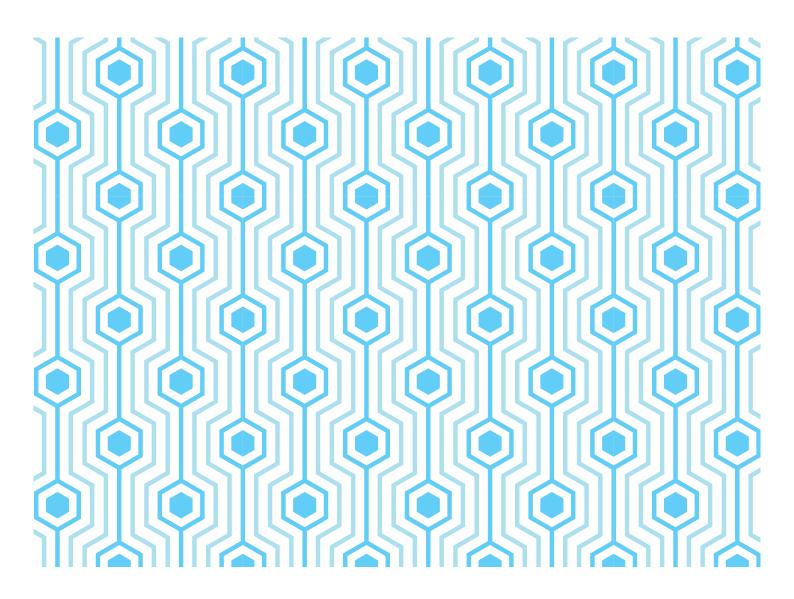
# Global AIDS Monitoring 2019

Indicators for monitoring the 2016 Political Declaration on Ending AIDS



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Modelled HIV estimates using the updated Spectrum software are due by 1 April 2019.

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# Summary of indicators for Global AIDS Monitoring

2020 Fast-Track commitments and expanded targets to end AIDS

\* Expanded targets are in blue

Reduce the number of people newly infected with HIV to fewer than 500 000 globally by 2020
HIV incidence (see Commitment 3)

Reduce the number of people dying from AIDS-related causes to fewer than 500 000 globally by 2020
AIDS mortality (see Commitment 1)

Eliminate HIV-related stigma and discrimination by 2020
Discriminatory attitudes towards people living with HIV (see Commitment 4)

**COMMITMENT 1:** Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90–90 targets by 2020

## Commit to the 90–90–90 target

- 1.1 People living with HIV who know their HIV status
- 1.2 People living with HIV on antiretroviral therapy
- 1.3 Retention on antiretroviral therapy at 12 months
- 1.4 People living with HIV who have suppressed viral loads
- ➔ 1.5 Late HIV diagnosis
- 1.6 Antiretroviral medicine stock-outs
- 1.7 AIDS mortality
- 1.8 HIV testing volume and positivity

Address regulations, policies and practices that prevent access to safe, efficacious and affordable generic medicines, diagnostics and related health technologies, including by ensuring the full use of the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) flexibilities, and strengthen regional and local capacity to develop, manufacture and deliver qualityassured affordable health products **COMMITMENT 2:** Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018

- 2.1 Early infant diagnosis
- 2.2 Mother-to-child transmission of HIV

.....

- 2.3 Preventing the mother-tochild transmission of HIV
- 2.4 Syphilis among pregnant women
- 2.5 Congenital syphilis rate (live births and stillbirth)
- 2.6 HIV testing among pregnant women

Additional indicators related to this target but compiled elsewhere (either in different commitment areas or through the HIV estimates process):

- Number of children newly infected with HIV (see 3.1 HIV incidence)
- HIV treatment among children: antiretroviral therapy (see 1.2 People living with HIV on antiretroviral therapy)

**COMMITMENT 3:** Ensure

access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circumcision, harm reduction and condoms, to at least 90% of people by 2020, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender people, sex workers and their clients, people who inject drugs and prisoners

➔ 3.1 HIV incidence

Ensure that 90% of the people at risk of HIV infection have access to comprehensive HIV prevention services, including sex workers and their clients, men who have sex with men, transgender people, people who inject drugs and prisoners

- 3.2 Estimates of the size of key populations
- 3.3 HIV prevalence among key populations
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## People who inject drugs

- 3.8 Safe injecting practices among people who inject drugs
- 3.9 Needles and syringes distributed per person who injects drugs
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## Sex workers

 3.11 Active syphilis among sex workers

#### Men who have sex with men

 3.12 Active syphilis among men who have sex with men

## Prisoners

 3.13 HIV prevention programmes in prisons

## Viral hepatitis

 3.14 Viral hepatitis among key populations

## Reach 3 million people with pre-exposure prophylaxis by 2020

➔ 3.15 People receiving pre-exposure prophylaxis

## Reach 25 million men with voluntary medical male circumcision in highincidence countries by 2020

- 3.16 Prevalence of male circumcision
- 3.17 Annual number of males voluntarily circumcised

## Make 20 billion condoms available annually by 2020 in low- and middleincome countries

 3.18 Condom use at last high-risk sex

Number of condoms distributed (NCPI)

## **COMMITMENT 4:** *Eliminate*

gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020

- 4.1 Discriminatory attitudes towards people living with HIV
- 4.2 Avoidance of health care among key populations because of stigma and discrimination
  - 4.2A Avoidance of health care by sex workers because of stigma and discrimination
  - 4.2B Avoidance of health care by men who have sex with men because of stigma and discrimination
  - 4.2C Avoidance of health care by people who inject drugs because of stigma and discrimination

4.2D Avoidance of health care by transgender people because of stigma and discrimination

### Ensure universal access to quality and affordable sexual and reproductive health-care services, including HIV services, for women

