the highest-priority activity for both the AIDS Programme and National TB Programme. A measure of the percentage of HIV-positive TB patients that access appropriate treatment for their TB and HIV is therefore very important.

Numerator
Number of HIV-positive new and relapse TB patients started on TB treatment during the reporting period who were already on antiretroviral therapy or started on antiretroviral therapy during TB treatment within the reporting year

Denominator
Estimated number of incident TB cases in people living with HIV

Calculation
Numerator/denominator

Method of measurement
For the numerator.: Facility antiretroviral therapy registers and reports; programme monitoring tools. Count the total number of HIV-positive new and relapse TB patients who were started on TB treatment (as recorded in the TB register) and antiretroviral therapy, or those already on antiretroviral therapy (as recorded in the antiretroviral therapy register). The information should be reconciled quarterly and annually with the TB registers in the relevant basic management units before consolidation and reporting.

For the denominator: Programme data and estimates of incident TB cases among people living with HIV. WHO calculates annual estimates of the number of incident TB cases in people living with HIV. The denominator estimates, provided by countries on notification and antiretroviral therapy coverage, become available only in August of the reporting year and do not need to be provided at the time of reporting. The estimates for 2020 are available at http://www.who.int/tb/country/data/download/en.

See Annex 5 for further understanding of the indicator.

Measurement frequency
Data should be collected continuously at the facility level, reconciled with the TB registers and aggregated periodically, preferably monthly or quarterly, and reported annually. The most recent year for which data and estimates are available should be reported here.

Disaggregation
- Sex.
- Age (<15 and 15+ years).

Additional information requested
None.

Strengths and weaknesses

Adequate detection and treatment of TB will prolong the lives of people living with HIV and reduce the community burden of TB. WHO provides annual estimates of the burden of TB among people living with HIV, based on the best available country estimates of HIV prevalence and TB incidence. All people living with HIV newly infected with TB should start TB treatment and antiretroviral therapy within eight weeks of starting TB treatment, regardless of CD4 count. The people with both HIV and TB with profound immunosuppression (such as CD4 counts less than 50 cells/mm3) should receive antiretroviral therapy within the first two weeks of initiating TB treatment. TB treatment should be started in accordance with national TB programme guidelines.

This indicator measures the extent to which collaboration between national TB and HIV programmes ensures that people living with HIV and TB are able to access appropriate treatment for both diseases. However, this indicator will be affected by low uptake of HIV testing, poor access to HIV care services and antiretroviral therapy and poor access to TB diagnosis and treatment. Separate indicators for each of these factors should be referred to when interpreting the results of this indicator.

It is important that those providing HIV care and antiretroviral therapy record TB diagnosis and treatment, since this information has implications for antiretroviral therapy eligibility and choice of antiretroviral regimen. It is therefore recommended that the date TB treatment starts be recorded in the antiretroviral register.

Further information

WHO policy on collaborative TB/HIV activities. Geneva: World Health Organization; 2012). (http://apps.who.int/iris/bitstream/handle/10665/44789/9789241503006_eng.pdf?sequence=1).

Global tuberculosis report 2021. Geneva: World Health Organization; 2021 (https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2021).

A guide to monitoring and evaluation for collaborative TB/HIV activities: 2015 revision. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/150627/9789241508278_eng.pdf?sequence=1).

7.8 People living with HIV with active tuberculosis disease

Total number of people living with HIV with active tuberculosis (TB) expressed as a percentage of those who are newly enrolled in HIV treatment during the reporting period

What it measures

The burden of active TB among people living with HIV who are newly enrolled in HIV treatment. It also indirectly measures efforts to detect HIV-associated TB early.

Rationale

The primary aims of intensified TB case-finding in HIV care settings and provider-initiated HIV testing and counselling for TB patients are early detection of HIV-associated TB and prompt provision of antiretroviral therapy and TB treatment. Although intensified TB case-finding should be implemented among all people living with HIV at each visit to HIV care and treatment facilities, it is particularly important at the time of enrolment, since the risk of undetected TB is higher among newly enrolled patients than among those already receiving antiretroviral therapy. Furthermore, newly enrolled people living with HIV may be less aware of TB symptoms and the importance of early detection and treatment, and they may not seek care for general or specific TB symptoms. Intensified TB case-finding offers an opportunity to educate people living with HIV and to detect TB early. All people living with HIV detected with TB disease should start anti-TB treatment immediately and antiretroviral therapy within eight weeks (if they are not already receiving antiretroviral medicine).

Numerator

Total number of people living with HIV newly enrolled in HIV treatment who have active TB disease during the reporting period

Denominator

Total number of people newly enrolled in HIV treatment (i.e., those who registered for antiretroviral therapy during the reporting period)

Calculation

Numerator/denominator

Method of measurement

The outcome of TB investigations among people living with HIV presumed to have TB should be recorded on the HIV antiretroviral therapy card (in the "Investigations" column in the Encounters section) and in the antiretroviral therapy registers (the monthly and quarterly follow-up sections, respectively). Similarly, TB patients who are found to be HIV-positive should be enrolled into HIV treatment promptly and their TB status recorded on the antiretroviral therapy card and registers.

For the numerator. At the end of the reporting period, count the total number of people living with HIV newly enrolled in HIV treatment who have active TB disease. Data should be drawn from TB- and HIV-sided services and data sources.

For the denominator. Count the total number of people living with HIV who are newly enrolled in HIV treatment (i.e., those who started antiretroviral therapy during the reporting period).

The information on TB status in the antiretroviral therapy registers should be updated and reconciled with the TB registers in relevant basic management units before consolidation and reporting to higher levels.

See Annex 5 for further understanding of the indicator.

Measurement frequency

Data should be recorded daily and reported to the national or subnational level as part of routine quarterly reporting. Data should also be submitted annually to UNAIDS.

Disaggregation

None.

Additional information requested

None.

Strengths and weaknesses

Reviewing the trends in TB among people living with HIV who are newly enrolled in treatment over a period of time may provide useful information on: (a) the TB burden among them; and (b) the effectiveness of efforts to detect and treat HIV-associated TB early.

This indicator may underestimate the actual burden of HIV-associated TB, since it may exclude: (a) patients who were detected through provider-initiated HIV testing and counselling, but who were not enrolled in HIV treatment; or (b) those who have disseminated forms of TB, remain asymptomatic and were missed during routine TB screening. A high indicator value may mean high TB rates or effective TB screening and HIV testing programmes, whereas a low value may reflect poor TB screening and HIV testing or successful TB control efforts. The indicator value, therefore, needs to be interpreted carefully.

Further information

A guide to monitoring and evaluation for collaborative TB/HIV activities. 2015 revision. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/150627/9789241508278_eng.pdf?sequence=1).

7.9 People living with HIV who started tuberculosis preventive treatment

Percentage of people on antiretroviral therapy who started tuberculosis preventive treatment during the reporting period

What it measures
The extent to which people who are on antiretroviral therapy started TB preventive treatment

Rationale
TB preventive treatment reduces the risk of developing active TB and improves survival among all people living with HIV. People living with HIV should be screened for TB at every clinic visit using a clinical algorithm recommended by the World Health Organization (WHO). Adults and adolescents living with HIV who do not report any of the symptoms of TB —current cough, fever, weight loss or night sweats—are unlikely to have active TB and should be offered TB preventive treatment. WHO recommends a number of screening tools that can be used to rule out active TB (eg. chest x-ray, c-reactive protein).

Children living with HIV who do not have poor weight gain, fever or current cough should be offered TB preventive treatment regardless of whether or not they are receiving antiretroviral therapy.

Numerator
1. Total number of people newly enrolled on antiretroviral therapy during the reporting period who also started TB preventive treatment during the reporting period.

2. Total number of people currently on antiretroviral therapy who started TB preventive treatment during the reporting period.

Denominator
1. Total number of people newly enrolled on antiretroviral therapy during the reporting period.

2. Total number of people currently on antiretroviral therapy during the reporting period.

Calculation
Numerator/denominator

Method of measurement
TB preventive treatment should be started for all eligible people living with HIV, and the start date should be recorded on the HIV care/antiretroviral therapy card (in the Encounter section). Those who accept treatment and receive at least the first dose should then be recorded in the antiretroviral therapy registers (under the TB preventive treatment start month and year column).

1. *Numerator.* Count the total number of people living with HIV newly enrolled on antiretroviral therapy during the reporting period who also started TB preventive treatment during the same reporting period (i.e., those who received at least one dose of the regimen)

   Denominator. Count the total number of people living with HIV newly enrolled on antiretroviral therapy during the reporting period.

2. *Numerator.* Count the total number of people currently on antiretroviral therapy during the reporting period who also started TB preventive treatment during the same reporting period (i.e., those who received at least one dose of the regimen).

   Denominator. Count the total number of people living with HIV currently on antiretroviral therapy during the reporting period.

Countries are asked to report on 1 and/or 2, as available.

If available, also provide the number of people living with HIV currently on antiretroviral therapy who have ever received TB preventive treatment (excluding those who received it during the current reporting period).

Measurement frequency
Data on people who started antiretroviral therapy and TB preventive treatment should be recorded daily and reported quarterly to the national or subnational level. They should be consolidated annually and reported to UNAIDS.

Disaggregation
- Age (<5 years, 5–15 years, 15+ years).

Additional information requested
None.

Strengths and weaknesses

This indicator measures the coverage of TB preventive treatment among people on HIV treatment, but it lacks the benchmark for acceptable performance. Scaling up this intervention will assist in developing such a benchmark at the national level. Unless further data are collected, this indicator provides no information on the number of individuals who adhere to or complete the course of treatment.

For accurate planning and drug management, more detailed information needs to be collected in addition to this indicator. A pharmacy-based register may be used to record client attendance and drug collection. Alternatively, the HIV treatment facility may maintain a TB preventive treatment register in parallel with the antiretroviral therapy register. Such a record may provide valuable information on the number of new and continuing patients on TB preventive treatment, as well as treatment completion rates and adverse events.

Further information

WHO guidelines on tuberculosis infection prevention and control. 2019 update. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/bitstream/handle/10665/311259/9789241550512-eng.pdf).

WHO consolidated guidelines on tuberculosis. Module 1: prevention. Tuberculosis preventive treatment. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/who-consolidated-guidelines-on-tuberculosis-module-1-prevention-tuberculosis-preventive-treatment).

7.10 Percentage of people living with HIV on antiretroviral therapy who completed a course of tuberculosis preventive treatment among those who initiated tuberculosis preventive treatment

Percentage of people living with HIV initiating tuberculosis (TB) preventive treatment and on antiretroviral therapy who completed a course of TB preventive treatment

What it measures

This indicator measures the effectiveness of scaled-up TB preventive treatment programmes by assessing the proportion of people living with HIV on antiretroviral therapy who completed a recommended course of TB preventive treatment during the reporting period.

Rationale

TB preventive treatment reduces the risk of developing active TB and improves survival of all people living with HIV. Completing TB preventive treatment as prescribed optimizes its efficacy. All people on antiretroviral therapy should be screened for TB at every visit, using a clinical algorithm recommended by the World Health Organization (WHO). Adults and adolescents living with HIV who do not report any of the symptoms of TB — current cough, fever, weight loss or night sweats—are unlikely to have active TB and should be offered TB preventive treatment. Similarly, children living with HIV who do not have poor weight gain, fever or current cough should be offered TB preventive treatment.

While many countries have made progress in initiating TB preventive treatment among eligible people living with HIV, completion rates remain poor or unknown. Assessing completion of TB preventive treatment is a critical element of the TB/HIV cascade of services and essential to ensuring impact.

Numerator

Number of people on antiretroviral therapy who completed TB preventive treatment among those who initiated any course of TB preventive treatment during the previous year e.g. 2021 cohort for 2023 reporting (Figures 1 and 2).

Denominator

Number of people on antiretroviral therapy who initiated any course of TB preventive treatment during the previous year (insert same cohort year as numerator: e.g., 2021 for 2023 reporting)

Calculation

Numerator/denominator (expressed as %)

Method of measurement

Numerator: Programme records (for example, antiretroviral therapy registers or electronic medical records (EMRs)). Count the total number of people living with HIV on antiretroviral therapy initiating TB preventive treatment during the cohort reporting year who completed the course of TB preventive treatment. The cohort reporting year would usually be the last calendar year during which all people who initiate TB preventive treatment can be assessed for treatment completion. As mentioned above, for the 2023 reporting cycle, the cohort would comprise those initiating TB preventive treatment during 2021.

This includes all those eligible for TB preventive treatment who started TB preventive treatment (including those newly on antiretroviral therapy and currently on treatment) and who completed TB preventive treatment during the same year or the following year. For programmes using continuous isoniazid preventive therapy (36-month IPT), TB preventive treatment completion is defined as 6 months of treatment. Completion of TB preventive treatment should be determined on the basis of national clinical guidelines (see the *WHO operational handbook on tuberculosis—module 1: prevention*).

Denominator: Programme records (for example, antiretroviral therapy registers or EMRs). Count the total number of people living with HIV who were on antiretroviral therapy and initiated a course of TB preventive treatment during the cohort reporting period (2021 for 2023 reporting). If a person who is initiated on TB preventive treatment dies before TB preventive treatment completion, they should be recorded in the denominator, but not in the numerator.

This reflects an annual cohort approach where 2023 reporting is based on those who initiated TB preventive treatment in 2021, regardless of whether they completed in 2021 or 2022.
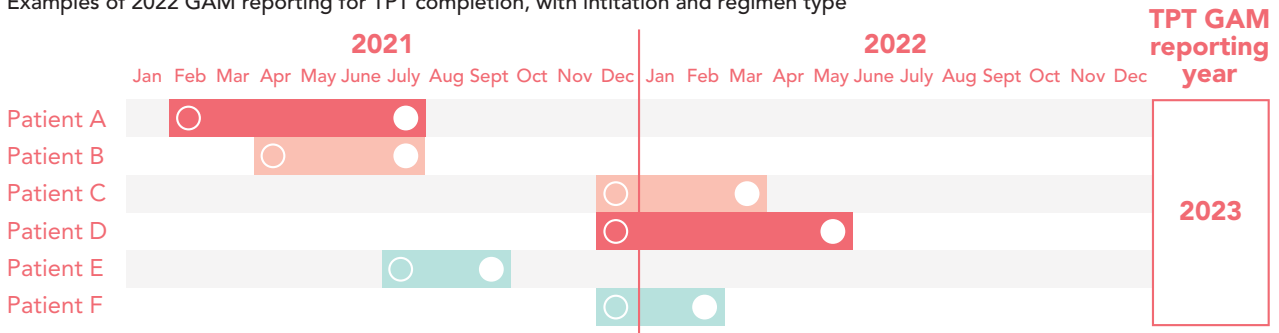
Range of 2023 GAM Reporting Dates: TB preventive treatment initiations and TB preventive treatment completions
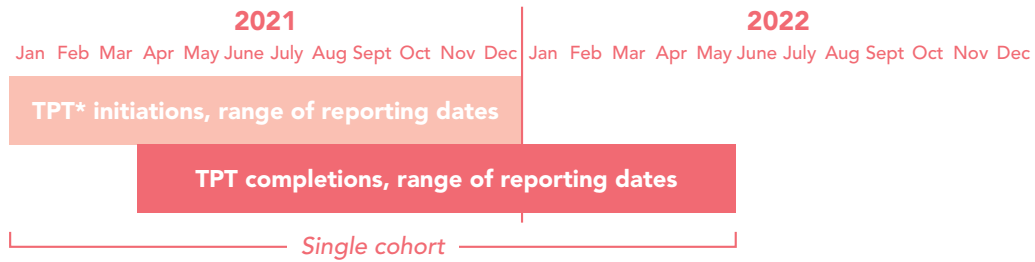
*TPT = TB preventive treatment

Examples of 2022 GAM reporting for TPT completion, with intitation and regimen type

Legend

- ○ Initiated TPT
- ● Completed TPT
- ● 6 INH, six months of isoniazid monotherapy
- ● 4R, four months of daily rifampin
- ● 3HP, three months of once-weekly isoniazid plus rifapentine

Measurement frequency

Annually. A periodicity more frequent than annual may be expedient (e.g., quarterly reporting for more timely reporting of patients on a new TB preventive treatment regimen)

Disaggregation

- Gender (female, male, transgender).
- Age (<5 years, 5–14 years, 15+ years).
- Type of TB preventive treatment regimen (if the country is able to report on disaggregation).

Strengths and weaknesses

This indicator would more accurately provide information on people living with HIV who have received this intervention to reduce TB incidence and mortality among people living with HIV. It has already been field tested by United States President's Emergency Plan for AIDS Relief (PEPFAR) programmes for a number of years and reported through the monitoring, evaluation and reporting (MER) system.

Challenges include incomplete recording and reporting, information systems that may not capture TB preventive treatment completion, use of different criteria to determine completion and account for TB preventive treatment interruptions, and suboptimal programme implementation.

Further information

WHO operational handbook on tuberculosis. Module 1: prevention—tuberculosis preventive treatment. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/who-operational-handbook-on-tuberculosis-module-1-prevention-tuberculosis-preventive-treatment).

7.11 Number of women living with HIV who were screened for cervical cancer using any screening test

The number of women living with HIV who were screened for cervical cancer in the last 12 months using any screening test

What it measures

Progress towards scaling up population-based screening for the prevention of cervical cancer among women living with HIV

Rationale

The purpose of this indicator is to assess the availability and uptake of screening to prevent cervical cancer among women living with HIV. To prevent invasive cervical cancer, women can be screened using various tests to identify those who have or are at risk of cervical precancer. Low cost and appropriate technology screening methods are available that make most precancerous lesions identifiable at stages when they can easily be treated and cured. Achieving high coverage of screening of women—with treatment of precancerous lesions detected by screening—can lead to a low incidence of invasive cervical cancer.

The traditional method to screen women for cervical cancer has been cytology (the Papanicolaou test, also known as the Pap or smear test). Newer screening tests include visual inspection with acetic acid (VIA) and molecular tests, mainly high-risk HPV DNA-based tests, which are suitable for use in all settings. Other molecular tests—as well as more advanced visual inspection tests based on artificial intelligence/machine learning platforms—have also been developed. Cervical cancer screening can be done using different primary screening and triage tests, and there are numerous combinations or algorithms in use in different settings.