● 4.3 Prevalence of recent intimate partner violence

> Percentage of countries that report disaggregated data by sex (analytical output in the online reporting tool)

## Eliminate HIV-related stigma and discrimination in health-care settings by 2020

 4.4 Experience of HIV-related discrimination in healthcare settings

Review and reform laws that reinforce stigma and discrimination, including on age of consent, HIV non-disclosure, exposure and transmission, travel restrictions and mandatory testing

NCPI

**COMMITMENT 5:** Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year

- 5.1 Young people: knowledge about HIV prevention
- 5.2 Demand for family planning satisfied by modern methods

Additional indicators related to this target but compiled elsewhere (either in different commitment areas or through the HIV estimates process):

- Women 15–24 years old newly infected with HIV (see 3.1 HIV incidence)
- Condom use at last high-risk sex among young women 15–24 (see 3.18 Condom use at last high-risk sex)

**COMMITMENT 6:** Ensure that 75% of people living with, at risk of and affected by HIV benefit from HIV-sensitive social protection by 2020

Indicators to be included in Global AIDS Monitoring

NCPI

**COMMITMENT 7:** Ensure that at least 30% of all service delivery is community-led by 2020

Indicators to be included in Global AIDS Monitoring

NCPI

**COMMITMENT 8:** Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers

● 8.1 Total HIV expenditure

# Domestic and international HIV expenditure by categories and funding sources

- 8.1A Expenditure on HIV testing and counselling
- 8.1B Expenditure on antiretroviral therapy
- 8.1C Expenditure on HIV-specific laboratory monitoring
- 8.1D Expenditure on TB and HIV
- 8.1E Expenditure on the five pillars of combination prevention
- 8.1F Expenditure on preventing the motherto-child transmission of HIV
- 8.1G Expenditure on social enablers
- 8.1H Expenditure on cash transfers for young women and girls

**COMMITMENT 9:** Empower people living with, at risk of and affected by HIV to know their rights and to access justice and legal services to prevent and challenge violations of human rights

NCPI

**COMMITMENT 10:** Commit to taking AIDS out of isolation through people-centred systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C

Reduce tuberculosis-related deaths among people living with HIV by 75% by 2020

- 10.1 Co-managing TB and HIV treatment
- 10.2 People living with HIV with active TB disease
- 10.3 People living with HIV who started TB preventive therapy

Additional indicators related to this target but compiled elsewhere (either in different commitment areas or through the HIV estimates process):

 TB deaths among people living with HIV

#### Sexually transmitted infections

- ➔ 10.4 Men with urethral discharge
- 10.5 Gonorrhoea among men

#### Hepatitis B and C

- ➔ 10.6 Hepatitis B testing
- 10.7 People coinfected with HIV and HBV receiving combined treatment
- 10.8 Hepatitis C testing
- 10.9 People coinfected with HIV and HCV starting HCV treatment

#### **Cervical cancer**

 10.10 Cervical cancer screening among women living with HIV

Additional indicators related to this target but compiled elsewhere by WHO:

HPV vaccination

# Abbreviations and acronyms

3TC AIDS AZT DTG EFV FTC GAM HBV HCV HIV HPV ILO LPV/r NASA NCPI NGO NNRTI NVP PrEP RPR TP	lamivudine acquired immunodeficiency syndrome zidovudine dolutegravir efavirenz emtricitabine Global AIDS Monitoring hepatitis B virus hepatitis C virus human immunodeficiency virus human immunodeficiency virus human papillomavirus International Labour Organization lopinavir with a ritonavir boost National AIDS Spending Assessment National AIDS Spending Assessment National Commitments and Policy Instrument nongovernmental organization(s) non-nucleoside reverse-transcriptase inhibitor nucleoside reverse-transcriptase inhibitor nevirapine pre-exposure prophylaxis rapid plasma reagin tubaraulosia
ТВ	tuberculosis
TDF	tenofovir disoproxil fumarate
TPHA	Treponema pallidum haemagglutination assay
TPPA	Treponema pallidum particle agglutination assay
UNDP UNFPA UNICEF UNODC VDRL WHO	United Nations Development Programme United Nations Population Fund

# Introduction

#### Purpose and background

The purpose of this document is to provide guidance to national AIDS programmes and partners on the use of indicators to measure and report on the country response.

The 2016 United Nations Political Declaration on Ending AIDS, adopted at the United Nations General Assembly High-Level Meeting on AIDS in June 2016, mandated UNAIDS to support countries in reporting on the commitments in the Political Declaration. The Political Declaration on Ending AIDS built on three previous political declarations: the 2001 Declaration of Commitment on HIV/AIDS, the 2006 Political Declaration on HIV/AIDS and the 2011 Political Declaration on HIV and AIDS.

Member States unanimously adopted the 2001 Declaration of Commitment at the United Nations General Assembly Special Session on HIV/ AIDS in 2001. It reflected global consensus on a comprehensive framework to achieve Millennium Development Goal 6: halting and beginning to reverse the HIV epidemic by 2015. It recognized the need for multisectoral action on a range of fronts and addressed responses at the global, regional and country levels to prevent people from becoming newly infected with HIV, to expand health-care access and to mitigate the impact of the epidemic.

The 2006 Political Declaration recognized the urgent need to achieve universal access to HIV treatment, prevention, care and support. The 2011 Political Declaration established 10 targets to intensify the efforts to eliminate HIV and AIDS.

The 2016 Political Declaration on Ending AIDS focuses on the next five years, with additional focus on the period of the Sustainable Development Goals through 2030 and with a stronger focus on integrating the global HIV response into the broader development agenda.

Although governments have adopted the 2016 Political Declaration on Ending AIDS, the vision extends far beyond the government sector, reaching private industry and labour groups, faith-based organizations, and nongovernmental organizations (NGOs) and other civil society entities, including those representing people living with HIV.

As indicated in the 2016 Political Declaration on Ending AIDS, a successful AIDS response should be measured by the achievement of concrete, time-bound targets. It calls for careful monitoring of progress in implementing commitments and requires the United Nations Secretary-General to issue annual progress reports. These reports are designed to identify challenges and constraints and recommend action to accelerate the achievement of the targets.

The 2019 Global AIDS Monitoring is the third year after the transition from the Millennium Development Goals to the Sustainable Development Goals; it also is the third year of reporting for the HIV monitoring framework for 2016–2020. The World Health Organization (WHO), UNAIDS and partners collaborated to compile the consolidated strategic information guidelines for HIV in the health sector that have informed the Global AIDS Monitoring guidelines.<sup>1</sup>

In past reporting rounds, countries have been encouraged to integrate indicators into their ongoing monitoring efforts. These indicators are designed to help countries in assessing the state of their national response and their progress in achieving national HIV targets. They will contribute to improving understanding of the global response to the HIV epidemic, including progress made towards achieving the global targets set in the 2016 Political Declaration on Ending AIDS and the Sustainable Development Goals.<sup>2</sup>

These guidelines are designed to improve the quality and consistency of data collected at the country level, enhancing the accuracy of the conclusions drawn at the national, regional and global levels.

## Rationale for the Global AIDS Monitoring framework

The following principles were applied when selecting indicators for the Global AIDS Monitoring framework.

 Reduced monitoring burden. The set of indicators is smaller now and has fewer separate questionnaires (subindicators and data sources). It integrates indicators for monitoring and reporting on the health sector

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://who.int/hiv/pub/ guidelines/strategic-information-guidelines/en, accessed 31 October 2018).
 Fast-Track commitments to end AIDS by 2030. Geneva: UNAIDS (http://www.unaids.org/sites/default/files/media\_asset/fast-track-commitments\_

<sup>&</sup>lt;sup>2</sup> Fast-Track commitments to end AIDS by 2030. Geneva: UNAIDS (http://www.unaids.org/sites/default/files/media\_asset/fast-track-commitments\_ en.pdf, accessed 31 October 2018).

#### How to use these guidelines

These guidelines have been developed to help countries collect data and report on their national HIV response as effectively as possible. The section on indicators for Global AIDS Monitoring devotes pages to each indicator, giving reasons for their inclusion and methods for collecting, constructing and measuring the indicator. The indicator's strengths and weaknesses are also discussed.

response to HIV (previously called Universal Access indicators) and is also aligned with the Sustainable Development Goal indicators, making data collection less burdensome for countries. The descriptions of the indicators in this guide supersede previous descriptions of indicators from previous guidelines, including the global reference list of 100 core health indicators and the 2015 WHO Consolidated strategic information guidelines for HIV in the health sector.<sup>3</sup>, <sup>4</sup> To fully meet the reporting requirements for the 10 Fast-Track commitments, indicators are disaggregated by age, sex, geographical location and key population, as appropriate.

 Better programmatic utility for countries. Because of their disaggregation, sources and geographical granularity—including at the city level—the indicators can summarize the diversity of the situation in a country and identify where programmes can have the greatest impact. Use of programme monitoring data is also included as an option for selected indicators.

- Knowing the epidemic and reallocating resources. The epidemiological estimates are improved every year, and they are increasingly used at the subnational level together with programmatic data to assess service coverage and gaps. This enables efficient investment.
- Coherent together. The set is also defined with the idea that indicators are not independent but rather complement each other, providing a more complete view of the AIDS response in a given country context.
- Innovative and forward looking. For flexibility in the coming years, the option to report using alternative data sources (different types of surveys and programmatic data) is presented in select indicators. Community-driven data collection in multiple forms, such as through social media or dating applications, could be complementary to indicator data collected, offering further insight into the situation.

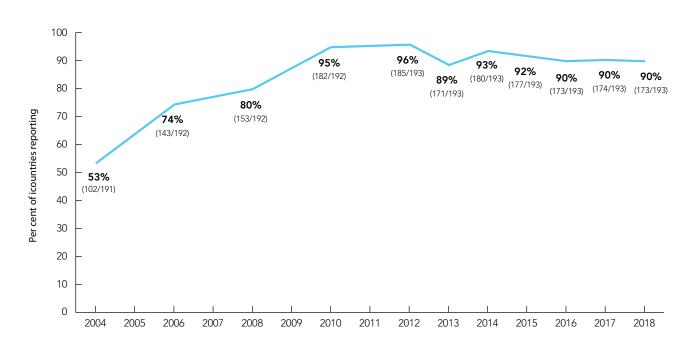
<sup>&</sup>lt;sup>3</sup> Global reference list of 100 core health indicators. Geneva: World Health Organization; 2015 (http://www.who.int/healthinfo/indicators/2015/en, accessed 31 October 2018).

<sup>&</sup>lt;sup>4</sup> Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://www.who.int/hiv/pub/ guidelines/strategic-information-guidelines/en/, accessed 31 October 2018).

## **Reporting history**

To monitor the various political declarations, UNAIDS has collected country progress reports from Member States every two years since 2004 and every year since 2012. The response rates increased from 102 Member States (53%) in 2004 to 185 (96%) in 2012. Since 2012, the response rate has remained roughly stable, with 173 Member States (90%) reporting in 2018 (Figures 1 and 2). Information in country progress reports provides the most comprehensive data on the status of and response to the epidemic. Data from the previous reporting rounds are available online at http://aidsinfo. unaids.org. The full database is available at http:// www.aidsinfoonline.org and can be used to produce charts, maps and tables. Unedited narrative country reports from the 2018 reporting round are available at:

http://www.unaids.org/en/ dataanalysis/knowyourresponse/ countryprogressreports/2018countries.