Numerator

Number of women living with HIV who had a screening test for cervical cancer using any screening test

Denominator

N/A

Calculation

N/A

Method of measurement

The number is generated by counting the number of women living with HIV among all women who were screened for cervical cancer in the last 12 months, using cervical cancer programme screening and/or HIV programme data as the source.

Each individual should only be counted once within the reporting period. If a second triage test or a follow-up test was performed as part of the screening strategy, that individual should only be counted once.

Measurement frequency

Annual

Disaggregation

- Age (15–19, 20–24, 25–29, 30–49, 50+ years).
- People who were screened for the first time in their lives.

Additional information requested

None.

Strengths and weaknesses

Since the screening interval between tests depends on the test used, the number of women screened may vary from year to year.

Coverage levels of screening for all women living with HIV is not possible without an estimate of the population size.

Changes in this indicator as measures of progress over time should be interpreted in light of related data, including the number of women known to be living with HIV.

Further information

Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, Bray F. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. CA Cancer J Clin. 2021;71:209-249.

Global strategy to accelerate the elimination of cervical cancer as a public health problem. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240014107).

Comprehensive cervical cancer control: a guide to essential practice. 2nd ed. Geneva: World Health Organization; 2014 (https://apps.who.int/iris/bitstream/handle/10665/144785/9789241548953_eng.pdf).

Guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention. Geneva: World Health Organization; 2021 (https://www.who.int/publications/i/item/9789240030824).

Introducing and scaling up testing for human papillomavirus as part of a comprehensive programme for prevention and control of cervical cancer. A step-by-step guide. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240015166).

WHO technical guidance and specifications of medical devices for screening and treatment of precancerous lesions in the prevention of cervical cancer. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240002630).

7.12 Cervical precancer treatment in women living with HIV

Percentage of women living with HIV, who screened positive for cervical precancer who received treatment for precancerous lesions in the last 12 months

What it measures
Progress towards the treatment coverage target of 90% of women with a positive screening test, receiving treatment.

Rationale
The purpose of this indicator is to assess availability, access and coverage of precancer treatment among women living with HIV who were diagnosed with precancerous lesions upon screening and were deemed eligible for precancer treatment in line with the World Health Organization (WHO) *Recommendations for screening and treatment to prevent cervical cancer.*

The WHO Global Strategy targets to eliminate cervical cancer are to vaccinate 90% of eligible girls against human papillomavirus (HPV), to screen 70% of eligible women at least twice in their lifetimes and to effectively treat 90% of those with a positive screening test or a cervical lesion, including palliative care when needed, all by 2030.

Numerator
Number of women living with HIV who received treatment for precancerous lesions after screening positive for cervical precancer.

Denominator
Number of women living with HIV who screened positive for cervical precancer

Calculation
Numerator/denominator

Method of measurement
The numerator and denominator are generated from programmatic data from HIV or cervical cancer screening programmes. Women who screened positive, but were ineligible for treatment of precancerous lesions, for example because they were referred for evaluation of potential invasive cervical cancer, should not be counted.

Measurement frequency
Annual

Disaggregation
- Age (15–19, 20–24, 25–29, 30–49, 50+ years).
- Cervical precancer treatment episode (1st in lifetime, 2nd, 3rd, 4th, etc.).
- Treatment method (cryotherapy, thermal ablation, large-loop excision of the transformation zone [LLETZ], other).

Additional information requested
None.

Strengths and weaknesses
Variation in the denominator over time may reflect the changing skill of healthcare workers to evaluate eligibility for precancerous treatment, the screening test used and its accuracy, and whether a triage test is used

Further information
Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, Bray F. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. CA Cancer J Clin. 2021;71:209-249.

Global strategy to accelerate the elimination of cervical cancer as a public health problem. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240014107).

Comprehensive cervical cancer control: a guide to essential practice. 2nd ed. Geneva: World Health Organization; 2014 (https://apps.who.int/iris/bitstream/handle/10665/144785/9789241548953_eng.pdf).

Guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention. Geneva: World Health Organization; 2021 (https://www.who.int/publications/i/item/9789240030824).

WHO technical guidance and specifications of medical devices for screening and treatment of precancerous lesions in the prevention of cervical cancer. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240002630).

7.13 Treatment of invasive cervical cancer in women living with HIV

The percentage of women living with HIV with suspected invasive cervical cancer who were treated within the last 12 months

What it measures

Progress towards increasing access to treatment for invasive cervical cancer for women living with HIV

Rationale

The purpose of this indicator is to assess availability and access to treatment services for invasive cervical cancer for women living with HIV over time. In the longer run, it is expected that the number of women living with HIV who received treatment for invasive cervical cancer will plateau and slowly decrease, as screening programmes will expand detection and treatment of precancerous lesions, and coverage of human papillomavirus (HPV) vaccination will increase in line with the World Health Organization (WHO) 90–70–90 elimination targets.

Numerator

Number of women living with HIV with suspected invasive cervical cancer who received treatment

Denominator

Number of women living with HIV who were screened for cervical cancer and had suspected invasive cancer

Calculation

Numerator/denominator

Method of measurement

The number is generated from programmatic data from HIV or cervical cancer programmes, or from a national cancer registry, if HIV status is recorded there

Measurement frequency

Annual

Disaggregation

- Age (15–19, 20–24, 25–29, 30–49, 50+ years).
- Invasive cervical cancer treatment episode (1st in lifetime, 2nd, 3rd, 4th etc.).
- Treatment type: medical, surgical.

Additional information requested

None.

Strengths and weaknesses

Changes in this indicator over time should be interpreted in light of related interventions, such as the generalization of the precancer screening and treatment programme.

Variation may also represent changes in health care workers' ability to identify invasive cancer.

Further information

Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, Bray F. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. CA Cancer J Clin. 2021;71:209-249.

Global strategy to accelerate the elimination of cervical cancer as a public health problem. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240014107).

Comprehensive cervical cancer control: a guide to essential practice. 2nd ed. Geneva: World Health Organization; 2014 (https://apps.who.int/iris/bitstream/handle/10665/144785/9789241548953_eng.pdf).

WHO framework for strengthening and scaling-up services for the management of invasive cervical cancer. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240003231).

Guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention. Geneva: World Health Organization; 2021 (https://www.who.int/publications/i/item/9789240030824).

7.14 People living with HIV receiving multimonth dispensing of antiretroviral medicine

Proportion of people living with HIV and currently on antiretroviral therapy who are receiving multimonth dispensing of antiretroviral medicine

What it measures

The proportion of all people living with HIV and currently on antiretroviral therapy, who received a multimonth (as specified below) supply of antiretroviral medicine at their most recent antiretroviral medicine pick-up.

Rationale

The option for people living with HIV who are clinically stable (established on antiretroviral therapy - see Definitions below) to receive multiple months of antiretroviral medicines is a key component of care that responds to the needs and preferences of people living with HIV (known as differentiated service delivery - see "Definitions," below). For people living with HIV who are established on antiretroviral therapy, multimonth dispensing has the potential to improve health outcomes and support long term treatment adherence, while also reducing unnecessary clinic attendance, thus contributing to system efficiency. Broadly, multimonth dispensing can contribute to efforts to achieve the 95–95–95 targets.

Adoption and roll-out of multimonth dispensing as part of national government strategies and plans are increasing. Since 2016, differentiated service delivery—including the option of multimonth dispensing—has been recommended in World Health Organization (WHO) HIV treatment and public health guidelines. The COVID-19 pandemic has particularly exposed the fragility of health systems and, in response, finding ways to maintain service delivery and reduce unnecessary clinic attendance has been prioritised.

The extent to which these models of care have been scaled up in many countries is uncertain and reporting on this indicator will support efforts to expand the offer of multimonth dispensing.

Numerator

Number of people living with HIV and currently on antiretroviral therapy who received 3 - <6 or 6+ months of antiretroviral medicine at their most recent antiretroviral medicine pick-up.

(The number receiving <3 months of antiretroviral supply is also collected for validation purposes)

If countries cannot report on the number of months of antiretroviral medicine dispensed by the disaggregation described above, they could, as an alternative, report the total number of people currently on antiretroviral therapy and receiving ≥3 months of antiretroviral medicine at their last medicine pick-up.

Denominator

Number of people living with HIV and currently on antiretroviral therapy.

Calculation

Numerator / Denominator

Method of measurement

The data for this indicator are collected at the end of the reporting period from facility antiretroviral therapy registers (including antiretroviral medicine dispensed outside the facility), programme monitoring tools or other databases. (If data are available from the private sector these should be included).

All people currently on antiretroviral therapy should be identified. People who have not received antiretroviral medicine within 28 days of their scheduled medicine pick-up are considered lost to follow-up and should not be counted in the denominator or the numerator. For example, if antiretroviral medicine was provided for three months (12 weeks), the time since the last medicine pick-up should be no longer than 16 weeks (12 weeks plus 28 days).

For the numerator: registers should capture the duration of antiretroviral medicine dispensed for each patient currently on antiretroviral therapy at their most recent medicine pick-up visit. If possible, this should be categorized as <3 months, 3- <6 months, or 6+ months and summarized for each age/sex group.

The denominator should match the total number of people currently on antiretroviral therapy at the end of the year, and be aligned with the national values submitted through the Global AIDS Monitoring tool.

If this indicator result is only available for a proportion of people currently on treatment, please enter the number of people that the percentage is based on, as well as the national denominator value, so that it is clear what proportion of the population currently on treatment is represented in the calculation.

Please note: multimonth dispensing should not be confused with multimonth prescriptions. Someone who receives a six-month antiretroviral medicine prescription but needs to attend clinic every one or two months for refills would not be counted as receiving multimonth dispensing.

Measurement frequency

Annual

Disaggregation

- Age 0–14
- Age 15+ by sex (male, female and transgender).

Additional information requested

Please include any information on sustained changes in national guidance on dispensing frequency that is related to COVID-19 in the narrative report.

Strengths and weaknesses

An indicator focused on the scale of multimonth dispensing is a pragmatic way of capturing one important aspect of differentiated service delivery. The indicator gives an overall sense of how widely a differentiated service delivery approach to HIV treatment is being adopted and the extent of possible individual benefit. It also suggests the potential for further improvements in system efficiency through increased spacing of antiretroviral medicine dispensing.

The presence of this indicator does not imply that all individuals living with HIV should be provided multimonth supplies of antiretroviral medicines. In addition to considering the clinical needs of people living with HIV - multimonth dispensing is proposed only for people who are established on antiretroviral therapy - dispensing frequency should also be guided by the needs and preferences of affected individuals and populations. Other factors that influence the capacity to provide multimonth supplies of antiretroviral medicines include supply chain issues, policy considerations and health care staff readiness. The fact that 100% coverage should not be seen as the target for multimonth dispensing highlights the importance of having some contextual information to guide the interpretation of results.

Focusing only on the duration of antiretroviral medicine dispensed provides an incomplete picture of differentiated service delivery. Monitoring of outcomes such as viral load suppression, patient satisfaction and retention in care would add to this picture, as would information on the quality and extent of social and other support being provided as part of differentiated service delivery. Ideally, the proportion of people living with HIV who were offered a choice of a differentiated treatment model would be captured, but this may not be feasible.

Definitions

Differentiated service delivery for HIV is defined by the WHO as a person-centred approach that simplifies and adapts HIV services to better serve the needs of people living with HIV and to optimize the available resources in health systems.

Multi-month dispensing refers to the provision of multiple months' supply of antiretroviral medicine and/or other medicines at single time point. Multimonth dispensing is frequently offered as a component of differentiated service delivery. WHO recommends that people who are established on antiretroviral therapy should be offered antiretroviral medicine refills lasting three to six months, preferably six months where feasible.

Established on antiretroviral therapy. The criteria for determining that a person is successfully established on antiretroviral therapy are
a) receiving antiretroviral therapy for at least six months; b) no current illness, [which does not include well-controlled chronic health conditions]; c) good understanding of lifelong adherence: adequate adherence counselling provided; and d) evidence of treatment success: at least one suppressed viral load result within the past six months (if viral load is not available: CD4 count >200 cells/mm3 (CD4 count >350 cells/mm3 for children 3-5 years old) or weight gain, absence of symptoms and concurrent infections).

The definition of being established on antiretroviral therapy should be applied to all populations, including those receiving second- and third-line regimens, those with controlled comorbidities, children, adolescents, pregnant and breastfeeding women and key populations.

Further information

Consolidated HIV strategic information guidelines. Driving impact through programme monitoring and management. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240000735).

Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach. Geneva: World Health Organization; 2021 (https://www.who.int/publications/i/item/9789240031593).

8.1 Domestic public budget for HIV

Budget for HIV and AIDS programmes from domestic public sources

What it measures

The allocated and executed government budget earmarked for HIV programmes, along with perceived near-term trends in budget (i.e., next year's budget).

The total domestic public resources allocated and executed for HIV from central and subnational levels are to be reported.

Rationale

Domestic resources have contributed significantly to the HIV funding landscape over the last decade. In recent years, domestic resources have accounted for more than half of the total financial resources for HIV in low- and middle-income countries.

The monitoring of domestic public budgets and their short-term forecasts aims to foster global efforts to mobilize resources to achieve the targets to end AIDS by 2030.

Numerator

Not applicable

Denominator

Not applicable

Data type

Currency and monetary values, and categorical variables indicating the magnitude of change to represent short-term forecasts of the domestic funding landscape.

Calculation

Planned and executed budgets by each fiscal year.

The relevant department of government financial statistics maintains the budgets allocated to various sectors. Many countries may have earmarked budgets for HIV and AIDS programmes, while some may have budgets for those activities under different sectors.

The indicator aims to capture the budget for HIV and AIDS activities allocated through the government's own sources of funding. Budgeted activities funded through external aid transfers from foreign entities must be excluded.

Virtually all countries have an earmarked public budget for HIV, even while not all HIV expenditures are derived from budgets. The scope of budgets may differ occasionally across countries, but trends are useful for in-country analysis.

Method of measurement

Budget analysis

Note: The short-term forecast for the approaching fiscal year must be reported based on the information obtained through the government finance statistics, the Ministry of Health or the National AIDS Commission.

Measurement frequency

Annually for fiscal year

Disaggregation

- Budgets by level of government (i.e., national/federal, provincial/state/district or municipal/city/local) as appropriate in each country.
- If segmented budgetary units exist (e.g., social security institutions or national AIDS bodies), they should be reported separately.

Strengths and weaknesses

The data quality may be robust in countries that have earmarked budgets for HIV. When there are no earmarked budgets for HIV reporting on this indicator may need coordination between government departments concerned with health and social welfare. When service provision is integrated within facilities, such expenditures will not be identified easily in earmarked budgets.

Further information

Annex 2

8.2 Antiretrovirals: unit prices and volume

What it measures
The average unit prices of antiretroviral regimens for a country's HIV programme and the associated procurement volume

Rationale
The average unit prices and procurement volume of antiretroviral commodities help monitor the antiretroviral medicine market dynamics and support the process of triangulating with people reported to be on antiretroviral therapy.

Numerator
Not applicable

Denominator
Not applicable

Data type
The average unit price per pack of regimen in current US$ or the local currency units for the reporting year, and the absolute number of packs procured within a given period.

Calculation
Not applicable

Method of measurement
Procurement and supply chain management systems

Data collection tools
Logistics Management Information Systems (LMIS)

Measurement frequency
Annually

Disaggregation
- By procurement batches. The number of packs procured needs to be provided for each batch of procurement of a regimen/formulation. When batch level data do not exist, then average annual unit price and the total number of packs procured annually need to be reported for this indicator.

Strengths and weaknesses
The procurement supply chain management systems (PSM) in countries maintain information on health commodity procurement at the central level. In some countries, there are LMIS that monitor commodities data at the level of the health facility. These information systems may be able to provide the data for reporting on this indicator.

Further information
Annex 3

8.3 HIV expenditure by origin of resources

Domestic and international HIV expenditure by programme category and financing source

What it measures

In-country expenditures of HIV programmes and services by source in a standardized and comparable manner according to mutually exclusive categories. The HIV expenditures by programme or service reported here would need to be consistent with the number of people who have received the services (as reported elsewhere in Global AIDS Monitoring).

Rationale

The indicator to be reported is total and subtotal HIV expenditures by services or programme categories and by financing sources. There are eight core sub-indicators that map to this reporting. These are outlined under Annex 3.

By the end of 2021, the international and domestic resource availability for the HIV response reached an estimated US$ 21.4 billion (in constant 2019 dollars) in low- and middle-income countries. Achieving country and global targets requires increased focus, resources, programme effectiveness and efficiency to provide the HIV care, treatment and prevention to reduce HIV incidence and extend life.

It is critical to identify long-term, sustainable financing sources, including domestic resource mobilization, to maintain and build upon the success achieved. However, filling the financing gap and pursuing efficient resource allocation can only be achieved by assessing and managing the resources available and their use.

The quantification of financing flows and expenditures helps to examine the questions of who benefits from HIV programmes and to determine the current state of allocations for HIV programmes and services that focus on key or other specific populations.

The vast majority of the AIDS Spending Categories (or ASCs, per National AIDS Spending Assessment [NASA] classifications) or the sub-indicators are drawn from existing frameworks and are now structured around the 2021 Political Declaration on Ending AIDS. The resource needs for low- and middle-income countries resulted in a target to mobilize at least US$ 29 billion (in constant 2019 US dollars) by 2025.

Numerator
Not applicable

Denominator
Not applicable

Data type
Currency and monetary values

Calculation

Social accounting and costing principles need to be applied for producing expenditure data. Rules, frameworks and principles are described in the specific manuals and guidelines (links provided below).

The calculation of each service/programme or sub-indicator may have individual characteristics to ensure proper accounting of all components (e.g., direct and shared costs of service provision) and to avoid double-counting; these calculations may be different by each financing source and service delivery modality (or even by service provider). Further guidance is available in the respective guidelines and manuals listed at the end of this section.

The quantification is limited to in-country expenditures, using international development assistance funds and the expenditures incurred using public or private funds reported in the current US$ or local currency units for the chosen reporting year.

There are certain requirements for data collection and quality to ensure the reliability and validity of the indicators to assure credibility.

The conciliation of top-down estimates (from the financing sources) and bottom-up (from the costing of service delivery) provides the best assessment of the total HIV in-country spending.

Financial and programme records from providers or service delivery organizations are the basis for data collection.