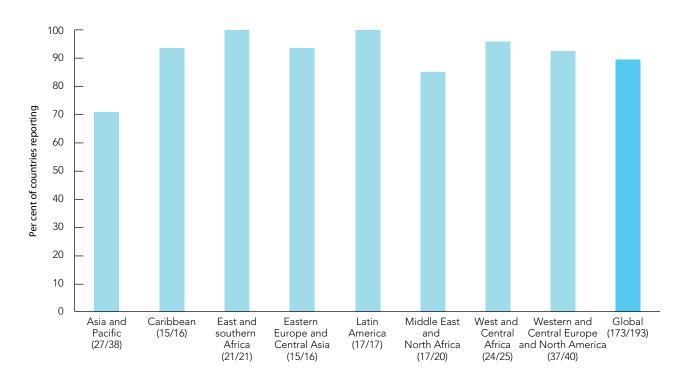


## Figure 1

Trend in response rates, 2004–2018



Proportion of countries that submitted reports in the 2018 cycle of Global AIDS Monitoring



Please note that corrections or updates to indicator data following validation are available in AIDSInfo and may not be reflected in narrative reports.

## **Reporting format**

The 2019 reporting requires submission of the indicators and the National Commitments and Policy Instrument (NCPI). When submitting Global AIDS Monitoring data, countries are also encouraged to submit a narrative report. The online tool incorporates a template for a narrative report

consisting of brief narrative summaries for each Fast-Track commitment. Alternatively, countries can submit a recent national epidemiology and response overview report, if available.

Indicator data are considered an integral part of each country progress report submission. Hence, both the narrative part of the country progress report and the indicator data should be considered in the consultation and report preparation process, as outlined in the section on implementing progress reporting at the national level.

The Global AIDS Monitoring indicator data should be submitted through the reporting website (https://aidsreportingtool.unaids.org) to enhance the completeness and quality of the data and to facilitate processing and analysis at the country, regional and global levels.

## The deadline for submission using the reporting website is 1 April 2019.

Global AIDS Monitoring indicators are important for two reasons. First, they can help individual countries evaluate the effectiveness of their national response. Second, when data from multiple countries are analysed collectively, the indicators can provide critical information on the effectiveness of the response at a wider level and form the basis for regional and global analyses of progress. This also provides countries with insights into the national-level responses of other countries.

The changes in this round of reporting (compared with the 2018 reporting round) are summarized on pages 29–32.

Countries should consider how each indicator applies to their local epidemic. For each indicator in the reporting website, countries are asked to indicate whether an indicator is considered relevant or not, and if it is relevant, whether new data are available for this indicator. When countries choose not to report on a specific indicator, they should provide their reasons, since this enables an absence of data to be differentiated from the inapplicability of certain indicators to specific country epidemics.

Most of the national indicators apply to all countries. The behaviour indicators for key populations at higher risk are relevant in all countries regardless of the national HIV prevalence. For example, a country with a higher prevalence epidemic may also have a concentrated subepidemic among people who inject drugs. It would therefore also be valuable to calculate and report on the indicators that relate to the key populations at higher risk.

Similarly, countries with a low HIV prevalence are encouraged to collect data on sexual behaviour among young people as a means of tracking trends in behaviour that could influence the national response in the future. However, a few indicators are solely applicable to specific HIV epidemic contexts.

UNAIDS strongly recommends that countries use these indicators within their national monitoring and evaluation systems. If a country is using an alternative indicator to monitor the issue in question effectively, the comment boxes of the online reporting tool may be used to describe it (including a full definition and method of measurement), along with any available data for the indicator.

These guidelines fully define all indicators used for the Global AIDS Monitoring.

## National indicators for high-income countries

In adopting the 2016 Political Declaration on Ending AIDS, high-income countries have committed to reporting on progress made in their national responses to HIV. High-income countries may use relatively complex information systems and a variety of data sources, which can make calculating a single national indicator challenging. However, this does not remove the need for high-income country data for monitoring global progress towards the targets of the 2016 Political Declaration on Ending AIDS. European Union (EU) and European Economic Area (EEA) countries have used innovative ways to link global HIV monitoring systems more closely to regional circumstances.

UNAIDS encourages high-income countries to contact the UNAIDS Strategic Information Department (AIDSreporting@unaids.org) if they require further technical advice on reporting on their domestic programmes.

# Implementing monitoring at the national level

## **Constructing national indicators**

For each indicator, this manual provides the information needed to construct the indicator, including the following:

- A summary of what it measures.
- A rationale for the indicator.
- A numerator, denominator and calculation.
- Disaggregation of the indicator.
- Recommended measurement tools.
- Measurement frequency.
- Strengths and weaknesses of the indicator (including summary interpretation of the indicator).

## Measurement tools and data sources

The primary measurement tools vary by indicator and include the following:

- Nationally representative population-based sample surveys.
- Behavioural surveillance surveys.
- Specially designed surveys and questionnaires, including surveys of specific population groups (such as specific service coverage surveys).
- Patient tracking systems.
- Health information systems.
- Sentinel surveillance.
- HIV case surveillance systems.
- Mathematical models.
- National HIV estimates from Spectrum software.

Existing data sources—including records and programme reviews from health facilities and schools, and specific information from HIV surveillance activities and programmes—should be used to supplement the primary measurement tools.

A major tool for generating denominators used in the Global AIDS Monitoring reporting is the Spectrum computer package, which allows countries to create population-level estimates of people living with HIV, pregnant women who need antiretroviral medicine to prevent vertical HIV transmission and HIV-exposed children who need virological testing.<sup>5</sup>

In 2019, Spectrum files will be developed simultaneously with submission of indicator data

through the Global AIDS Monitoring system. Final Spectrum files should be submitted by 1 April 2019. Country teams will receive information on the 2019 estimates process in November 2018.

As in previous years, countries have the option to import Spectrum data into the Global AIDS Monitoring online tool for certain indicators, thereby not requiring them to be entered in the Global AIDS Monitoring tool. Starting in 2018, countries with populations of 250 000 or greater will enter broad age- and sex-disaggregated data for Indicators 1.1, 1.2 and 1.4 in Spectrum, and these data will be imported into the Global AIDS Monitoring tool. See further instructions on page 33.

#### Uncertainty bounds around UNAIDS estimates<sup>6</sup>

The estimation software calculates uncertainty bounds around each estimate. These bounds define the range within which the true value lies. Narrow bounds indicate that an estimate is precise, while wide bounds indicate greater uncertainty regarding the estimate.

In countries using HIV surveillance data, the quantity and source of the data available partly determine the precision of the estimates: countries with more HIV surveillance data have smaller ranges than countries with less surveillance data or smaller sample sizes. Countries in which a national population-based survey has been conducted generally have smaller ranges around estimates than countries where such surveys have not been conducted. Countries producing subnational estimates at the provincial level have wider ranges. In countries using HIV case reporting and AIDS-related mortality data, the number of years of data and the magnitude of the cases reported or AIDS-related deaths observed will inform the precision of the estimate.

The assumptions required to arrive at the estimates also contribute to the extent of the ranges around the estimates: in brief, the more assumptions, the wider the uncertainty range, since each assumption introduces additional uncertainties. For example, the ranges around the estimates of adult HIV prevalence are smaller than those around the estimates of HIV incidence among children, which require additional data on prevalence among pregnant women and the probability of mother-to-child HIV transmission with their own additional uncertainty.

UNAIDS is confident that the actual numbers of people living with HIV, people who are newly infected with HIV or people who have died from AIDSrelated causes lie within the reported ranges. Over time, more and better data from countries will steadily reduce uncertainty.

<sup>&</sup>lt;sup>5</sup> Spectrum/EPP [website]. Geneva: UNAIDS; 2018 (http://www.unaids.org/en/dataanalysis/datatools/spectrum-epp).

Originally published in: Miles to go: closing gaps, breaking barriers, righting injustices. Geneva: UNAIDS; 2018 (http://www.unaids.org/sites/default/ files/media\_asset/miles-to-go\_en.pdf, accessed 1 November 2018).

A team of national experts trained on the software creates the Spectrum files. It is critical that the team completing the Global AIDS Monitoring tool imports the final set of estimates developed by the national HIV estimates team.

Civil society organizations are valuable actors in the AIDS response, and they may contribute data for many indicators, especially those that relate to interventions in which NGOs and faith-based and community-based organizations play an active role. Examples include work with young people, key populations at higher risk and pregnant women.

In many countries, most of the data required for the national-level indicators may not be available from routine sources. Gathering indicator data may require adapting existing monitoring tools or adding specific surveys. Countries that conduct regular, nationally representative populationbased surveys—such as Population-based HIV Impact Assessments or the Demographic and Health Surveys—will collect important information, including behavioural data on young people. In countries in which other types of population-based surveys are conducted, including those for purposes other than HIV, surveys can be adapted to collect data for selected indicators.

## Numerators and denominators

For each indicator, detailed instructions for measuring the national response are provided. Most national-level indicators use numerators and denominators to calculate the percentages that measure the state of the national response. Countries are strongly encouraged to pay close attention to the dates attached to specific data when calculating an indicator. Collecting data used for the numerator and denominator at different times will compromise the accuracy and validity of that information.

The methods described have been designed to facilitate the construction of global estimates from national-level data. Although these methods can be applied at the subnational level, simpler, faster and more flexible approaches tailored to local conditions may be more appropriate to guide decision-making below the national level.

Several indicators related to the coverage of services require a denominator based on the full population: that is, not just the people visiting health-care clinics. Calculating population-level indicators requires estimating the total number of people eligible for the service. For example, estimating how close a country is to reaching 100% coverage of services to prevent mother-to-child transmission of HIV requires estimating the total number of pregnant women living with HIV. UNAIDS recommends that countries use the Spectrum computer package to calculate the denominators needed for Global AIDS Monitoring reporting.

## Disaggregate the data, especially by sex and age

One of the key lessons learned from previous rounds of reporting was the importance of obtaining disaggregated data: for example, breaking it down by sex and age, and providing it for specific key populations or geographic locations. It is vital that countries collect data in their component parts and not simply in summary form. Without disaggregated data, monitoring the breadth and depth of the response to the epidemic at the national and global levels is difficult. It is equally difficult to monitor access to services, the equity of that access, the appropriateness of focusing on specific populations and meaningful change over time.

Countries are strongly encouraged to make collecting disaggregated data—especially by sex and age, and for specific key populations one of the cornerstones of their monitoring and evaluation efforts. If possible, equity analysis should also be conducted.<sup>7</sup> Sex- and age-disaggregated epidemiological data and behavioural indicators may reveal gender dynamics. Key ministries should review their information systems, surveys and other instruments for collecting data to ensure that they capture disaggregated data at the subnational levels, including the facility and project levels. Special efforts should be made to follow disaggregated data up to the national level. In addition, the private sector and/or civil society organizations involved in the country's AIDS response must be advised of the importance of disaggregated data, and they must make collecting, disseminating and analysing the data a priority in their ongoing operations.