There are significant documented discrepancies between budgetary allocations and actual expenditures. Budget analysis is not recommended as the sole basis for reporting total in-country HIV expenditure.

It is good practice to validate expenditures funded by international sources, national financing sources and financing agents, as well as with all relevant stakeholders.

Method of measurement
Primary:
- NASA.

Alternative:
- Budget analysis.
- System of Health Accounts 2011 (SHA-2011) with HIV module.

Note:
- When a NASA is not available, countries may use centrally produced results from the PEPFAR expenditure reporting system and request expenditure data from the Global Fund. The reporting of expenditures for programmes funded by the Global Fund must conform to the reporting guidelines on Progress Update and Disbursement Request.[6]
- Health accounts using the SHA-2011 framework with full disease distribution attempt to capture top-level elements of the NASA ASCs. However, depending on the objectives of a given resource-tracking exercise, SHA-2011 may or may not inform on the totality of HIV granular expenditure (disaggregated by programme) as required. The SHA-2011 accounting framework may have to be supplemented by robust costing principles to disaggregate the HIV portion of the joint costs incurred by the system.

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[6] Please see Progress Update and Disbursement Request Form Instructions (https://www.theglobalfund.org/media/11754/fundingmodel_pudr_instructions_en.pdf).
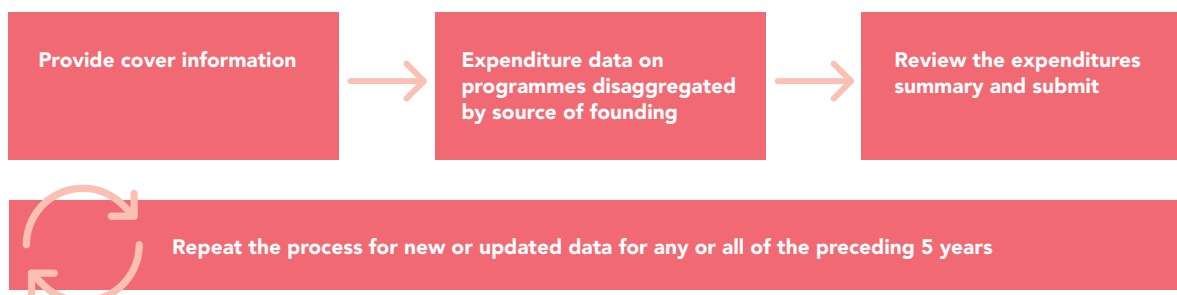
Data collection tools

Countries develop their reports on HIV expenditures by core programme/service categories and financing sources using the national funding matrix template. A full range of HIV programme categories is provided in Annex 2. If countries have developed a full and proper NASA, the filling of the funding matrix constitutes only an output template from the exercise. If countries have developed a health account using the SHA-2011 framework, the cells of the funding matrix can be filled, particularly for the international sources, and in some cases, for the domestic private and public sources of financing.

Process flow for reporting on this indicator

Provide cover information	→	Expenditure data on programmes disaggregated by source of founding	→	Review the expenditures summary and submit

Repeat the process for new or updated data for any or all of the preceding 5 years

The amended data for previous years can be submitted if the data submitted in previous years were preliminary.

Measurement frequency

Annually for calendar or fiscal year. Since the results of any accounting exercise may take time longer than the deadline for annual reporting, countries may submit preliminary results, which will be substituted when final results are available. In this reporting cycle, we suggest that countries submit any number of annual final reports available from the last five years, indicating their status as preliminary or final and whether they substitute for previous reports. It is not required to resubmit the data that have previously been reported and that remained unchanged. The UNAIDS team can be contacted for assistance if countries would like to submit recently amended or final reports on expenditures prior to 2016.

Disaggregation

- Financing source.
- HIV and AIDS programme categories.
- For selected sub-indicators, countries are encouraged to report expenditures on the most salient commodities under each of the relevant programmes representing sub-indicators, as data allow. Reporting of total expenditures by programme is acceptable if the disaggregation is not known but there is certainty that both commodities and service delivery costs are included.

Strengths and weaknesses

Countries that have appropriately implemented a full NASA are able to fill the template with an output table from the NASA exercise. Final country estimates need to be validated with all stakeholders and triangulated to increase reliability and validity.

Countries that have implemented an SHA-2011 annual exercise may need to ensure that the allocation keys used to estimate HIV expenditures from the utilization of the health system are updated and allow the granular data for domestic sources. This process may not use certified data as some accounting principles might require. Countries that have just started the process of full distributional health accounts need to validate the results with other existing sources and all stakeholders to increase reliability and validity of the estimates, particularly the overall level, potential duplication and significant unaccounted expenditures. Countries using health accounts should add non-health-related expenditures and ensure that consistent HIV expenditure is reported, particularly for shared costs in the health system. The implementation of health accounts needs medium- to long-term planning, and it is resource-intensive and depends on coordination between health accountants and programme managers.

Countries using budget analysis need to ensure that allocated budgets were spent as planned; the estimates for the expenditures that are not incurred using an earmarked budget should be added to each subtotal, as appropriate.

Countries have the choice of reporting on: (a) separate costs (commodities and service delivery) if they have the data; (b) on only one cost (if that is what is available); or (c) a disaggregated total that includes both commodities and service delivery.

List of core sub-indicators and associated statistical metadata

Total HIV expenditure	Funding source or service/programme category	Not applicable	Total expenditure from all sources spent on HIV and AIDS at the national level, including health and non-health
Sub-indicators	**Disaggregation**	**Target population**	**What it measures**
A. Expenditure on HIV testing and counselling (non-targeted; specific commodities separately)	Funding source	General population under specific indications	HIV testing and counselling is used to refer to all services involving HIV testing provided alongside counselling, including: ▪ Client-initiated HIV testing and counselling. ▪ Provider-initiated testing and counselling. ▪ HIV testing and counselling (HTC) as part of a campaign, through outreach services or through home-based/self-testing. Direct expenditures in the purchase of reagents for laboratory and rapid tests to be reported separately from other costs (as available).
B. Expenditure on antiretroviral therapy (adults and paediatric; specific commodities separately)	Funding source, adults and children (younger than 15 years old)	Persons living with HIV	Antiretroviral therapy. Direct expenditures in the purchase of antiretrovirals separately from other from other costs (as available). Unit prices and volume of commodities procured/distributed.
C. Expenditure on HIV-specific laboratory monitoring (specific commodities separately)	Funding source	Persons living with HIV on antiretroviral therapy	Diagnostic services related to HIV clinical monitoring. Direct expenditures in the purchase of laboratory reagents for use in determining CD4+ cell counts and viral load quantification, separately from costs associated with other commodities and service delivery (as available).
D. Expenditure on tuberculosis (TB) and HIV (specific commodities separately)	Funding source	People living with HIV and people living with TB	Examinations, clinical monitoring, related laboratory services, treatment and prevention of TB (including isoniazid and drugs for treating active TB), and screening and referring clients of TB clinics for HIV testing and clinical care. Direct expenditures in the purchase of drugs for the treatment and prevention of TB (including isoniazid and drugs for treating active TB) separately from other commodities and service delivery costs (as available).
E. Expenditure on the five pillars of combination prevention (specific commodities separately)	Funding source, five pillars of combination prevention: ▪ Prevention for young women and adolescent girls (age 10–24 years, exclusively high-prevalence countries). ▪ Voluntary medical male circumcision (exclusively high-prevalence countries). ▪ Pre-exposure prophylaxis (PrEP) stratified by key population (gay men and other men who have sex with men, sex workers, people who inject drugs, transgender people, prisoners, young women and adolescent girls, and serodiscordant couples). ▪ Condoms (non-targeted). ▪ Prevention among key populations (gay men and other men who have sex with men, sex workers, people who inject drugs, transgender people and prisoners).	General population, key populations	This subset of prevention services is labelled and defined as combination prevention. The rest of the HIV prevention services are to be specified within the categories of the national funding matrix as part of broader prevention services. This subset includes prevention services specifically designed and delivered for each of the key populations, including prevention services for: ▪ Young women and adolescent girls (age 10–24 years) in high-prevalence countries. ▪ Gay men and other men who have sex with men. ▪ Sex workers and their clients. ▪ People who inject drugs. ▪ Voluntary medical male circumcision. ▪ PrEP, stratified by key populations. ▪ Condom promotion and provision for the general population. Direct expenditures in the purchase of condoms, needles and syringes, and drugs for substitution therapy separately from other costs (as available).

F. Expenditure on prevention of vertical transmission of HIV (specific commodities separately)	Funding source	Pregnant women and newborns	Activities aimed at elimination of new HIV infections in children, including: ▪ HIV testing for pregnant women. ▪ Antiretroviral therapy for pregnant women living with HIV. ▪ Antiretroviral medicine for newborns. ▪ Safe childbirth practices. ▪ Counselling and support for maternal nutrition and for exclusive breastfeeding. **Note:** When a woman living with HIV receives antiretroviral therapy as a part of her treatment before she knows she is pregnant, the treatment should be included under antiretroviral therapy for adults rather than for the prevention of mother-to-child transmission.
G. Expenditure on social enablers	Funding source	Not Applicable	Activities to support the implementation of basic programmes as defined in the UNAIDS Investment Framework, including: ▪ Political commitment and advocacy. ▪ Mass media. ▪ Laws, legal policies and practices. ▪ Community mobilization. ▪ Stigma reduction. ▪ Human rights programmes
H. Expenditure on cash transfers for young women and girls (age 10–24 years, high-prevalence countries)	Funding source	Young women and girls (age 10–24 years)	Total expenditure on cash transfers for young women and girls (age 10–24 years). This is defined as a development synergy with implications for HIV prevention.

Guidelines for completing the 2023 interim National Commitments and Policy Instrument

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Introduction

Policy monitoring has been a component of global AIDS reporting since 2003, and it has been implemented every two years, most recently in 2022. The NCPI is an integral component of Global AIDS Monitoring (GAM) that aims to measure progress in developing and implementing policies, strategies and laws related to the HIV response. It achieves this by doing the following:

- Promoting consultation and dialogue between key stakeholders at the national level, especially government and civil society and communities, in order to capture their perspectives on the AIDS response.

- Supporting countries in assessing the status of their HIV epidemic and response, and in identifying barriers, gaps and facilitators to strengthen the response.

- Collecting data on the policy and legal environment related to the AIDS response.

The responses directly monitor several targets and provide context on progress towards achieving global targets.

The NCPI is to be completed and submitted as part of GAM reports every two years. This interval reflects the expectation that changes to laws, policies and regulations occur slowly, and that the need for more frequent monitoring may be limited.

During interim years, an interim NCPI is to be completed and submitted as part of GAM reports. The interim NCPI includes a subset of questions from the NCPI Part A that relate to policy elements that may change more frequently.

Based on extensive consultations, the NCPI questionnaire was restructured and the questions revisited in 2021 to reflect the global commitments in the 2021 United Nations (UN) Political Declaration on HIV and AIDS: Ending Inequalities and Getting on Track to End AIDS by 2030. The wording of some of the questions has been further refined based on experiences in previous reporting rounds and to reflect developments in policy recommendations and available technologies.

Structure of the National Commitments and Policy Instrument

The NCPI has two parts: Part A is to be completed by national authorities, and Part B is to be completed by civil society, communities and other nongovernmental partners involved in the national AIDS response. While questions from the NCPI Part B – which are to be completed by civil society, communities and other non-governmental partners engaged in the response – are not included in the interim NCPI, countries are encouraged to engage civil society and communities in the overall Global AIDS Monitoring process.

The questions are structured around the commitments in the 2021 Political Declaration on AIDS.[7]

Proposed steps for gathering and validating data

The process described below for completing the NCPI should be integrated within each country's plan and time frame for the overall GAM process. This suggested process aims to integrate consistency checks for NCPI data collected throughout the process and to promote analysis of the information that is as objective as possible.

1. Establish a working group to accompany NCPI reporting. This could be an existing multisectoral monitoring and evaluation technical working group.

2. Identify a focal point to coordinate the completion of the questionnaire.

3. An NCPI working group conducts a stakeholder mapping exercise to select contributors systematically.

   A mapping exercise can ensure that the most up-to-date and accurate data can be collected through the NCPI by involving relevant experts and avoiding the influence of potential biases in the reporting process. It can ensure that the reporting reflects a broad range of perspectives; involving a broad range of stakeholders can also help with interpreting qualitative or potentially ambiguous data.

   The list of all of the people or entities who could provide information or insight on the questions included in the NCPI can be drawn from the knowledge of working group members, through contacts with other people knowledgeable about the national HIV response and by reviewing relevant documentation. Stakeholders can be identified from the following sectors and groups (among others):

   o   Health ministry or the equivalent.

   o   Education ministry or the equivalent.

   o   Gender ministry or the equivalent.

   o   Justice ministry or the equivalent.

   o   Trade ministry or the equivalent.

   o   Representatives of people living with HIV, including women and young people living with HIV.

   o   Representatives of the various key population groups.

   o   Bilateral and multilateral organizations engaged in the HIV response.

   o   Other nongovernmental organizations or foundations engaged in the HIV response.

   o   The private sector.

   Geographical diversity should be considered in identifying stakeholders to ensure representativeness.

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[7]   For more on the 2021 Declaration on AIDS, please see:
      https://www.unaids.org/sites/default/files/media_asset/2021_political-declaration-on-hiv-and-aids_en.pdf

The following information should be recorded for all stakeholders contacted throughout the NCPI reporting process:

o Name.

o Contact details.

o Organization affiliation.

o Role in the organization.

o Stakeholder type: health ministry, other ministry, private sector, civil society, community, international nongovernmental organization, bilateral organization, UNAIDS or other UN organization.

This information could be helpful for documenting the multisectoral nature of the process and supporting preparations for future rounds of NCPI reporting.

4. Collect responses to NCPI questions: To ensure accuracy and avoid respondent fatigue, it is suggested that specific questions be directed to specific respondents who are knowledgeable in that area. Focal points for the questionnaire or consultant(s) recruited to support the process should coordinate contact with identified stakeholders—such as through in-person interviews, by phone or email—in order to share the NCPI questions in their area of expertise and gather their responses.

If possible, it is recommended that the same question be sent to more than one stakeholder knowledgeable in the area. If there are discrepant answers, the coordinator for the NCPI could share a summary of the information received for that question with the various stakeholders who have provided it in order to clarify the source of the different responses and to reach a consensus (if possible). To avoid potential sources of bias, the anonymity of respondents should be maintained as much as possible during this process of data verification and follow-up.

A PDF version of the questionnaire can be downloaded through the NCPI header in the indicator list in the GAM online reporting tool (https://AIDSreportingtool. unaids.org).

Please refer to the glossary of key terms below and to additional guidance on responding to laws-related questions in the NCPI (annex 6).

5. The national GAM focal point enters responses in the online reporting tool.

6. Stakeholders view and provide comments on the draft responses. The draft of the completed NCPI can be shared with stakeholders by giving them viewing rights to the GAM online reporting tool or by sharing the NCPI questionnaire with draft responses in PDF. The PDF can be extracted from the online reporting tool by clicking Print all NCPI to PDF in the indicator list page.

7. Conduct a validation consultation:

o To review NCPI responses for selected questions.

o To analyse NCPI data jointly with indicator data, identifying progress, gaps, barriers and facilitators to the AIDS response.

o To identify key points for narrative summaries for each commitment area.

Because of the length of the questionnaire, it is suggested that responses to all questions not be reviewed during the national validation workshop, but that the workshop instead focus on: (a) specific questions identified as key for discussion during the data collection and review process before the workshop; and (b) on discussing progress and gaps for each commitment area more broadly.

8. Update the NCPI responses entered in the GAM online reporting tool based on comments received in preparation for and during the consultation, and complete the narrative summaries for each commitment area.

9. Submit the NCPI responses with other GAM components on or before 31 March 2022.

10. Respond to queries posted through the online reporting tool during the data validation process.

Operationalizing and using the National Commitments and Policy Instrument data

Data collected through the NCPI will complement indicator and expenditure data that are also collected and reported through the GAM process. Countries are encouraged to use the NCPI data in analysing the status of the national epidemic and response, and in their national strategic planning efforts.

NCPI data will also be used: (a) to directly monitor progress globally towards several of the 10–10–10 targets; (b) to provide context to quantitative data collected through GAM indicators during the analysis of progress towards other global commitments in the 2021 Political Declaration on AIDS; and (c) to inform global strategies and reports. The responses to the NCPI questions from each country will be aggregated in order to generate regional and global values. The NCPI data by country will be available through AIDSInfo (http://aidsinfo.unaids.org/) and Laws and Policies Analytics (http://lawsandpolicies.unaids.org/).

For important guidance on interpreting and responding to questions within the NCPI on the existence of certain laws, please refer to Annex 6 in these guidelines.

Loading policy data previously reported through Global AIDS Monitoring

Countries that submitted responses to questions through a previous NCPI that have remained the same from the previous reporting round can choose to load those responses into the 2023 GAM online reporting tool. Responses can then be updated or resubmitted where there has been no change.

Definitions

The following are definitions of key terms included in the NCPI questionnaire, where they are marked with an asterisk (*).

These definitions should be followed to complete the questionnaire: consistent use of these definitions over time and across countries strengthens comparability and trend analyses.

Cash transfers. Programmes that give money to poor and vulnerable people. Cash transfers may be conditional, giving money in return for fulfilling specific behavioural conditions (such as school attendance among children), or unconditional (not attached to specific behavioural requirements).

Established on antiretroviral therapy. The World Health Organization (WHO) defines people established on antiretroviral therapy as having met all of the following criteria: they have been receiving antiretroviral therapy for at least six months; they have no current illness, which does not include well-controlled chronic health conditions; they have a good understanding of lifelong adherence: they are provided with adequate adherence counselling; and there is evidence of treatment success (at least one suppressed viral load result within the past six months; if viral load is not available at least one of the following can be considered: CD4 count >200 cells/mm3 [CD4 count >350 cells/mm3 for children aged 3 to 5 years] or weight gain, absence of symptoms and concurrent infections).[8]

HIV case surveillance. HIV case surveillance refers to the reporting of an initial diagnosis of HIV infection and defined sentinel events from every person diagnosed with HIV to a public health agency responsible for monitoring and controlling the epidemic. Case surveillance entails individual-level, longitudinal data obtained from multiple sources that are linked by unique identifiers and maintained in a dedicated data repository at the national level.[12]

Non-nucleoside/nucleotide transcriptase inhibitors (NNRTI). Antiviral drug class non-analogue to nucleosides that blocks/interferes with HIV reverse transcriptase and prevents HIV replication.