The Global AIDS Monitoring online reporting tool (https://aidsreportingtool.unaids.org) clearly identifies the disaggregated data required to report accurately on the numerator and denominator for each indicator (see the preceding subsection on numerators and denominators for additional information). In general, where appropriate, all data should be disaggregated by sex and age. In addition, indicators for key populations are to be provided for each population for which they are available. If collecting disaggregated data proves difficult, partial data may be entered.

When disaggregated data are not readily available, the information needed for indicators may be extracted from larger data sets, although the location of the data varies from country to country. Countries should seek technical assistance from the United Nations System (including country offices of UNAIDS, WHO and the United Nations Children's Fund [UNICEF]) and its partners for help with accessing the disaggregated data needed to properly complete the measurements of indicators.

Governments are encouraged to look beyond their internal information resources to collect and validate data. In many cases, civil society organizations may be able to provide valuable primary and secondary data, especially for key populations.

Countries are encouraged to report available complementary data that reflect the gender dimensions of the indicators from other sources including quantitative and qualitative data collected by civil society—in the comment boxes on each indicator page. These additional data will permit a more comprehensive situational analysis of the indicators from a gender perspective.

<sup>&</sup>lt;sup>7</sup> World Health Organization, UNAIDS. A tool for strengthening gender-sensitive national HIV and sexual and reproductive health (SRH) monitoring and evaluation systems. Geneva: WHO; 2016.

## Subnational data

Many countries are improving the use of data at the subnational level to help all stakeholders better understand the geographical distribution of the epidemic and the response in each community. In 2015, the UNAIDS World AIDS Day report gave examples of how countries focus on specific populations and locations to Fast-Track their respective HIV responses.<sup>8</sup>

Since mid-2014, the online reporting tool has allowed users to submit subnational data for the number of pregnant women living with HIV receiving antiretroviral medicine for preventing the mother-to-child transmission of HIV (Indicator 2.3), the number of people receiving antiretroviral therapy (Indicator 1.2) and data related to key populations.

The tool also allows users to submit data on priority cities for additional indicators to assess progress in the HIV response in cities, with specific focus on high-burden cities or those identified as Fast-Track cities that have committed to ending AIDS by 2030.

## Recent and representative survey data

Countries are requested to report only newly available data. If the latest available data have already been reported in a previous round of reporting, they should not be reported again. When calculating indicators based on general population surveys, countries should use the most recently available nationally representative survey.

When calculating indicators based on key population surveys, ensuring that samples are representative of the broader group is a great technical challenge.

Methods are being developed to achieve representative sampling of these populations (such as respondent-driven sampling). While these are being refined, countries may not be confident that the samples used for surveying key populations at higher risk of HIV exposure are representative. Countries are advised to use the most recent survey of key populations that has been reviewed and endorsed by local technical experts, such as monitoring and evaluation technical working groups or national research councils. Countries are encouraged to report all recent high-quality surveys of key populations, by site, with the numerator, denominator and sample size in the Global AIDS Monitoring online reporting tool.

One of the challenges in developing estimates of the burden of disease and planning for programme needs is describing the size of key populations. Countries are asked to report the size estimates for key populations, providing methods and any estimates specific to cities or provinces calculated empirically. See page 68 for more details. Some countries with empirical national size estimates for key populations can also aggregate prevention

<sup>&</sup>lt;sup>8</sup> On the Fast-Track to end AIDS by 2030: focus on locations and populations. Geneva: UNAIDS; 2015 (http://www.unaids.org/en/resources/ documents/2015/FocusLocationPopulation, accessed 1 November 2018).

programme data. If a country can report against an indicator with national programme data, they may do so in the comment fields.

Countries that need additional information on implementation should seek technical assistance from their UNAIDS strategic information advisers, UNICEF or WHO offices, or HIV monitoring and evaluation working groups. Technical support is also available from the UNAIDS regional strategic information advisers based at the regional support team and from the Strategic Information Department, which can be reached via email at AIDSreporting@unaids.org.

## Interpretation and analysis

This manual discusses each indicator, including their strengths and weaknesses. Countries should carefully review the interpretation section before they begin collecting and analysing data, since it explains how to analyse each indicator and any potential issues related to it. The points raised in this section should be reviewed before finalizing reporting and writing the narrative report to confirm the appropriateness of the findings for each indicator.

The sections on the strengths and weaknesses of each indicator are designed to improve the accuracy and consistency of the data submitted to UNAIDS. Other points in this section provide additional information on the value of a particular indicator. The section acknowledges that countries vary on issues as diverse as the relationship of costs to local income, standards for quality and variation in treatment regimens.

After compiling their data, countries are strongly encouraged to continue to analyse their findings. This will enable them to better understand their national response and identify opportunities to improve it. Countries should be looking closely at the links between policy, resource allocation and efficiency, implementing HIV programmes, verifiable behaviour change and changes in the epidemic. For example, if a country has a policy for reducing the mother-to-child transmission of HIV, does it also have sufficiently funded programmes that make services to prevent mother-to-child transmission available to pregnant women? If these programmes are in place, are women using them in sufficient numbers to reduce the number of infants living with HIV born in that country?

These links exist in every facet of a national response, and the national-level indicators included in this manual reflect many of the most important ones. To analyse these linkages effectively, countries must draw on the widest range of data available, including quantitative and qualitative information from the public and private sectors and communities. Excessive reliance on data of a single type or from a single source is less likely to provide the perspective or insights required to understand such links and to identify any existing or emerging trends.

## Role of civil society

Civil society plays a key role in the response to the AIDS epidemic in countries around the world. The wide range of expertise within civil society organizations makes them ideal partners in the process of preparing country progress reports. Specifically, civil society organizations are well positioned to provide quantitative and qualitative information to augment the data collected by governments and to interpret the data collected. National AIDS councils, commissions, committees or their equivalents should seek input from the full spectrum of civil society—including NGOs, networks of people living with HIV, faith-based organizations, women, young people, trade unions and community-based organizations-for their reports on the national-level indicators underlying the 2016 Political Declaration on Ending AIDS. The importance of securing input from the full spectrum of civil society, including people living with HIV, cannot be overstated: civil society speaks with many voices and represents many different perspectives, all of which can be valuable in monitoring and evaluating a country's AIDS response.