Participation. Active and informed participation in formulating, implementing and monitoring and evaluating all decisions, policies and interventions that affect one's health in order to ensure respect for human rights. It also means ensuring that health systems and interventions are responsive, effective, appropriate and sustainable. Participation is informed when people can access the information required to participate in a meaningful and effective way. If necessary, capacity-building activities should be carried out to ensure this.[15]

Routine viral load testing. Routine viral load monitoring can be carried out at six months and 12 months, and then every 12 months thereafter, if the patient is stable on antiretroviral therapy.[8]

Social protection. Defined as "all public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalized; with the overall objective of reducing the economic and social vulnerability of poor, vulnerable and marginalized groups."[16] Social protection is HIV-sensitive when it is inclusive of people who are either at risk of HIV infection or susceptible to the consequences of HIV.[17]

**Stock-out.** Unplanned interruption in the stock of a health product.

[8] Consolidated guidelines on HIV prevention, testing, treatment, service delivery, and monitoring. Geneva: WHO; 2021 (https://apps.who.int/iris/rest/bitstreams/1357089/retrieve, accessed 9 November 2021).

[12] Consolidated guidelines on person-centred HIV patient monitoring and case surveillance. Geneva: WHO; 2017 (https://apps.who.int/iris/bitstream/handle/10665/255702/9789241512633-eng.pdf?sequence=1, accessed 9 November 2021).

[15] Sander G. HIV, HCV, TB and harm reduction in prisons: human rights, minimum standards and monitoring at the European and international levels. London: Harm Reduction International; 2016 (https://www.hri.global/files/2016/02/10/HRI_PrisonProjectReport_FINAL.pdf, accessed 10 November 2021).

[16] Devereux S, Sabates-Wheeler R. Transformative social protection. IDS Working Paper 232. Brighton: Institute of Development Studies; 2004 (https://www.ids.ac.uk/download.php?file=files/dmfile/Wp232.pdf, accessed 10 November 2021).

[17] HIV and social protection guidance note. Geneva: UNAIDS; 2014 (http://www.unaids.org/sites/default/files/media_asset/2014unaidsguidancenote_HIVandsocialprotection_en.pdf , accessed 10 November 2021).
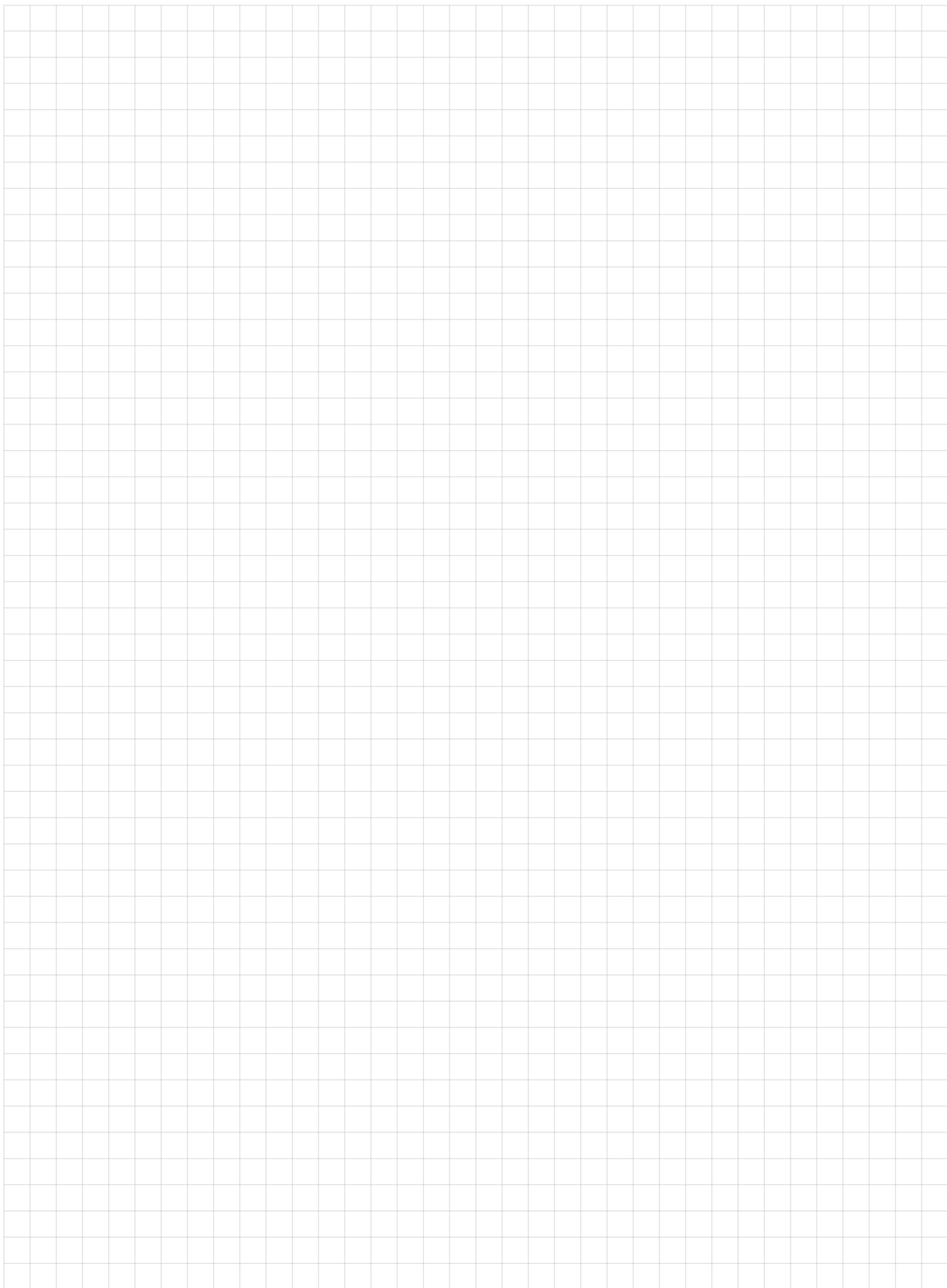
Interim NCPI

Abbreviations and acronyms

3TC	lamivudine
ABC	abacavir
AZT	zidovudine
CrAg	cryptococcal antigen
DTG	dolutegravir
EWI	early warning indicator
FDC	fixed-dose combination
FTC	emtricitabine
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIVDR	HIV drug resistance
IGRA	interferon-gamma release assay
IPT	isoniazid preventive therapy
LF-LAM	lateral flow urine lipoarabinomannan assay
LPV/r	lopinavir with a ritonavir boost
LTBI	latent tuberculosis infection
MNCH	maternal, newborn and child health
NCD	non-communicable diseases
NCPI	National Commitments and Policy Instrument
NNRTI	non-nucleoside/nucleotide transcriptase inhibitors
NRTI	nucleoside reverse transcriptase inhibitor
OAMT	opioid agonist maintenance therapy
PDR	pre-treatment drug resistance
PEP	post-exposure prophylaxis
PrEP	pre-exposure prophylaxis
STI	sexually transmitted infections
TB	tuberculosis
TDF	tenofovir disoproxil fumarate
TPHA	treponema pallidum hemagglutination assay
TPPA	treponema pallidum particle agglutination assay
UNFPA	United Nations Population Fund
WHO	World Health Organization

Interim National Commitments and Policy Instrument

* The guidelines for the National Commitments and Policy Instrument (NCPI) define the terms marked with an asterisk (*).

1. Combination prevention for all

- Reduce new HIV infections to under 370 000 by 2025.

- Ensure that 95% of people at risk of HIV infection—within all epidemiologically relevant groups, age groups and geographic settings—have access to and use appropriate, prioritized, person-centred and effective combination prevention options.

- Reduce the number of new HIV infections among adolescent girls and young women to below 50 000 by 2025.

- Ensure availability of pre-exposure prophylaxis (PrEP) for 10 million people at substantial risk of HIV and post-exposure prophylaxis (PEP) for people recently exposed to HIV by 2025.

- 95% of people within humanitarian settings at risk of HIV use appropriate, prioritized, people-centred and effective combination prevention options.

Pre-exposure prophylaxis

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1. **Do your country's national guidelines recommend any of the following pre-exposure prophylaxis (PrEP) modalities/products? Please select all that apply.**
- ☐ Daily oral PrEP
- ☐ Event-driven (on demand) PrEP
- ☐ The dapivirine vaginal ring (DVR)
- ☐ Long-acting injectable cabotegravir (CAB-LA)
- ☐ No PrEP modalities/products are recommended in the national guidelines

1.1 **To which populations is pre-exposure prophylaxis (PrEP) provided under the national guidelines? Please select all that apply.**
- ☐ Gay men and other men who have sex with men
- ☐ Sex workers
- ☐ People who inject drugs
- ☐ Transgender people
- ☐ Serodiscordant couples
- ☐ Young women (aged 18–24 years)
- ☐ Adolescents (aged <17 years)
- ☐ People in prisons and other closed settings
- ☐ Pregnant and breastfeeding women
- ☐ People who request PrEP
- ☐ Other (please specify): _____
- ☐ No national PrEP guidelines have been developed

1.2 **Who has the authority to prescribe pre-exposure prophylaxis (PrEP) in your country? Please select all that apply.**
- ☐ Doctors
- ☐ Clinical officers
- ☐ Nursing cadre (e.g., midwives, nurse practitioners and registered nurses)
- ☐ Pharmacists
- ☐ Other (please specify): _____

1.3 **Is pre-exposure prophylaxis (PrEP) available through any of the following in your country? Please select all that apply.**
- ☐ Public health-care facilities
- ☐ Community-based distribution (including mobile services)
- ☐ Pharmacies (stand-alone, including online)
- ☐ Private health-care providers
- ☐ The Internet (informal purchases)
- ☐ Educational institutions (e.g., schools and universities)
- ☐ Research sites
- ☐ Other (please specify): _____

Condoms

2. **Has the national need for condoms been estimated?**
☐ Yes
☐ No

2.1 **If yes, what is the estimated number of condoms needed?** _____

2.2 **If yes, for what year is the condom needs estimate?** _____

2.3 **If yes, what method was used to estimate the number of condoms needed? Please select all that apply.**
☐ General population (condoms per sexually active man/year)
☐ Historical (same as last year, plus population growth)
☐ Budget-driven (based on what can be bought)
☐ Demand-based (based on past condom usage rates, such as using the GOALS model)
☐ Capacity-based (how many can be supplied and distributed with current capacity)
☐ Part of family planning commodity needs estimates
☐ "Total universe of need" approach
☐ UNFPA/UNAIDS Condom Needs and Resource Requirement Estimation Tool
☐ Other (please specify): _____

3. **Have there been condom stock-outs* in the past 12 months?**
3.a **National stock-outs**
☐ Yes
☐ No
3.b **Local stock-outs**
☐ Yes
☐ No

2. 95–95–95 for HIV testing and treatment

▪ Reduce annual AIDS-related deaths to under 250 000 by 2025.

▪ Ensure that 34 million people are on HIV treatment by 2025.

▪ Achieve the 95–95–95 testing, treatment and viral suppression targets within all demographics, groups and geographic settings, including children and adolescents living with HIV:
  – 95% of people living with HIV know their HIV status.
  – 95% of people who know their HIV-positive status are accessing treatment.
  – 95% of people on treatment have suppressed viral loads.

▪ Ensure that 90% of people living with HIV receive preventive treatment for tuberculosis (TB) by 2025.

▪ Reduce TB-related deaths among people living with HIV by 80% by 2025 (compared to a 2010 baseline).

HIV testing

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4. **Which of the following HIV testing approaches are used in your country? Please select all that apply.**

☐ Client-initiated testing and counselling

☐ Provider-initiated testing and counselling

☐ Routine antenatal testing

☐ Dual HIV/syphilis rapid diagnostic tests for pregnant women in antenatal care

☐ Dual HIV/syphilis rapid diagnostic tests for any key population group

☐ Community-based testing

☐ Home-based (door-to-door) testing

☐ Lay provider testing

☐ Self-testing

☐ Provider-assisted referral (assisted partner notification/index testing)

☐ Social network-based HIV testing

☐ Other (please specify): _____

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5. **Has your country adapted the recommendations from the 2019 World Health Organization (WHO) *Consolidated guidelines on HIV testing services* in a national process on testing guidelines?**

☐ Yes, fully

☐ Yes, partially

☐ No

☐ Don't know

---

6. **Has your country included HIV self-testing as a national policy (either within the national HIV testing policy/plan or a stand-alone HIV self-testing policy)?**

☐ Yes

☐ No

6.1 **If yes, is HIV self-testing routinely implemented in your country?**

☐ Yes, routinely implemented on a national scale

☐ Yes, routinely implemented on a subnational scale or in select districts

☐ No, only in pilot projects

☐ No, not implemented anywhere

6.2 **If no to Question 6, is a national policy or plan on HIV self-testing in development?**

☐ Yes, and self-testing is being piloted to inform policy

☐ Yes, but self-testing is not being piloted

☐ No

6.2a **If yes to Question 6.2, please indicate the year in which a national self-testing policy or plan is expected to be completed.**

☐ No planned year

☐ 2023

☐ 2024

☐ 2025

☐ 2026

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7. Has your country included provider-assisted referral (assisted partner notification/index testing) in its national policy?
☐ Yes
☐ No

7.1 If no, is a national policy or plan on provider-assisted referral (assisted partner notification/index testing) in development?
☐ Yes
☐ No

7.1.a If yes, please indicate the year in which a national policy on provider-assisted referral (assisted partner notification/index testing) is planned to be completed.
☐ No planned year
☐ 2023
☐ 2024
☐ 2025
☐ 2026

8. Has your country included social network-based HIV testing service approaches in its national policy?
☐ Yes
☐ No

8. If no, does it have plans to include social network-based HIV testing service approaches in its national policy in the future?
☐ Yes
☐ No

8.1.a If yes to Question 8.1, please indicate the year in which a national policy on social network-based HIV testing service approaches is planned to be completed.
☐ No planned year
☐ 2023
☐ 2024
☐ 2025
☐ 2026

9. Does your country use three consecutive reactive tests (3-test strategy/algorithm) for an HIV-positive diagnosis?
☐ Yes
☐ No

9.1 If no, does your country have a plan to adopt a 3-test strategy/algorithm for an HIV-positive diagnosis?
☐ Yes
☐ No

9.1.a If yes, please indicate the year in which a national policy on 3-test strategy for an HIV-positive diagnosis is planned to be adopted.
☐ No planned year
☐ 2023
☐ 2024
☐ 2025
☐ 2026

10. Does your country have national policies and/or strategies on linking HIV testing and counselling and enrolment in care following an HIV-positive diagnosis?
☐ Yes
☐ No

11. Does your country have national policies and/or strategies on linking HIV testing and prevention following an HIV-negative diagnosis?
☐ Yes, for all populations
☐ Yes, but only for key populations and high-risk groups
☐ No

Antiretroviral therapy

12. **Has your country adopted the recommendations on rapid initiation of antiretroviral therapy in the 2021 World Health Organization (WHO)** *Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach?*

- ☐ Yes, rapid initiation within 7 days of HIV diagnosis
- ☐ No
- ☐ Other (please specify): _____

12.1 **If your country has adopted a policy on rapid initiation of antiretroviral therapy, what is the status of implementation?**

- ☐ Implemented in few (<50%) treatment sites
- ☐ Implemented in many (50–95%) treatment sites
- ☐ Implemented countrywide (>95% of treatment sites)
- ☐ Not implemented in practice
- ☐ Other (please specify): _____

12.2 **Does your country have a policy to offer starting antiretroviral therapy on the same day as an HIV diagnosis, as part of the policy on rapid initiation of antiretroviral therapy?**

- ☐ Yes
- ☐ No

12.3 **If your country has a policy on same day start, what is the status of implementation?**

- ☐ Implemented in few (<50%) treatment sites
- ☐ Implemented in many (50–95%) treatment sites
- ☐ Implemented countrywide (>95% of treatment sites)
- ☐ Not implemented in practice
- ☐ Other (please specify): _____

13. **Is CD4 testing for diagnosing advanced HIV disease available?**

- ☐ Yes
- ☐ No

13.1 **Is yes, where is it available? Please select all that apply.**

- ☐ Point-of-care
- ☐ Facility laboratory
- ☐ Centralized laboratory
- ☐ Other (please specify): _____

13.2 **If yes, in what percentage of sites (estimated) do clients have access to CD4 testing and return of results?**

- ☐ In few (<50%) sites
- ☐ In many (50–95%) sites
- ☐ Countrywide (>95% of sites)
- ☐ Not implemented in practice
- ☐ Other (please specify): _____

13.3 **If yes, what is the median time (in number of days) for the patient to receive the CD4 result?**

- ☐ Please specify:_____
- ☐ Not available

14. **Is nurse-initiated antiretroviral therapy allowed in your country for any of the following populations? Please select all that apply.**

- ☐ Adults except pregnant women
- ☐ Pregnant women
- ☐ Adolescents (aged 10–19 years)
- ☐ Children younger than 10 years
- ☐ None of the above

15. **Does your country have a national policy promoting community delivery of antiretroviral therapy (such as outside of health facilities)?**

☐ Yes

☐ No

15.1 **If yes, where is delivery in a community setting implemented?**

☐ Nationally

☐ Regionally

☐ At pilot sites

☐ Other (please specify): _____

15.2 **If yes, to which populations is antiretroviral therapy provided in community settings in your country (such as outside of health facilities)?**

☐ For all people on antiretroviral therapy, including pregnant and breastfeeding women and children

☐ For all people on antiretroviral therapy, excluding pregnant and breastfeeding women and children

☐ For all people on antiretroviral therapy, including pregnant and breastfeeding women, but excluding children

☐ For all people on antiretroviral therapy, including children, but excluding pregnant and breastfeeding women

☐ For all people who are stable on antiretroviral therapy, according to the national guidelines

☐ Other (please specify):_____

15.3 **If yes, which differentiated care services is your country using for the pick-up of antiretroviral medicine? Please select all that apply.**

☐ Pharmacy pick-up at the same site as the health facility

☐ Other pharmacy (e.g., stand-alone)

☐ Adherence group at the same site as the health facility

☐ Community pick-up points (individual)

☐ Community-based adherence groups

☐ Other (please specify):_____

16. **Does your country have a national policy on the frequency of clinic visits for adults who are established* on antiretroviral therapy?**

☐ Yes

☐ No

16.1 **If yes, please specify the frequency of clinic visits in the national policy.**

☐ Once a month

☐ Every 2 months

☐ Every 3 months

☐ Every 6 months

☐ Every 12 months

16.2 **If yes, what is the status of implementation?**

☐ Implemented in few (<50%) treatment sites

☐ Implemented in many (50–95%) treatment sites

☐ Implemented countrywide (>95% of treatment sites)

☐ Not implemented in practice

☐ Other (please specify): _____

17. Does your country have a national policy on how frequently adults who are established* on antiretroviral therapy should pick-up antiretroviral medicine?

- ☐ Yes
- ☐ No

17.1 If yes, please specify the frequency of antiretroviral medicine pick-up included in the national policy.

- ☐ Once a month
- ☐ Every 2 months
- ☐ Every 3 months
- ☐ Every 6 months
- ☐ Every 12 months
- ☐ Other (please specify): _____

17.2 If yes, what is the status of implementation?

- ☐ Implemented in few (<50%) treatment sites
- ☐ Implemented in many (50–95%) treatment sites
- ☐ Implemented countrywide (>95% of treatment sites)
- ☐ Not implemented in practice
- ☐ Other (please specify): _____

18. Do the country's national criteria for (or definition of) people established* on antiretroviral therapy include the following elements defined in the 2021 World Health Organization (WHO) *Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach?* Please select all that apply.

- ☐ Receiving antiretroviral therapy for at least 6 months
- ☐ No current illness (does not include well-controlled chronic health conditions)
- ☐ Good understanding of lifelong adherence
- ☐ Evidence of treatment success (i.e., at least one suppressed viral load result within the past 6 months)
- ☐ Other (please specify): _____

19. Does the country provide psychological support for adolescents living with HIV?

- ☐ Yes
- ☐ No

20. Does your country implement interventions to trace people who have disengaged from care and provide support for re-engagement?

- ☐ Yes
- ☐ No

21. Please provide the country's national criteria for (or definition of) lost to follow-up. For guidance, the World Health Organization (WHO) defines "lost to follow-up" as a patient who has not received antiretroviral medicines within 28 days of their last missed drug collection appointment.[18]

_____

22. Has your country adopted the recommendations in the 2021 World Health Organization (WHO) *Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health* approach to offer a package of interventions to all patients presenting with advanced HIV disease (defined by WHO as CD4<200)?

- ☐ Yes, fully adopted
- ☐ Yes, partially adopted (only for specific interventions and/or populations, such as children, adolescents or adults) (please specify): _____
- ☐ No

22.1 If yes, how widely is it implemented?

- ☐ Implemented in few (<50%) treatment sites
- ☐ Implemented in many (50–95%) treatment sites
- ☐ Implemented countrywide (>95% of treatment sites)
- ☐ Not implemented in practice
- ☐ Other (please specify): _____

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[18] Source: Consolidated guidelines on person-centred HIV strategic information: strengthening routine data for impact. Geneva: World Health Organization; 2022: page 127.

23. Which of the following components of the package of advanced HIV disease interventions for tuberculosis (TB), severe bacterial infections and cryptococcal meningitis recommended in the 2021 WHO *Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach* are included in the national policy on antiretroviral therapy for adults, adolescents and children? Please select all that apply.

☐ Baseline CD4 test to diagnose advanced HIV disease

☐ Molecular diagnostic tests for TB diagnosis

☐ Urine LF-LAM for TB diagnosis

☐ Cryptococcal antigen (CrAg) screening

☐ Co-trimoxazole prophylaxis

☐ TB preventive treatment

☐ Fluconazole empirical prophylaxis

☐ Fluconazole pre-emptive therapy

☐ Rapid antiretroviral therapy initiation

☐ Adapted adherence support

☐ Other (please specify):_____

24. Which of the following service provision modalities are included in the national policy on antiretroviral therapy for adults, adolescents and children? Please select all that apply.

☐ Tuberculosis (TB) service providers provide antiretroviral therapy in TB clinics for the duration of TB treatment

☐ Antiretroviral therapy providers provide TB treatment in antiretroviral therapy settings for the duration of TB treatment

☐ Maternal, newborn and child health (MNCH) service providers provide antiretroviral therapy in MNCH clinics

☐ Antiretroviral therapy providers deliver antiretroviral therapy for pregnant women

☐ Antiretroviral therapy providers deliver antiretroviral therapy for newborns, infants and children

☐ Nutrition assessment, counselling and support provided to malnourished people living with HIV

☐ Antiretroviral therapy delivered in settings providing opioid substitution therapy

☐ Primary health-care providers deliver antiretroviral therapy in primary health care for adults and adolescents

☐ Primary health-care providers deliver antiretroviral therapy in primary health-care settings for children

☐ Psychosocial support strategies for patient-centered care (e.g., support groups, enhanced adherence counselling, support for disclosure or referral for psychological/socioeconomic services) linked to facilities

☐ Patient-centered support (e.g., counselling, enhanced adherence counselling, support for disclosure or referral for psychological/socioeconomic services) separated from facilities

☐ Key population-friendly services

☐ Adolescent-friendly health services

☐ Antiretroviral therapy delivered in the community as part of a differentiated care model

☐ Antiretroviral therapy providers carry out cardiovascular disease screening and management

☐ Antiretroviral therapy providers carry out mental health screening and treatment

☐ Other (please specify): _____

25.   Do patients pay any routine user fees or charges for services when visiting a public sector health facility?

☐   Yes

☐   No

25.1   If yes, is there a specific formal fee or an informal/variable fee for the following?

25.1.a   HIV testing

☐   Formal

☐   Informal

25.1.b   Dispensing of pre-exposure prophylaxis (PrEP)

☐   Formal

☐   Informal

25.1.c   Primary care appointment

☐   Formal

☐   Informal

25.1.d   Patient cards

☐   Formal

☐   Informal

25.1.e   Diagnostic services (including viral load test)

☐   Formal

☐   Informal

25.1.f   Dispensing of HIV treatment

☐   Formal

☐   Informal

25.1.g   Dispensing of prevention and treatment of coinfections

☐   Formal

☐   Informal

25.1.h   Dispensing of other co-therapies (e.g., medicines for noncommunicable diseases, sexual and reproductive health or immunizations)

☐   Formal

☐   Informal

Antiretroviral therapy regimens

Adults and adolescents

26.   Based on the recommendations in the 2021 WHO Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach, is TDF + 3TC (or FTC) + DTG the preferred first-line antiretroviral combination for treatment initiation in national guidelines for the following:

26.a   **Adults and adolescents?**
☐   Yes
☐   No, TDF + 3TC (or FTC) + DTG is included as alternative first-line regimen
☐   No

26.a.i   **If yes, what is the status of implementation?**
☐   Implemented in few (<50%) treatment sites
☐   Implemented in many (50–95%) treatment sites
☐   Implemented countrywide (>95% of treatment sites)
☐   Not implemented in practice
☐   Other (please specify): _____

26.a.ii   **If no, what is (are) the preferred option(s):**
☐   TDF + 3TC (or FTC) + EFV 600 mg
☐   TDF + 3TC + EFV 400 mg
☐   ABC + 3TC + DTG
☐   TAF + 3TC (or FTC) + DTG
☐   Other regimens (please specify): _____

26.a.iii   **If no, is there a plan to adopt TDF + 3TC (or FTC) + DTG as the preferred first-line antiretroviral combination for treatment initiation in 2023?**
☐   Yes
☐   No

26.b   **Women of childbearing age?**
☐   Yes
☐   No

26.b.i   **If no, what is (are) the preferred option(s):**
☐   TDF + 3TC (or FTC) + EFV 600 mg
☐   TDF + 3TC + EFV 400 mg
☐   TAF + 3TC (or FTC) + DTG
☐   Other regimens (please specify): _____

26.b.ii   **If no, is there a plan to adopt TDF + 3TC or (FTC) + DTG as the preferred first-line antiretroviral medicine combination for treatment initiation in 2023?**
☐   Yes
☐   No

26.c   **Pregnant and/or breastfeeding women?**
☐   Yes
☐   No

26.c.i   **If no, what is (are) the preferred option(s):**
☐   TDF + 3TC (or FTC) + EFV 600 mg
☐   TDF + 3TC + EFV 400 mg
☐   TAF + 3TC (or FTC) + DTG
☐   Other regimens (please specify): _____

26.c.ii   **If no, is there a plan to adopt TDF + 3TC or (FTC) + DTG as the preferred first-line antiretroviral medicine combination for treatment initiation in 2023?**
☐   Yes
☐   No

27. **Does your country use fixed-dose combination (FDC) antiretroviral therapy as the preferred first-line therapy? Please select all that apply.**

☐ Yes, 3-drug fixed-dose combination, taken once a day

☐ Yes, 2-drug fixed-dose combination plus 1 other drug, taken once a day

☐ No

☐ Other (please specify): _____

28. **Is a DTG-based regimen included in the national guidelines as an option for second-line antiretroviral combination for adults and adolescents with HIV?**

☐ Yes, as preferred option

☐ Yes, as alternative option

☐ No

☐ Other (please specify): _____

29. **Is an ATV/r-based (or LPV/r-based) regimen included in the national guidelines as an option for second-line antiretroviral combination for adults and adolescents with HIV?**

☐ Yes, as preferred option

☐ Yes, as alternative option

☐ No

☐ Other (please specify): _____

30. **Is a DRV/r-based regimen included in the national guidelines as an option for second-line antiretroviral combination for adults and adolescents with HIV?**

☐ Yes, as preferred option

☐ Yes, as alternative option

☐ No

☐ Other (please specify): _____

Children

31. **Are DTG regimens the preferred treatment initiation option in the national guidelines for all infants and children with HIV?**

☐ Yes, for all children older than 4 weeks and weighing more than 3kg

☐ Yes, but only for children weighing more than 20kg

☐ No

☐ Other (please specify): _____

31.1 **If DTG is not the preferred treatment option for infants and children older than 4 weeks and weighing more than 3kg, are LPV/r-based regimens the preferred treatment option?**

☐ Yes, for all

☐ No, but only for children weighing less than 20kg

☐ No

32. **What is the recommended NRTI* backbone in the national guidelines for treatment initiation in children?**

☐ TDF + 3TC (or FTC)

☐ AZT + 3TC (or FTC)

☐ ABC + 3TC (or FTC)

☐ Other (please specify): _____

33. **Is DTG recommended as the preferred second-line option for children failing NNRTI-based regimens?**

☐ Yes, for all children older than 4 weeks

☐ Yes, for children weighing more than 20 kg

☐ No

☐ Other (please specify): _____

34. **Is DTG recommended as the preferred second-line option for children failing protease inhibiting-based regimens?**

☐ Yes, for all children older than 4 weeks and weighing more than 3kg

☐ Yes, but only for children weighing more than 20kg

☐ No

☐ Other (please specify): _____

35. **Is LPV/r (or ATV/r) recommended as the preferred second-line option for children failing DTG-based regimens?**

☐ Yes

☐ No

☐ Other (please specify): _____

36. **Are any of the following early childhood development activities integrated into HIV programmes? Please select all that apply.**

☐ Responsive caregiving

☐ Promote early learning

☐ Integrate caregiving and nutrition interventions

☐ Support maternal mental health

☐ None of the above

Viral load

37. **Please identify the measured threshold in national treatment guidelines at which viral load suppression[19] in an individual is defined as suppressed:**

☐ ≤1000 copies/ml

☐ ≤400 copies/ml

☐ ≤200 copies/ml

☐ ≤50 copies/ml

☐ Not detected by assay or sample type used

☐ Other (please specify): _____

38. **Does your country have a current national policy on routine viral load testing* for monitoring antiretroviral therapy?**

38.a **For adults and adolescents**

☐ Yes

☐ No

38.a.i **If yes, what is the status of implementation?**

☐ Implemented in few (<50%) treatment sites

☐ Implemented in many (50–95%) treatment sites

☐ Implemented countrywide (>95% of treatment sites)

☐ Not implemented in practice

☐ Other (please specify): _____

38.b **For children**

☐ Yes

☐ No

38.b.i **If yes, what is the status of implementation?**

☐ Implemented in few (<50%) treatment sites

☐ Implemented in many (50–95%) treatment sites

☐ Implemented countrywide (>95% of treatment sites)

☐ Not implemented in practice

☐ Other (please specify): _____

39. **Does your country have a current national policy on point-of-care viral load testing?**

☐ Yes

☐ No

39.1 **If yes, what is the status of implementation?**

☐ Implemented in few (<50%) treatment sites

☐ Implemented in many (50–95%) treatment sites

☐ Implemented countrywide (>95% of treatment sites)

☐ Not implemented in practice

☐ Other (please specify): _____

---

[19] The viral suppression threshold for may differ from the threshold to determine treatment failure.

40. **Are dried blood spot specimens recommended in the national policy for viral load testing?**

☐ Yes

☐ No

☐ Other (please specify): _____

40.1 **If yes, what is the level of implementation?**

☐ Fully

☐ Partially

☐ Not implemented

41. **Does the country have a policy to prioritize viral load testing in select populations and/or situations (e.g., pregnant women, infants and adolescents)?**

☐ Yes

☐ No

41.1 **If yes, for which populations is viral load testing prioritized? Please select all that apply.**

☐ Pregnant and breastfeeding women

☐ Patients with advanced HIV disease

☐ Patients suspected of failing treatment

☐ Infants and children (aged 0–<10 years)

☐ Adolescents (aged 10–19 years)

☐ Other (please specify): _____

HIV drug resistance and toxicity monitoring[20]

42. **Does your country have a national plan to monitor HIV drug resistance?**

☐ Yes

☐ No

42.1 **If yes, please specify the years covered by the plan:** _____

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[20] Data from HIV drug resistance surveys should be routinely uploaded to the WHO HIVDR database. Ministry of Health/Antiretroviral Therapy Programme designated users can request access by contacting hiv-aids@who.int. For details, please see: https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv/treatment/hiv-drug-resistance/hiv-drug-resistance-surveillance

43. In the past three years, has your country carried out HIV drug resistance (HIVDR) surveillance according to any of the following World Health Organization (WHO) protocols?

43.a Pre-treatment drug resistance (PDR) surveys[21]
☐ Yes
☐ No, but there is a plan to implement the PDR survey this year
☐ No, and there is no plan to implement the PDR survey this year

43.a.i If yes, please specify the year the last PDR survey started: _____

43.b HIV drug resistance survey among individuals exposed to pre-exposure prophylaxis (PrEP) diagnosed with HIV infection
☐ Yes
☐ No, but there is a plan to implement the survey this year
☐ No, and there is no plan to implement the survey this year

43.b.i If yes, please specify the year the last survey started: _____

43.c Acquired drug resistance surveys among adults[22]
☐ Yes
☐ No, but there is a plan to implement the survey this year
☐ No, and there is no plan to implement the survey this year

43.c.i If yes, please specify the year the last survey started: _____

43.d Acquired drug resistance surveys among children
☐ Yes
☐ No, but there is a plan to implement the survey this year
☐ No, and there is no plan to implement the survey this year

43.d.i If yes, please specify the year the last survey started: _____

43.e HIV drug resistance among infants (<18 months) using early infant diagnosis[23]
☐ Yes
☐ No, but there is a plan to implement the infant survey this year
☐ No, and there is no plan to implement the infant survey this year

43.e.i If yes, please specify the year the last infant survey started: _____

43.f Survey or routine monitoring of clinic performance using early warning indicators (EWI) for HIV drug resistance
☐ Yes
☐ No

43.f.i If yes, please specify:
☐ Year it was last monitored: _____
☐ Number of clinics monitored: _____

43.f.ii The early warning indicators (EWI) for HIV drug resistance were collected through:
☐ EWI survey in a sample of clinics
☐ Routine patient monitoring systems

44. Does your country have a national policy for HIV drug resistance testing for individual patients who fail second-line antiretroviral therapy?
☐ Yes
☐ No

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[21] For more details, please see: Surveillance of HIV drug resistance in adults initiating antiretroviral therapy. Geneva: World Health Organization; 2014 (https://www.who.int/publications/i/item/9789241507196).

[22] For more details, please see: Surveillance of HIV drug resistance in adults receiving ART. Geneva: World Health Organization; 2014 (https://www.who.int/publications/i/item/9789241507073).

[23] For more details, please see: HIV drug resistance. In: World Health Organization: Global HIV Programme: Treatment & Care [Internet]. Geneva; World Health Organization; c2022 (https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv/treatment/hiv-drug-resistance).

45. Excluding passive pharmacovigilance approaches, does your country make an ongoing systematic effort to monitor the toxicity of antiretroviral medicines in the country?

☐ Yes

☐ No

45.1 If yes, what approaches are used? Please select all that apply.

☐ Routine toxicity monitoring as part of the national monitoring and evaluation system

☐ Active toxicity monitoring/surveillance within cohorts in adults

☐ Active toxicity monitoring/surveillance within cohorts in adolescents and children

☐ Pregnancy registry and surveillance of birth defects

46. Have toxicity monitoring approaches been introduced to monitor adverse drug reactions to DTG use?

☐ Yes

☐ No

46.1 If yes, what approaches are used? Please select all that apply.

☐ Routine toxicity monitoring as part of the national monitoring and evaluation system

☐ Active toxicity monitoring/surveillance within cohorts in adults

☐ Active toxicity monitoring/surveillance within cohorts in adolescents and children

☐ Pregnancy registry and surveillance of birth defects

46.2 If yes, has training of health-care workers on the management, capture and reporting of adverse drug reactions related to DTG been implemented?