National AIDS committees or their equivalents should provide civil society organizations with easy access to their plans for collecting data, including that on denominators. A straightforward mechanism for submitting and evaluating information should be developed. As part of this effort, civil society organizations should also be invited to participate in workshops at the national level to determine how they can best support the country's reporting process. In every country, civil society representatives should be given sufficient opportunity to review and comment on the data before they are finalized and submitted. The report submitted to UNAIDS should be widely disseminated to ensure that civil society has ready access to it.

Country-level UNAIDS staff members are available to assist with civil society input throughout the process. In particular, UNAIDS country-level staff members should:

- Brief civil society organizations on the indicators and the reporting process.
- Provide technical assistance on gathering, analysing and reporting data, including focused support for people living with HIV.
- Facilitate the dissemination of reports, including (whenever possible) reports in national languages.

UNAIDS will accept shadow reports by civil society as in previous rounds. Nevertheless, shadow reports are not intended as a parallel reporting process for civil society. Wherever possible, UNAIDS encourages integrating civil society into national reporting processes, as described above. Shadow reports are intended to provide an alternative perspective if it is strongly felt that civil society was not adequately included in the national reporting process, if governments do not submit a report, or if the data provided by the government differ considerably from the data collected by civil society while monitoring government progress in delivering services. Shadow reports can be submitted through aidsreporting@unaids.org.

## Content of the report

In 2019, countries are expected to submit data on all the national indicators that apply to their response. National governments are responsible for reporting on national-level indicators with support from civil society and, where applicable, development partners. The procedures outlined in this manual should be used for collecting and calculating the necessary information for each indicator.

Countries are also requested, when possible, to submit copies of (or links to) primary reports from which data are drawn for the different indicators. These reports can be submitted through the online reporting tool. This will facilitate interpretation of the data, including trend analysis and comparison between countries.

As discussed previously, and as required by the 2016 Political Declaration on Ending AIDS, civil society—including people living with HIV—should be involved in the reporting process. The private sector at large should have a similar opportunity to participate in the reporting process. UNAIDS strongly recommends that national governments organize a workshop or forum to present and discuss the data before submitting them. Joint United Nations teams on AIDS are available in many countries to facilitate this discussion process.

The indicator data will be made available at aidsinfo.unaids.org after a process of data cleaning, validation and reconciliation.

If there are any questions, countries should consult with UNAIDS locally or at headquarters at AIDSreporting@unaids.org. Updated information on Global AIDS Monitoring is available at the UNAIDS website at:

http://www.unaids.org/en/dataanalysis/ knowyourresponse/globalaidsprogressreporting.

## Guidance on submitting data

Countries needing additional information on the reporting tool and submission mechanisms should seek technical assistance from their UNAIDS strategic information advisers and HIV monitoring and evaluation working groups in the country. The UNAIDS Strategic Information Department is also available to provide support and can be reached via email at AIDSreporting@unaids.org.

## Reporting tool and submitting data

The indicator data, the NCPI and narrative summaries of the data for each commitment or available national narrative reports should be submitted online by 1 April 2019. If focal points need to update the Spectrum-imported data after this deadline, they should request that their Global AIDS Monitoring online tool be opened for the import process between 1 April and 1 May.

Such data should be entered online using the global reporting website: https://aidsreportingtool. unaids.org. This will aid data processing and minimize errors. Each country has identified a national focal point responsible for accessing this tool and entering information: the national rapporteur. Countries may add or assign multiple rapporteurs if data are provided from several sources and reporting structures.

Country rapporteurs may access the reporting tool using the same credentials they used in the previous reporting round. New country rapporteurs are requested to create a user name and password. Based on official communication with the country, one data editor is initially assigned per country, but the country rapporteur can extend these rights to others if desired. Editors can add and change the information to be submitted. Similar to previous years, the country rapporteur can also enable other people to view the data, enabling broader country consultation. Viewers can see the information to be submitted but they cannot change it. The e-tutorials on how to use the reporting tool provide more details on this at the Global AIDS Monitoring website (http://www.unaids.org/en/dataanalysis/ knowyourresponse/globalaidsprogressreporting).

As mentioned above, if countries do not submit data on an indicator, they should indicate whether this is because appropriate data are lacking or because the indicator is not considered relevant to the epidemic. The comment boxes should be used for short explanatory notes stating how the numerator and denominator were calculated and assessing the representativeness and accuracy of the composite and disaggregated data. For country-level review, the data can also be printed out as one file if needed.

Progress in the reporting can be assessed in the main page, viewing the percentage or number of indicators being responded to. In addition to entering data for the current year, countries may request to modify their data for past years. To modify data for past years, send a message to AIDSreporting@unaids.org and the indicator in the online tool will be reopened for editing.

Clicking the submit button completes the data entry process. This closes the country's session in the online global reporting tool. The country can no longer edit or add to its submission using this tool, except in the case where the Spectrum-imported data needs to be updated. UNAIDS will review the data and ask for clarification, if necessary. If UNAIDS has queries about the data, the site will be opened again for countries to edit their responses.

Data from Spectrum can be imported directly from the .CSV file provided by the national HIV estimates team. UNAIDS will compare the final data to ensure the same file was used in Global AIDS Monitoring and the final HIV estimates process.

Problems with the online global reporting tool can be reported to AIDSreporting@unaids.org.