☐ Yes

☐ No

Adherence and retention

47. Does your country have national policies and/or strategies on adherence support (community and facility-based)?

☐ Yes

☐ No

48. Are any of the following adherence support services being implemented in your country? Please select all that apply.

☐ Peer counsellors

☐ Text messages

☐ Use of reminder devices

☐ Patient reintegration follow-up calls/home visits

☐ Enhanced adherence counselling

☐ Referral to psychological/socioeconomic support

☐ Cognitive behavioural therapy

☐ Behavioural skills training/medication adherence training

☐ Fixed-dose combinations and once-daily regimens

☐ Case management

☐ Peer navigation

☐ Other (please specify): _____

49. Does your country have national policies and/or strategies on retention in antiretroviral therapy?

☐ Yes

☐ No

50. Are any of the following retention support services being implemented in your country? Please select all that apply.

☐ Community-based interventions

☐ Adherence clubs and peer support

☐ Other (please specify): _____

51. Are treatment literacy programmes available in your country to people living with HIV, including information on side effects, drug resistance, etc.?

☐ Yes

☐ No

52. Are the following screening tools recommended for people living with HIV in national guidelines related to tuberculosis (TB) and/or HIV? Please select all that apply.

- ☐ World Health Organization-recommended, four-symptom screen for adults and adolescents (>10 years)
- ☐ C-reactive protein (CRP) for adults and adolescents (>10 years)
- ☐ Chest X-ray for adults and adolescents (>10 years)
- ☐ Molecular World Health Organization-approved rapid diagnostic tests for TB (mWRD) for adults and adolescents (>10 years)
- ☐ Symptom screen, including cough, fever, poor weight gain or close contact with a TB patient for children <10 years
- ☐ None of the above

53. Has your country adopted the 2019 WHO policy update on the use of lateral flow urine lipoarabinomannan assay (LF-LAM) for the diagnosis and screening of active tuberculosis in people living with HIV? Please select all age groups that apply.

- ☐ Yes, for adults and adolescents (>10 years)
- ☐ Yes, for children (<10 years)
- ☐ No

54. Which of the following regimens are recommended for tuberculosis (TB) preventive treatment in national guidelines? Please select all that apply.

54.a Adults and adolescents living with HIV

- ☐ 6 months of daily isoniazid monotherapy (6H)
- ☐ 9 months of daily isoniazid monotherapy (9H)
- ☐ 36 months of daily isoniazid monotherapy (36H)
- ☐ 4 months of daily rifampicin (4R)
- ☐ 3 months of weekly rifapentine plus isoniazid (3HP)
- ☐ 3 months of daily rifampicin plus isoniazid (3RH)
- ☐ 1 month of daily rifapentine plus isoniazid (1HP)
- ☐ Other (please specify): _____
- ☐ None of the World Health Organization-recommended TB preventive treatment regimens are recommended in national guidelines for adults and adolescents

54.a.i If more than one regimen is recommended, which is the preferred regimen?

- ☐ 6 months of daily isoniazid monotherapy (6H)
- ☐ 9 months of daily isoniazid monotherapy (9H)
- ☐ 36 months of daily isoniazid monotherapy (36H)
- ☐ 4 months of daily rifampicin (4R)
- ☐ 3 months of weekly rifapentine plus isoniazid (3HP)
- ☐ 3 months of daily rifampicin plus isoniazid (3RH)
- ☐ 1 month of daily rifapentine plus isoniazid (1HP)
- ☐ Other (please specify): _____

54.b Children living with HIV

- ☐ 6 months of daily isoniazid monotherapy (6H)
- ☐ 9 months of daily isoniazid monotherapy (9H)
- ☐ 4 months of daily rifampicin (4R)
- ☐ 3 months of weekly rifapentine plus isoniazid (3HP)
- ☐ 3 months of daily rifampicin plus isoniazid (3RH)
- ☐ Other (please specify): _____
- ☐ TB preventive treatment not recommended in national guidelines for children

54.b.i If more than one regimen is recommended, which is the preferred regimen?

- ☐ 6 months of daily isoniazid monotherapy (6H)
- ☐ 9 months of daily isoniazid monotherapy (9H)
- ☐ 4 months of daily rifampicin (4R)
- ☐ 3 months of weekly rifapentine plus isoniazid (3HP)
- ☐ 3 months of daily rifampicin plus isoniazid (3RH)
- ☐ Other (please specify): _____

55.   Are the following required in national guidelines prior to initiating tuberculosis (TB) preventive treatment in people living with HIV?

55.a   Skin tests or interferon-gamma release assay (IGRA) test

☐   Yes, for all

☐   No

☐   Only if available

55.b   X-ray

☐   Yes, for all

☐   No

☐   Only if available

56.   In the last reporting period, has there been a stock-out* of any of the following?

56.a   Isoniazid

☐   Yes, at the national level

☐   Yes, at the local level

☐   No

56.b   Vitamin B6

☐   Yes, at the national level

☐   Yes, at the local level

☐   No

56.c   Rifapentine (including fixed-dose combinations with isoniazid)

☐   Yes, at the national level

☐   Yes, at the local level

☐   No

57.   What is the status of integration of the following HIV and tuberculosis (TB) services?

57.a   World Health Organization-recommended rapid molecular diagnostics (e.g., Xpert MTB/RIF) are co-located:

☐   In few (<50%) health facilities providing HIV testing and care

☐   In many (50–95%) health facilities providing HIV testing and care

☐   Countrywide (>95% of health facilities providing HIV testing and care)

☐   Not integrated in practice

☐   Other (please specify): _____

57.b   People living with HIV who have tuberculosis (TB) received antiretroviral medicines at the same place as they receive their TB treatment:

☐   In few (<50%) health facilities

☐   In many (50–95%) health facilities

☐   Countrywide (>95% of health facilities)

☐   Not integrated in practice

☐   Other (please specify): _____

57.c   Antiretroviral therapy is initiated by the same health-care worker providing tuberculosis (TB) treatment for people living with HIV who have TB:

☐   In few (<50%) health facilities

☐   In many (50–95%) health facilities

☐   Countrywide (>95% of health facilities)

☐   Not integrated in practice

☐   Other (please specify): _____

57.d   Antiretroviral therapy and tuberculosis (TB) treatment for people living with HIV who have TB are monitored by one health-care worker:

☐   In few (<50%) health facilities

☐   In many (50–95%) health facilities

☐   Countrywide (>95%) of health facilities

☐   Not integrated in practice

☐   Other (please specify): _____

3. End paediatric AIDS and eliminate vertical transmission

- Ensure that 75% of all children living with HIV have suppressed viral loads by 2023 and 86% by 2025, in line with the 95–95–95 HIV treatment targets.

- Ensure that 95% of pregnant women have access to testing for HIV, syphilis, hepatitis B and other sexually transmitted infections (STIs) by 2025.

- Ensure that 95% of pregnant and breastfeeding women in high HIV burden settings have access to retesting during late pregnancy and in the post-partum period by 2025.

- Ensure that all pregnant and breastfeeding women living with HIV are receiving life-long antiretroviral therapy, with 95% achieving and sustaining viral suppression before delivery and during breastfeeding by 2025.

- Ensure that all HIV-negative pregnant and breastfeeding women in high HIV burden settings—or those who have male partners at high risk of HIV in all settings—have access to combination prevention, including pre-exposure prophylaxis (PREP), and that 90% of their male partners who are living with HIV are continuously receiving antiretroviral therapy.

- Ensure that 95% of HIV-exposed children are tested by two months of age and after the cessation of breastfeeding.

Prevention of vertical transmission of HIV

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58.   **Does your country have a policy on retesting HIV-negative women during pregnancy, delivery and/or the post-partum/breastfeeding period?**

☐   Yes

☐   No

58.1   **If yes, when is retesting done?**

58.1.a   **During pregnancy**

☐   Yes

☐   No

58.1.a.i   **If yes, which month of pregnancy:** _____

58.1.b   **At delivery**

☐   Yes

☐   No

58.1.c   **Post-partum/breastfeeding**

☐   Yes

☐   No

☐   If yes, how long after delivery (in months): _____

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59.   **Does your country have a policy on testing women for Hepatitis B virus during pregnancy?**

☐   Yes

☐   No

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60.   **Does your country have a national plan for the elimination of the vertical transmission of HIV:**

☐   Yes

☐   No

60.1   **If yes, please specify:**

60.1.a   **Target(s) for the vertical transmission rate (%):** _____

60.1.b   **Year:** _____

60.1.c   **Elimination target(s) (such as the number of cases/100 000 population):** _____

60.1.d   **Year:** _____

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61.   **Is your country implementing a treat all policy for pregnant and breastfeeding women living with HIV?**

☐   Yes

☐   No

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62. **What is the current nationally recommended regimen for HIV-exposed infants for preventing the vertical transmission of HIV?**

☐ Please specify the infant prophylaxis regimen: _____

☐ Recommended duration of the regimen: _____

62.a **Are different regimens recommended for high-risk infants?**

☐ Yes

☐ No

62.a.i **If yes, please specify the regimens:** _____

62.a.ii **What is the definition of "high-risk infant" in the national policy? Please select all that apply.**

☐ Born to women with established HIV infection who have received less than 4 weeks of antiretroviral therapy at the time of delivery

☐ Born to women with established HIV infection with viral load >1000 copies/mL in the 4 weeks before delivery (if viral load is available)

☐ Born to women with incident HIV infection during pregnancy or breastfeeding

☐ Born to women identified for the first time during the postpartum period, with or without a negative HIV test prenatally

☐ Other (please specify):

63. **Does your country have a national recommendation on infant and young child feeding for HIV-exposed infants?**

☐ Yes, breastfeeding

☐ Yes, replacement feeding

☐ Yes, both are recommended, left to individual choice or different settings

☐ No

63.1 **If breastfeeding is recommended for HIV-positive women and HIV-exposed infants, is the recommended duration specified?**

☐ Yes (please specify the duration in months): _____

☐ No

64. **Is food and nutrition support in your country integrated within prevention of vertical transmission programmes?**

☐ Implemented in few (<50%) maternal and child health sites

☐ Implemented in many (50–95%) maternal and child health sites

☐ Implemented countrywide (>95% of maternal and child health sites)

☐ Not implemented in practice

☐ Other (please specify): _____

65. **Does your country have a national strategy on interventions at delivery for women living with HIV who have not previously been tested for HIV?**

☐ Yes, fully implemented

☐ Yes, partially implemented

☐ Yes, but not implemented

☐ No

66. **Does your country have a policy on viral load testing for women during pregnancy, delivery and/or the post-partum/ breastfeeding period?**

☐ Yes

☐ No

66.1 **If yes, when is viral load testing done?**

During pregnancy

☐ Yes

☐ No

66.1.a **If yes, which month of pregnancy:** _____

66.2 **At delivery**

☐ Yes

☐ No

66.3 **Post-partum/breastfeeding**

☐ Yes

☐ No

66.3.a **If yes, how long after delivery (in months):** _____

Elimination of vertical transmission of syphilis

67. **Does your country have a national plan for the elimination of vertical transmission of syphilis?**
- ☐ Yes, integrated with HIV or other elimination initiative(s)
- ☐ Yes, stand-alone (not integrated with HIV or other elimination initiatives)
- ☐ No national plan

67.1 **If yes, when was the national plan last updated?**
- ☐ 2017 or before
- ☐ 2018
- ☐ 2019
- ☐ 2020
- ☐ 2021
- ☐ 2022

68. **Does your country have a national policy for routinely screening pregnant women for syphilis?**
- ☐ Yes
- ☐ No

68.1 **If yes, what tests are used:**
- ☐ Laboratory-based non-treponemal
- ☐ Laboratory-based treponemal
- ☐ Rapid syphilis treponemal tests
- ☐ Dual HIV/syphilis rapid tests

69. **Does your country have national guidelines to treat pregnant women with syphilis?**
- ☐ Yes
- ☐ No

69.1 **If yes, is benzathine penicillin the first line of treatment recommended in national guidelines?**
- ☐ Yes
- ☐ No

69.2 **If yes, does your policy allow the treatment of pregnant women with syphilis using benzathine penicillin in primary care facilities, including antenatal clinics, by any of the following? Please select all that apply.**
- ☐ Nurses
- ☐ Doctors
- ☐ Other health-care workers
- ☐ None of the above

70. **Does your country have a national policy on the clinical follow-up of infants born to syphilis-positive mothers?**
- ☐ Yes
- ☐ No

71. **Does the national definition for congenital syphilis include stillbirths?**
- ☐ Yes
- ☐ No

Infant diagnosis

72. **Do your national guidelines recommend that HIV-exposed infants be tested for HIV as follows? Please select all that apply.**
- ☐ Nucleic acid testing at birth
- ☐ Nucleic acid testing at 6 weeks
- ☐ Nucleic acid testing at 9 months
- ☐ Antibody test at 18 months
- ☐ Antibody test after 3 months from cessation of breastfeeding
- ☐ Other (please specify): _____

73. In addition to prevention of vertical transmission settings, do any of the following sites in your country carry out HIV testing of children? Please select all that apply.

☐ Paediatric inpatient wards

☐ Nutrition centres

☐ Immunization clinics

☐ Outpatient clinics

☐ Tuberculosis (TB) clinics

☐ Other (please specify): _____

74. Does your country have a policy or recommendation for point-of-care infant diagnosis testing?

☐ Yes

☐ No

74.1 If yes, where is it implemented?

☐ Implemented in few (<50%) sites

☐ Implemented in many (50–95%) sites

☐ Implemented countrywide (>95% of sites)

☐ Not implemented in practice

☐ Other (please specify): _____

Child antiretroviral therapy

75. Does your country have a national policy on the frequency of clinic visits for children who are established* on antiretroviral therapy?

☐ Yes

☐ No

75.1 If yes, please specify the frequency of clinic visits in the national policy:

☐ Once a month

☐ Every 2 months

☐ Every 3 months

☐ Every 6 months

☐ Every 12 months

☐ Other (please specify): _____

75.2 If yes, what is the status of implementation?

☐ Implemented in few (<50%) treatment sites

☐ Implemented in many (50–95%) treatment sites

☐ Implemented countrywide (>95% of treatment sites)

☐ Not implemented in practice

☐ Other (please specify): _____

76. Does your country have a national policy on how frequently children who are established* on antiretroviral therapy should pick up antiretroviral medicine?

☐ Yes

☐ No

76.1 If yes, please specify the frequency of antiretroviral medicine pick-up included in the national policy:

☐ Once a month

☐ Every 2 months

☐ Every 3 months

☐ Every 6 months

☐ Every 12 months

☐ Other (please specify): _____

76.2 If yes, what is the status of implementation?

☐ Implemented in few (<50%) treatment sites

☐ Implemented in many (50–95%) treatment sites

☐ Implemented countrywide (>95% of treatment sites)

☐ Not implemented in practice

☐ Other (please specify): _____

77. **When is a child who initiated antiretroviral therapy considered lost to follow-up in your country?**

☐ Has not been seen for HIV care or pharmacy pick-up in 1 month

☐ Has not been seen for HIV care or pharmacy pick-up in 2 months

☐ Has not been seen for HIV care or pharmacy pick-up in 3 months

☐ Has not been seen for HIV care or pharmacy pick-up in 6 months

78. **Does your country have a strategy or plan to ensure that adolescents born with HIV are not lost to follow-up as they transition into adult HIV care?**

☐ Yes

☐ No

79. **Are cohorts of children receiving antiretroviral therapy monitored (i.e., ensuring that these children are alive and receiving antiretroviral therapy) in national registers at six-month and 12-month intervals?**

☐ Yes

☐ No

80. **Are growth monitoring and nutrition programmes for children integrated with HIV testing and treatment in your country?**

☐ Implemented in few (<50%) treatment sites

☐ Implemented in many (50–95%) treatment sites

☐ Implemented countrywide (>95% of treatment sites)

☐ Not implemented in practice

☐ Other (please specify): _____

4. Gender equality and empowerment of women and girls

▪ Reduce to no more than 10% the number of women, girls and people living with, at risk of and affected by HIV who experience gender-based inequalities and sexual and gender-based violence.

▪ Ensure that 95% of women and girls of reproductive age have their HIV and sexual and reproductive health-care service needs met, including antenatal and maternal care, information and counselling.

Violence

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81. **Does your country have at least one service delivery point that provides elements of comprehensive post-rape care as per World Health Organization (WHO) guidelines? The elements are: (1) first-line support, psychological first aid and psychosocial support; (2) emergency contraception; (3) sexually transmitted infection (STI) prophylaxis or treatment; (4) HIV post-exposure prophylaxis (PEP); and (5) safe abortion to the full extent of the law.**

☐ Yes, provides all 5 elements
☐ Yes, provides 4 out of 5 elements
☐ Yes, provides 1 to 3 elements
☐ No services delivery point provides any of these elements

81.1 **If yes, what proportion of health facilities provide each of the following elements of comprehensive post-rape care as per World Health Organization (WHO) guidelines:**

81.1.a **First-line support, psychological first aid and psychosocial support**

☐ <50% of health facilities
☐ 50–80% of health facilities
☐ >80% of health facilities
☐ Not provided in any health facility
☐ Don't know

81.1.b **Emergency contraception**

☐ <50% of health facilities
☐ 50–80% of health facilities
☐ >80% of health facilities
☐ Not provided in any health facility
☐ Don't know

81.1.c **Sexually transmitted infection (STI) treatment or prophylaxis**

☐ <50% of health facilities
☐ 50–80% of health facilities
☐ >80% of health facilities
☐ Not provided in any health facility
☐ Don't know

81.1.d **HIV post-exposure prophylaxis (PEP)**

☐ <50% of health facilities
☐ 50–80% of health facilities
☐ >80% of health facilities
☐ Not provided in any health facility
☐ Don't know

81.1.e **Safe abortion to the full extent of the law**

☐ <50% of health facilities
☐ 50–80% of health facilities
☐ >80% of health facilities
☐ Not provided in any health facility
☐ Don't know

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5. Community leadership

▪ Ensure that community-led organizations deliver 30% of testing and treatment services by 2025, with a focus on HIV testing, linkage to treatment, adherence and retention support, and treatment literacy.

▪ Ensure that community-led organizations deliver 80% of HIV prevention services for populations at high risk of HIV infection by 2025, including for women within those populations.

▪ Ensure that community-led organizations deliver 60% of programmes to support the achievement of societal enablers by 2025.

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82. **Are there any laws, regulations or policies that provide for the operation of community-led organizations in your country? Please select all that apply.**

☐ Registration of organizations led by people living with HIV is possible
☐ Registration of key populations-led organizations is possible
☐ HIV services can be provided by community-led organizations
☐ Services to key populations can be provided by community-led organizations
☐ Reporting requirements for community-led organizations delivering HIV services are streamlined
☐ There are no laws, regulations or policies that provide for the operation of community-led organizations in the country
☐ Other (please specify): _____

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83. **Are there laws, policies or regulations that enable access to funding for community-led organizations? Please select all that apply.**

☐ Social contracting or other mechanisms allowing for funding of service delivery by communities from domestic funding
☐ Social contracting or other mechanisms allowing for funding of monitoring and research led by communities from domestic funding
☐ Social contracting or other mechanisms allowing for funding of advocacy led by communities from domestic funding
☐ From international donors
☐ Require a certain percentage of government funding for community-led organizations
☐ No laws enabling access to funding, but community-led organizations are able to access funding under general laws, policies or regulations
☐ There are no laws, policies or regulations enabling access to funding for community-led organizations
☐ Other (please specify): _____

Participation

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84. **Do people living with HIV participate* in developing national policies, guidelines and/or strategies relating to their health in your country?**

☐ Yes
☐ No

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85. **Do women living with HIV participate* in developing national policies, guidelines and strategies relating to prevention of vertical transmission?**

☐ Yes
☐ No

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86. **Do gay men and other men who have sex with men participate* in developing national policies, guidelines and/or strategies relating to their health in your country?**

☐ Yes
☐ No

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87. **Do sex workers participate* in developing national policies, guidelines and strategies relating to their health in your country?**

☐ Yes
☐ No

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88. **Do people who inject drugs participate* in developing national policies, guidelines and strategies relating to their health in your country?**

☐ Yes
☐ No

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89. **Do transgender people participate* in developing national policies, guidelines and strategies relating to their health in your country?**

☐ Yes
☐ No

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90. **Do former and/or current prisoners participate* in developing national policies, guidelines and strategies relating to their health in your country?**

☐ Yes
☐ No

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91. Do young people (aged 15–24 years) participate* in developing national policies, guidelines and strategies relating to their health in your country?

☐ Yes
☐ No

91.1 If yes, do young people participate* in any of the following decision-making spaces in the national HIV response (where they exist)?

Decision-making space	Does it exist?	Do young people participate in this space?
Technical teams for the development, review and update of national AIDS strategies and plans	☐ Yes ☐ No	☐ Yes ☐ No
Technical teams for the development or review of programmes that relate to young people's access to HIV testing, treatment, care and support services	☐ Yes ☐ No	☐ Yes ☐ No
National AIDS Coordinating Authority or equivalent, with a broad-based multisector mandate	☐ Yes ☐ No	☐ Yes ☐ No
Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) Country Coordinating Mechanism	☐ Yes ☐ No	☐ Yes ☐ No
Community advisory body for hospitals, clinics and/or research projects	☐ Yes ☐ No	☐ Yes ☐ No
Other (please specify): _____	☐ Yes ☐ No	☐ Yes ☐ No

6. Realize human rights and eliminate stigma and discrimination

- Ensure that less than 10% of countries have restrictive legal and policy frameworks that unfairly target people living with, at risk of and affected by HIV by 2025. Examples include age of consent laws and laws related to HIV non-disclosure, exposure and transmission, laws that impose HIV-related travel restrictions and mandatory testing, and laws that lead to the denial or limitation of access to services by 2025.

- Invest US$ 3.1 billion in societal enablers—including protection of human rights, reduction of stigma and discrimination and law reform, where appropriate—in low- and middle-income countries by 2025.

- Ensure that less than 10% of people living with, at risk of and affected by HIV experience stigma and discrimination by 2025.

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92. **If HIV non-disclosure, exposure or transmission are criminalized, have any legal actions to decriminalize HIV non-disclosure, exposure or transmission either started or been in process in the last two years? Please select all that apply.**

☐ Strategic litigation

☐ Proposal put before parliament

☐ Other (please specify):_____

☐ There are no laws at the national or subnational level criminalizing HIV non-disclosure, exposure or transmission

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93. **If transgender people are criminalized, have any legal actions to decriminalize transgender people either started or been in process in the last two years? Please select all that apply.**

☐ Strategic litigation

☐ Proposal put before parliament

☐ Other (please specify):_____

☐ There are no laws at the national or subnational level that criminalize transgender people

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94. **If sex work is criminalized, have any legal actions to decriminalize sex work either started or been in process in the last two years? Please select all that apply.**

☐ Strategic litigation

☐ Proposal put before parliament

☐ Other (please specify):_____

☐ There are no laws at the national or subnational level criminalizing sex work or other punitive regulations of sex work

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95. **If same-sex sexual acts are criminalized, have any legal actions to decriminalize same-sex sexual acts either started or been in process in the last two years? Please select all that apply.**

☐ Strategic litigation

☐ Proposal put before parliament

☐ Other (please specify):_____

☐ There are no laws at the national or subnational level criminalizing same-sex sexual acts in private

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96. **If drug use and/or possession for personal use are criminal offences, have any legal actions to decriminalize drug use or possession for personal use either started or been in process in the last two years? Please select all that apply.**

☐ Strategic litigation

☐ Proposal put before parliament

☐ Other (please specify):_____

☐ There are no laws at the national or subnational level criminalizing drug use and/or possession for personal use

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97. **If drug use and/or possession are administrative/non-criminal offences, are any of the following applied in your country for people who use drugs? Please select all that apply.**

☐ Compulsory detention or compulsory rehabilitation in a close facility

☐ Compulsory detention or rehabilitation outside of a facility

☐ Restrictions on movement, including suspension of passport or driving licence

☐ Mandatory counselling

☐ Fines

☐ Other administrative penalties (please specify): _____

☐ Drug use and/or possession are not administrative/non-criminal offences

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7. Universal health coverage and integration

▪ Invest in robust, resilient, equitable and publicly funded systems for health and social protection systems that provide 90% of people living with, at risk of and affected by HIV with people-centred and context-specific integrated services for: HIV and other communicable diseases; noncommunicable diseases; sexual and reproductive health care; gender-based violence; mental health; palliative care; treatment of alcohol dependence; drug use legal services; and other services they need for their overall health and well-being Ensure that by 2025, 45% of people living with, at risk of and affected by HIV and AIDS have access to social protection benefits.

▪ Ensure that 90% of people in humanitarian settings have access to integrated HIV services.

▪ Ensure the systematic engagement of HIV responses in pandemic response infrastructure and arrangements, leveraging national HIV strategic plans to guide key elements of pandemic preparedness planning and ensuring that 95% of people living with, at risk of and affected by HIV are protected against pandemics, including COVID-19.

Cervical cancer

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98.   **Is cervical cancer screening and treatment for women living with HIV recommended in the following?**

98.a   **The national strategy, policy, plan or guidelines for cancer, cervical cancer or the broader response to non-communicable diseases (NCDs)**
☐   Yes
☐   No

98.b   **The national strategic plan governing the AIDS response**
☐   Yes
☐   No

98.c   **National HIV treatment and/or testing guidelines**
☐   Yes
☐   No

98.d   **Other policy document (please specify): _____**
☐   Yes
☐   No

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99.   **Have the recommendations for women living with HIV in the 2021 World Health Organization (WHO)** *Guidelines for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention* **been adopted in your country's national guidelines?**
☐   Yes, the guidelines have been developed
☐   No, the guidelines have not been developed

99.1   **If no, please indicate the year when the adoption of the 2021 World Health Organization (WHO) recommendations is planned?**
☐   2023
☐   2024
☐   2025
☐   2026
☐   No planned year
☐   Other (please specify): _____

Coinfection policies

100. **What coinfection policies are in place in the country for adults, adolescents and children? Please select all that apply.**

☐ Isoniazid preventive therapy (IPT) or latent TB infection (LTBI) prophylaxis for people living with HIV

☐ Intensified tuberculosis (TB) case finding among people living with HIV

☐ TB infection control in HIV health-care settings

☐ Antiretroviral providers deliver antiretroviral therapy within 2 weeks of initiation of TB treatment

☐ Co-trimoxazole prophylaxis

☐ Hepatitis B screening and management in antiretroviral therapy clinics

☐ Hepatitis B screening and management in antenatal care clinics to prevent vertical transmission of Hepatitis B virus

☐ Hepatitis C screening and management in antiretroviral therapy clinics

☐ Hepatitis B vaccination provided at antiretroviral therapy clinics

☐ Timely Hepatitis B birth dose vaccination provided at delivery services (within 24 hours of birth)

☐ Hepatitis C treatment (direct-acting antiviral agents) provided in antiretroviral therapy clinics

☐ Other (please specify): _____

Sexually transmitted infections

101. **Does your country have national treatment guidelines or recommendations for sexually transmitted infections (STIs)?**

☐ Yes

☐ No

101.1 **If yes, in what year were they last updated?** _____

102. **Does your country have a national strategy or action plan for the prevention and control of STIs?**

☐ Yes

☐ No

103. **Is gonococcal antimicrobial-resistance monitoring conducted in the country?**

☐ Yes, annually

☐ Yes, less than annually

☐ No

104.   **Does the national social protection strategy, policy or framework:**

104.1   **Recognize people living with HIV as key beneficiaries?**
☐   Yes
☐   No

104.1.a   **If no, please describe any conditions under which people living with HIV can access social protection benefits: _____**

104.2   **Recognize any key populations (sex workers, gay men and other men who have sex with men, people who inject drugs, transgender people or prisoners) as key beneficiaries?**
☐   Yes
☐   No

104.2.a   **If yes, which key populations are recognized as key beneficiaries? Please select all that apply.**
☐   Sex workers
☐   Gay men and other men who have sex with men
☐   Transgender persons
☐   People who inject drugs
☐   Prisoners

104.2.b   **If no, please describe any conditions under which key populations can access social protection benefits:_____**

104.3   **Recognize adolescent girls and young women as key beneficiaries?**
☐   Yes
☐   No

104.4   **Recognize children affected by HIV as key beneficiaries?**
☐   Yes
☐   No

104.5   **Recognize families affected by HIV as key beneficiaries?**
☐   Yes
☐   No

104.6   **Address the issue of unpaid care work in the context of HIV?**
☐   Yes
☐   No

105.   **Are representatives of the National AIDS Programme or equivalent included in any social protection* coordination mechanism or platform?**
☐   There is no social protection coordination mechanism or platform
☐   There is a social protection coordination mechanism or platform, but it does not include any representatives of the National AIDS Programme or equivalent
☐   There is a social protection coordination mechanism or platform, and it includes representatives of the National AIDS Programme or equivalent

106.   **Are any cash transfer programmes* for young women aged 15–24 years being implemented in the country?**
☐   Yes
☐   No

Universal health insurance

107. **Does your country have a universal health insurance scheme?**
☐ Yes
☐ No

107.1 **If no, is your country moving to a universal health insurance scheme?**
☐ Yes
☐ No

107.2 **If yes to questions 106 or 106.1, does the benefits package include the following?**
107.2.a **Antiretroviral medicines**
☐ Yes
☐ No
107.2.b **Pre-exposure prophylaxis (PrEP)**
☐ Yes
☐ No

8. Data, science and innovation

Information system

108.   Are patient-level data routinely available within the health information system?
☐   Yes, fully electronic
☐   Yes, partially electronic
☐   Yes, paper-based only
☐   No health information system exists

108.1   If patient-level data exist, are antenatal care testing and treatment cascade data included in the health information system at the district level? Please select all that apply.
☐   Pregnant women tested during antenatal care and outcome of test
☐   Women already on antiretroviral therapy at first antenatal care visit
☐   The number of people tested for HIV
☐   The number of people who have tested HIV-positive
☐   The number of people newly diagnosed with HIV who are on antiretroviral therapy
☐   The number of people on antiretroviral therapy who are virally suppressed

Surveillance

109.   Is HIV a nationally notifiable condition by law?
☐   Yes
☐   No

110.   Does the country have a national HIV case surveillance* system?
☐   Yes
☐   No

110.1   If yes, does the national HIV case surveillance system include any of the following? Please select all that apply.
☐   Individual-level data for each person diagnosed with HIV
☐   Collection of data from different sources (laboratories, testing and treatment records) to promote completeness of data on HIV case
☐   Linkage of individual-level data to remove duplicate records
☐   CD4 count at HIV diagnosis
☐   Initiation of antiretroviral therapy
☐   First and follow-up viral load test results
☐   Pregnancy in women living with HIV
☐   Death

Patient monitoring systems

111.   Has the country updated the HIV testing and treatment indicators and tools using the 2022 World Health Organization (WHO) Consolidated guidelines on person-centered HIV strategic information?
☐   Yes, fully
☐   Yes, partially
☐   No
☐   Don't know

112. Does the country have a method to identify and remove duplicate health information for patients within and between clinics—such as linking records using unique identifiers and/or personal identifiable information (including biometrics)—for the following services?

	Method to identify and remove duplicate health information	If yes, please specify how data are linked
Treatment services	☐ Yes, nationally harmonized ☐ Yes, but varies across regions ☐ Yes, but varies across programmes ☐ No ☐ Don't know	☐ National unique personal identifier ☐ HIV-specific unique identifier ☐ Combination of routinely collected personal identifying information ☐ Biometric ☐ Other (please specify) _____
Testing services	☐ Yes, nationally harmonized ☐ Yes, but varies across regions ☐ Yes, but varies across programmes ☐ No ☐ Don't know	☐ National unique personal identifier ☐ HIV-specific unique identifier ☐ Combination of routinely collected personal identifying information ☐ Biometric ☐ Other (please specify) _____
Laboratory services	☐ Yes, nationally harmonized ☐ Yes, but varies across regions ☐ Yes, but varies across programmes ☐ No ☐ Don't know	☐ National unique personal identifier ☐ HIV-specific unique identifier ☐ Combination of routinely collected personal identifying information ☐ Biometric ☐ Other (please specify) _____

HIV prevention services designed for any key population group to track combination prevention uptake

Gay men and other men who have sex with men	☐ Yes, nationally harmonized ☐ Yes, but varies across regions ☐ Yes, but varies across programmes ☐ No ☐ Don't know	☐ National unique personal identifier ☐ HIV-specific unique identifier ☐ Combination of routinely collected personal identifying information ☐ Biometric ☐ Other (please specify) _____
Sex workers	☐ Yes, nationally harmonized ☐ Yes, but varies across regions ☐ Yes, but varies across programmes ☐ No ☐ Don't know	☐ National unique personal identifier ☐ HIV-specific unique identifier ☐ Combination of routinely collected personal identifying information ☐ Biometric ☐ Other (please specify) _____
Transgender people	☐ Yes, nationally harmonized ☐ Yes, but varies across regions ☐ Yes, but varies across programmes ☐ No ☐ Don't know	☐ National unique personal identifier ☐ HIV-specific unique identifier ☐ Combination of routinely collected personal identifying information ☐ Biometric ☐ Other (please specify) _____
People who inject drugs	☐ Yes, nationally harmonized ☐ Yes, but varies across regions ☐ Yes, but varies across programmes ☐ No ☐ Don't know	☐ National unique personal identifier ☐ HIV-specific unique identifier ☐ Combination of routinely collected personal identifying information ☐ Biometric ☐ Other (please specify) _____
Other (please specify): _____	☐ Yes, nationally harmonized ☐ Yes, but varies across regions ☐ Yes, but varies across programmes ☐ No ☐ Don't know	☐ National unique personal identifier ☐ HIV-specific unique identifier ☐ Combination of routinely collected personal identifying information ☐ Biometric ☐ Other (please specify) _____

112.1 If yes to any of the above, does the unique identifier policy also provide for legally enforceable data privacy protections?

☐ Yes
☐ No

113. When was the most recent data quality review conducted to determine the accuracy of national-level numbers of people reported to be on treatment?

☐ Currently being conducted (results expected next year)

☐ Completed in the last year and results available

☐ Completed 2 to 5 years ago

☐ Never conducted or conducted more than 5 years ago

113.1 If a data quality review has been conducted in the last year, have the results been used to adjust the numbers of people on treatment reported in Indicator 2.2?

☐ Yes

☐ No

114. When was the most recent data quality review conducted to determine the accuracy of the number of people reported to have suppressed viral loads?

☐ Currently being conducted (results expected next year)

☐ Completed in the last year and results available

☐ Completed 2 to 5 years ago

☐ Never conducted or conducted more than 5 years ago

114.1 If a data quality review has been conducted in the last year, has this been used to adjust the number of people who have suppressed viral loads reported in Indicator 2.3?

☐ Yes

☐ No

Data use

115. Are data reviews of HIV treatment cascade data being conducted?

☐ Yes

☐ No

115.1 If yes, please select the frequency with which data reviews of HIV treatment cascade data are conducted.

☐ Quarterly

☐ Every 6 months

☐ Annually

☐ Other, please specify: _____

115.2 If yes, at which level are data reviews conducted? Please select all that apply.

☐ National

☐ District

☐ Facility

Annex 1.
Selected bibliography

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15. Consolidated HIV strategic information guidelines: Driving impact through programme monitoring and management. Geneva: World Health Organization, 2020 (https://apps.who.int/iris/bitstream/handle/10665/331697/9789240000735-eng.pdf?sequence=1&isAllowed=y)

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Annex 2.
Expected levels of earmarked domestic public budget for HIV

—

To fill in the form, please consider the following:

1. Indication of a fiscal year is required. A fiscal year may or may not align with the calendar year (use the fiscal year that starts on the calendar year specified in the field).

2. Choose the reporting currency. This could be filled in local currency or converted into US dollars when an official exchange rate is specified.

3. It is required to express the amounts in currency units in thousands or millions.

4. Fill the approved and executed budget in the corresponding fiscal year. The approved budget includes the domestic budget that is approved by the government. Budget allocations using government loans (non-official development assistance loans) are also considered to be part of the domestic budget. The executed budget is the spending of the approved budget; it should not be more than the approved budget unless there were additional funds provided (if so, please specify). The totality of the expenditures can exceed the approved budget because some incurred expenditures were not funded by HIV-specific earmarked budgets.

5. Indicate the perception of a budget increase, maintenance at the same level or a budget decrease for the next fiscal year.

6. It is necessary to provide the aggregate subtotals for budgets at each level of government, and for under-segmented and independent budget structures. For the levels of government, report the subtotals for the national/central/federal, provincial/state/district and municipal/city/local levels in each country (as appropriate). Separately report the public budgets for institutions that pertain to different systems—such as security institutions or other national bodies (e.g., the national AIDS commission)—if those systems are independent from the government levels mentioned above.

Annex 3. Volume and unit prices of antiretrovirals medicines procured and distributed

As part of Indicator 8.2, it is mandatory to complete the information on the volume and unit prices of antiretroviral medicines procured and distributed.

Regimen/formulation	Posology	Pills or smallest dose per pack	Total number of packs procured in the fiscal year	Procurement month and year (MM/YYYY)	Average unit price per pack	Total number of packs picked up by beneficiaries in the fiscal year
Tenofovir + Emtricitabine + Efavirenz [TDF + FTC + EFV]	300 mg + 200 mg + 600 mg					
Tenofovir + Lamivudine + Efavirenz [TDF + 3TC + EFV]	300 mg + 300 mg + 600 mg					
Tenofovir + Lamivudine + Nevirapine [TDF + 3TC] + NVP	300 mg + 300 mg + 200 mg					
Zidovudine + Lamivudine + Efavirenz [ZVD + 3TC] + EFV	300 mg + 150 mg + 200 mg					
Abacavir + Lamivudine + Zidovudine [ABC + 3TC + ZDV]	300 mg + 150 mg + 300 mg					
Zidovudine + Lamivudine + Nevirapine [ZVD + 3TC + NVP]	300 mg + 150 mg + 200 mg					
Zidovudine + Lamivudine + Nevirapine [ZVD + 3TC + NVP]	60 mg + 30 mg + 50 mg					
Tenofovir + Emtricitabine [TDF + FTC]	300 mg + 200 mg					
Zidovudine + Lamivudine [ZDV + 3TC]	300 mg + 150 mg					
Lopinavir + Ritonavir [LPV + RTV]	200 mg + 50 mg					
Lopinavir + Ritonavir [LPV + RTV]	80 mg + 20 mg/ml					
Abacavir + Lamivudine [ABC + 3TC]	860 mg + 30 mg					
Tenofovir + Lamivudine [TDF + 3TC]	300 mg + 300 mg					
Darunavir [DRV]	300 mg					
Dolutegravir [DTG]	50 mg					
Others (please specify):						

Notes:

1. Please express volume in the number of packs procured and unit prices in local currency units or current US$ for the reporting year.

2. The number of packs procured needs to be provided for each batch of procurement of a regimen/formulation.

3. The data on the number of packages picked up by beneficiaries correspond to the regimen/formulations without need to disaggregate by procurement process.

4. By choosing the "Other" option, the rapporteur will be able to provide custom data on the regimen and posology combination in case the regimen information is not found in the standard list shown above.

5. Information on patients per regimen will be captured as part of the WHO/AIDS Medicines and Diagnostics Service Survey on the Use of ARV Medicines and Laboratory Technologies and in the implementation of the WHO R*elated guidelines*, hosted on the Global AIDS Monitoring online tool.

Annex 4.
The national funding matrix for Indicator 8.3: HIV expenditure by origin of the resources
—

As in previous reporting cycles, the national funding matrix suggested for the Global AIDS Monitoring 2023 cycle contains a set of key core programmes and services by financing source. Each of the programme categories are divided into sets of sub-indicators. The set of the core sub-indicators comprise the following key programmes or services:

- Combination prevention, including condoms, PrEP, voluntary medical male circumcision, harm reduction services, empowering young women and girls, and providing essential service packages for key populations.
- Prevention of mother-to-child transmission of HIV.
- HIV testing and counselling.
- HIV-specific laboratory monitoring.
- Antiretroviral therapy.
- HIV and tuberculosis (TB).
- Social enablers, including reducing stigma and discrimination.
- Instituting human rights programmes.

The reporting framework of Indicator 8.3—"Total HIV expenditure by origin of the resources"—is organized around a two-dimensional system for recording HIV expenditure by programme and financing source. The form of reporting therefore has the format of a matrix.

The table below (Table 1) provides a complete set of programmes or services and a residual category that account for the totality of possible use of resources in countries, including financing sources. Countries are requested to report on the applicable programmes or services as appropriate (i.e., countries should only report on the relevant rows of the matrix, not on each one). The same is true for the financing sources: they need to be completed as they exist in each country. It is important to differentiate when the expenditure is non-existent (i.e., it has a value of "0"), unavailable or not applicable.

The total HIV expenditure is the sum of the core programmes and services from reported figures from Commitments 1 to 10 Table 1, plus the residual category of "Other essential programmes outside of the suggested framework" to account for total HIV expenditure and not just for the expenditures derived from earmarked budgets.

Further guidance will be provided in the Global AIDS Monitoring online reporting tool on how to complete the reporting forms and submit expenditure indicators to UNAIDS. The total amount of resources should include the totality of financing flows and expenditures by all programmes or services and by all sources. The sub-indicators would represent only a subset of the total that corresponds to parts of the specific commitments. The amounts reported will be compared to the number of people receiving the same services reported in Global AIDS Monitoring or elsewhere.

The National AIDS Spending Assessment (NASA) guidelines are being updated. A crosswalk on the new AIDS Spending Categories (ASCs) and the Global AIDS Monitoring funding matrix requested for Indicator 8.3 will be made available in time for Global AIDS Monitoring reporting. When a NASA—an in-depth HIV resource tracking exercise—is performed in countries, one can extract a Excel report from the resource tracking tool (RTT) and upload it into the Global AIDS Monitoring AIDS spending module.

Table 1
List of HIV programmes or services in the national funding matrix[24]

Codes in the Global AIDS Monitoring national funding matrix	Global AIDS Monitoring 2022 programme categories: complete set of interventions	Global AIDS Monitoring 2022 programme categories: core sub-indicators
1 Treatment, care and support (subtotal)		
1.1	HIV testing and counselling (HTC)	Expenditure on HTC (non-targeted), disaggregated by commodities and other direct/indirect costs.
1.2	Antiretroviral treatment (subtotal)	Expenditure on antiretroviral therapy (adults and paediatric).
1.2.1.	Adult antiretroviral treatment	Expenditure on antiretroviral therapy for adults disaggregated by commodities and other direct/indirect costs.
1.2.2.	Paediatric antiretroviral treatment	Expenditure on antiretroviral therapy for paediatric use, disaggregated by commodities and other direct/indirect costs.
1.2.3.	Antiretroviral therapy not broken down by either age or line of treatment	
1.3	Specific HIV-related laboratory monitoring (CD4, viral load)	Expenditure on HIV-specific laboratory monitoring (CD4 cell count, viral load and other lab/tests) disaggregated by commodities and other direct/indirect costs.
1.4	Opportunistic infections (OI) prophylaxis and treatment, excluding treatment and prevention of TB for people living with HIV	
1.5	Palliative care	
1.6	Support and retention	
1.98	Programmatic activities for treatment, care and support not disaggregated by type	
2 Prevention of vertical transmission of HIV (subtotal)		
2.1	HIV testing and counselling (HTC) for pregnant women	Expenditure on prevention of vertical transmission of HIV disaggregated by commodities and other direct/indirect costs.
2.2	Early infant diagnosis	Expenditure on prevention of vertical transmission of HIV disaggregated by commodities and other direct/indirect costs.
2.3	Antiretroviral treatment to reduce vertical transmission of HIV	Expenditure on prevention of vertical transmission of HIV disaggregated by commodities and other direct/indirect costs.
2.4	Non-ARV antiretroviral medicine-related component of prevention of mother-to-child transmission	Expenditure on prevention of vertical transmission of HIV other than the expenditures on the antiretroviral treatment provided to the pregnant women if a regimen as an adult living with HIV is provided.
2.98	Prevention of vertical transmission of HIV not disaggregated	

[24] Please note that the code numbering convention represented in this table for the national funding matrix is unchanged from 2021, and does not directly align with the 2022 GAM monitoring indicator numbers. This is because the programme categories are mapped with several other stakeholders and should therefore remain aligned.

3 Prevention (subtotal)

3.1	Social and behaviour change (SBC) programmes	Non-targeted.
3.2	Condoms	Condoms (non-targeted) disaggregated by commodities and other direct/indirect costs.
3.3	Pre-exposure exposure prophylaxis (PrEP) disaggregated by key populations (subtotal)	PrEP stratified by key population.
3.3.1.	PrEP for gay men and other men who have sex with men (MSM)	PrEP stratified by key population.
3.2.2.	PrEP for sex workers	PrEP stratified by key population.
3.3.3.	PrEP for persons who inject drugs (PWID)	PrEP stratified by key population.
3.3.4.	PrEP for transgender persons	PrEP stratified by key population.
3.3.5.	PrEP for key populations	PrEP stratified by key population.
3.3.6.	PrEP for young women and adolescent girls in high-prevalence countries	PrEP stratified by key population.
3.3.7	PrEP for serodiscordant couples	Pre-exposure prophylaxis(PrEP)
3.3.98	Pre-exposure prophylaxis PrEP not disaggregated by population type	
3.4	Voluntary medical male circumcision (VMMC) in high-prevalence countries	Voluntary medical male circumcision (VMMC).
3.5	Prevention, promotion of testing and linkage to care programmes for gay men and other men who have sex with men (MSM)	Prevention among key populations disaggregated by commodities and other direct/indirect costs.
3.6	Prevention, promotion of testing and linkage to care programmes for sex workers and their clients	Prevention among key populations disaggregated by commodities and other direct/indirect costs.
3.7	Prevention, promotion of testing and linkage to care programmes for persons who inject drugs (subtotal)	Prevention among key populations.
3.7.1.	Needle–syringe exchange, and prevention and promotion of testing, and linkage to care programmes for people who inject drugs	Prevention among key populations disaggregated by commodities and other direct/indirect costs.
3.7.2.	Substitution therapy	Prevention among key populations disaggregated by commodities and other direct/indirect costs.
3.8	Prevention and promotion of testing and linkage to care programmes for transgender persons	Prevention among key populations.

3.9	Prevention and promotion of testing and linkage to care programmes for prisoners	Prevention among key populations.
3.10	Prevention and promotion of testing and linkage to care programmes for young women and adolescent girls (high-prevalence countries)	Prevention among key populations.
3.11	Cash transfers to girls (high-prevalence countries)	Expenditures on cash transfers for young women and girls (age 10–24 years in high-prevalence countries) from HIV earmarked budgets.
3.12	Prevention programmes for vulnerable and accessible populations	
3.13	Post-exposure prophylaxis (PEP)	
3.14	Workplace	
3.15	Synergies with health sector	
3.16	Prevention of HIV transmission aimed at people living with HIV (PLHIV) not disaggregated	
3.99	Prevention of HIV transmission not disaggregated	Do not include other activities in this code if not explicitly listed. If there are additional activities, list them individually in mutually exclusive categories (ensuring no double-counting); avoid using a category already included above.

4 Gender programmes

5 Programmes for children and adolescents

6 Social protection

7 Community mobilization

8 Governance and sustainability (subtotal)

8.1	Strategic information	
8.2	Planning and coordination	
8.3	Procurement and logistics	
8.4	Health systems strengthening	
8.5	Education	
8.6	HIV- and AIDS-related research	
8.98	Governance and sustainability not disaggregated	

9 Critical social enablers (subtotal)

9.1	Policy dialogue	
9.2	Key human rights programmes	
9.3	HIV- and AIDS-specific institutional development	
9.98	Critical social enablers not disaggregated	

10 TB–HIV coinfection, diagnosis and treatment (subtotal)

10.1	TB screening and diagnosis among people living with HIV (PLHIV)	Expenditure on TB and HIV.
10.2	TB prevention and treatment for people living with HIV (PLHIV)	Expenditure on TB and HIV.
10.98	TB–HIV coinfection, diagnosis and treatment not disaggregated	
11.99	Other essential programmes outside the suggested framework of core HIV and AIDS programmes (please list below and specify)	All other HIV expenditure not elsewhere classified in any of the above categories (codes 1 through 10). Please ensure that none of the programmes or activities listed here are duplicated with any of the previous categories. Any programme or service listed below should be mutually exclusive with any of the codes listed above (codes 1 through 10).

Annex 5.
Additional guidance on constructing Global AIDS Monitoring indicators on HIV and tuberculosis 7.7–7.10

———
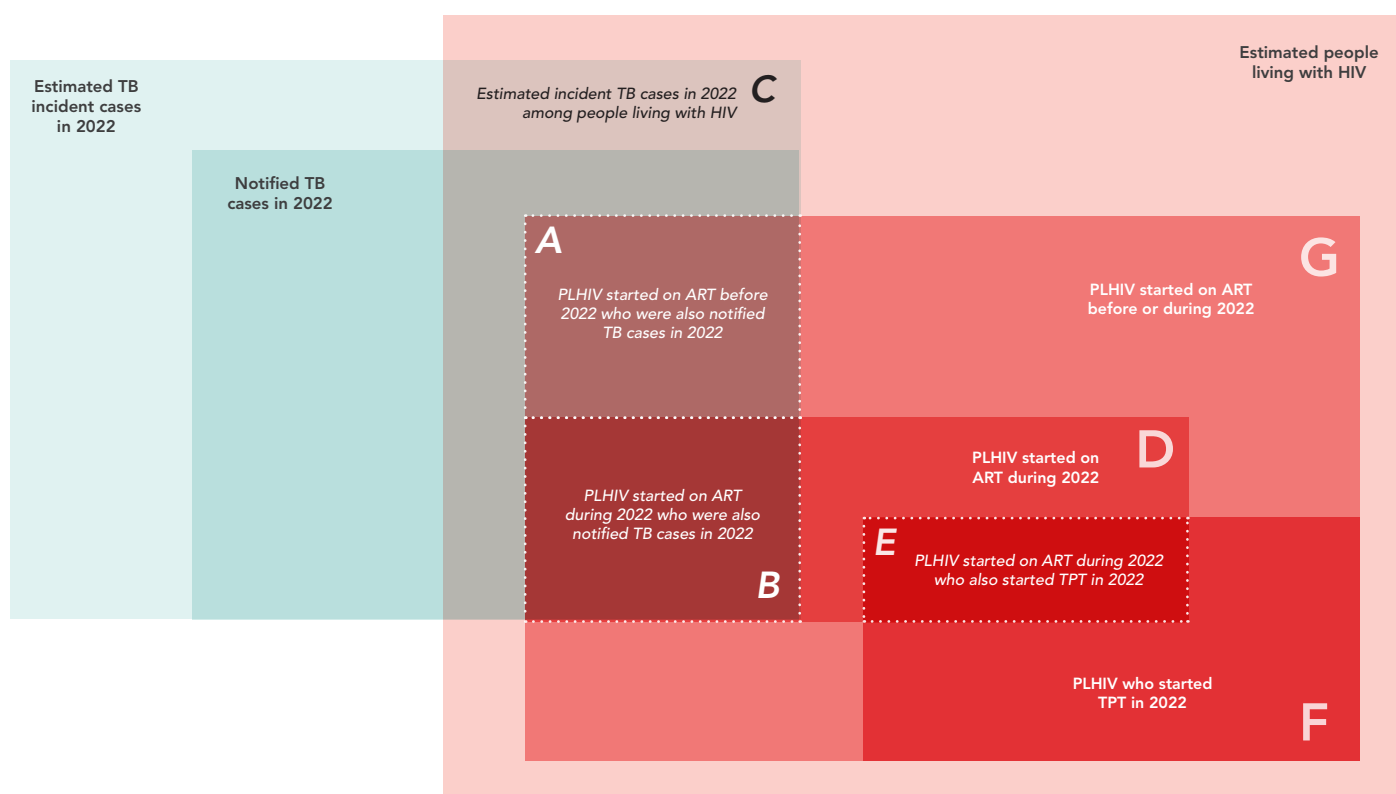
Indicator 7.7 = (A+B) / C
Note: The numerator for Indicator 7.7 should be equal to the number of HIV-positive new and relapse TB patients who started antiretroviral therapy as reported by the National Tuberculosis Programme. Please reconcile data with the National Tuberculosis Programme.

Indicator 7.8 = B / D
Note: Numerator for Indicator 7.7 will be greater than for Indicator 7.8. For the numerator, notified TB cases should include new, relapse and retreatment cases.

Indicator 7.9 (among people newly enrolled on ART) = E / D

Indicator 7.9 (among people currently enrolled on ART) = F / G

Please note for indicator 7.10 guidance is provided in the indicator definition sheet on page 100 of these guidelines.

Annex 6.
Global AIDS Monitoring 2023 interim National Commitments and Policy Instruments (NCPI) Guidance on Law-related Questions

——

The NCPI asks a number of questions regarding laws and regulations relating to HIV as well as key populations and vulnerable groups. The way in which various aspects of public and private life are regulated or criminalized differs widely between and within countries. This document provides further guidance and some examples to assist countries in answering those questions. Examples given are illustrative only, and should not be seen as exhaustive, they may not necessarily reflect the reality in your country.

This guidance covers the following questions from the interim NCPI:

82
92
93
94
95
96

Explanations of law-related questions in the NCPI (numbered according to questions in Part A; corresponding and identical Part B questions are denoted in italics)

Section 5

82.   **Are there any laws, regulations or policies that provide for the operation of community-led organizations in your country (please select all that apply)?**

Community-led organisations are organisations where the majority of governance, leadership, staff, spokespeople, membership and volunteers, reflect and represent the experiences, perspectives, and voices of their constituencies. Laws and regulations can influence whether or not different groups can form legal associations and the ease with which these associations can operate, provide health-services, meet reporting requirements and so forth. The response options in question 138 relate to laws and policies that determine what types of entities can register an association, whether they can provide services such as testing, harm reduction or peer counselling, and whether the laws allow for simplified or easier reporting for community-led organisations or civil society organisations generally. The laws and regulations may not specifically mention community-led organisations, but may, by interpretation, include them, for example under not-for-profit laws.

Section 6

92, 93, 94, 95, 96

Have there been any legal actions to decriminalize?

While law reform can take a long time, there are some specific concrete actions that can be taken as steps towards law reform. This question is aimed at capturing substantial concrete actions that lead to, or could lead to, decriminalization. While strategic litigation and proposals discussed by parliament are two main forms, there may be others in your country, such as a national consultation on a proposed bill, a draft decree being discussed, a referendum proposed. The action must be legal in nature, that is, it must involve parliamentary, governmental or judicial processes. It excludes practices that, while important, are not legal steps towards change. For example, it would not include sensitization or training activities.