## The national-level reporting process: action required

Complete reporting on the indicators is essential to inform national responses and contribute to the global response to the epidemic. Countries are strongly encouraged to establish timetables and milestones for completing the necessary tasks related to reporting. Listed below is the action suggested to facilitate completion of the report.

Under the direction of the national AIDS committee or its equivalent, countries need to:

- Identify the focal point for the reporting process and submit the person's name and contact details to UNAIDS through AIDSreporting@ unaids.org before 1 February 2019.
- 2. Identify the data needed in accordance with the national strategic plan and these Global AIDS Monitoring guidelines.
- 3. Identify focal points to coordinate the completion of Parts A (national authority) and B (civil society representative) of the NCPI.
- Develop and disseminate a plan for collecting data for Global AIDS Monitoring indicators and the NCPI, including timelines and the roles of the national AIDS committee or equivalent, other government agencies, civil society and other relevant partners.
- Identify relevant tools for data collection and sources for each report component, including by:
  - Meeting with the national HIV estimates team.
  - Aligning the data collection timeline with:
    - That of other data collection efforts, including those through funding agencies such as the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), the United States President's Emergency Plan for AIDS Relief (PEPFAR) and United Nations agencies.
    - The timeline for the aggregation of data to the national level for facility-based indicators.

- Collect and collate data in coordination with partner organizations from government, civil society and the international community, including:
  - Establishing protocols for data processing and management:
    - Basic data cleaning and validation.
    - One database for analysis and reporting purposes.
  - Data vetting.
  - Completing Parts A and B of the NCPI (see below for further guidance).
- 7. Ask the national estimates team to provide the final .CSV file with the estimates from Spectrum software.
- 8. Enter the indicator and NCPI data into the Global AIDS Monitoring online reporting tool (https://AIDSreportingtool.unaids.org).
- 9. Enable stakeholders, including government agencies and civil society, to comment on the draft data.
- 10. Conduct a validation workshop to analyse indicator data, including on AIDS expenditure and policy (NCPI), jointly with partner organizations from government, civil society and the international community, to identify progress, gaps, challenges and next steps towards achieving each of the 10 Fast-Track commitments and expanded targets to end AIDS by 2030, and reach consensus on the

national Global AIDS Monitoring submission. The results of this analysis should be summarized and entered by commitment in the narrative report section in the online reporting tool.

- 11. Send the data entered based on the conclusions of the consultation workshop.
- 12. Upload the final Spectrum file to the designated national estimates folder on or before **1 April 2019**.
- 13. Submit all indicator data, NCPI responses and narrative summaries by commitment on or before **1 April 2019**.
- 14. Respond in a timely manner to queries on the submission from UNAIDS, WHO or UNICEF posted in the online reporting tool or sent to the national Global AIDS Monitoring focal point from AIDSreporting@unaids.org.

The reported data should be validated and reconciled between all partners in the country. The online reporting tool supports this process through the ability to share viewer credentials with national stakeholders. Several countries have reported that this feature enabled civil society and other partners to view and provide input during the reporting process, enabling more rapid and wider stakeholder consultation and validation.

## Data validation process for 2019

After countries submit Global AIDS Monitoring reports through the online reporting tool, UNAIDS, with support from UNICEF and WHO, will review the data submitted to:

- Support countries in reviewing any errors in entering data.
- Verify that the data submitted respond to the indicator definitions as outlined in the Global AIDS Monitoring guidelines.

Data submitted through Global AIDS Monitoring will be published through AIDSInfo and used for global and regional analysis. For this purpose, data must be comparable across countries and respond to the globally agreed definitions of the indicators used for monitoring global political commitments.

If countries do not have data that correspond exactly to the indicator definition available, they are encouraged to consider during the reporting process other data that may be relevant to the commitment area to assess progress. However, for the reasons mentioned above, these data will not be published in AIDSInfo or included in global analysis.

Only new data reported by countries will be included in the final 2019 Global AIDS Monitoring datasets. Data already reported by a country in a previous round of Global AIDS Monitoring will not be included. If data previously reported have been revised, the indicator dataset for that year can be updated to reflect the corrected value.

During the review, UNAIDS liaises with national Global AIDS Monitoring focal points to request clarification or revise the data submitted in the tool.

Data validation is conducted in several steps.

- UNICEF and UNAIDS align the databases of survey data.
- The indicator focal points for UNAIDS, WHO and UNICEF headquarters conduct an initial review and note preliminary queries.
- UNAIDS regional support teams review the submissions and revise the preliminary queries.
- The UNAIDS Secretariat enters queries in the online reporting tool.
- The UNAIDS Secretariat and regional support teams follow up queries with countries.

The validation process considers the following points across indicators.

For indicators sourced from surveys:

- Verify the consistency of reported numbers, including whether the disaggregated data add up to the total.
- Verify for substantial variation from previously reported data.
- Verify that the data were not previously reported through Global AIDS Monitoring. If the data were previously reported, ask the country to remove the data and indicate that no new data are available for the indicator.
- Compare with the survey data available: numerators, denominators and disaggregated data.
- Check the survey years and data collection dates entered in the online reporting tool.
- Check the survey methods and sample sizes for representativeness.

- Review the reports.
- If data apply to a composite indicator, verify that the same source was used for all questions and that the composite values correspond to the sum of individual questions.

For indicators with estimate-based denominators:

- Verify that the estimates match the final Spectrum file submitted to UNAIDS.
- Verify the consistency of reported numbers, including whether the disaggregated data add up to the total.
- Verify the numerators against comparable data.

The comments from countries are reviewed for all indicators.

## Additional validation notes by indicator

Population size estimates:

- Check for large year-on-year changes.
- Review any reports.

Number of people living with HIV receiving antiretroviral therapy:

- Check whether national procurement and pharmacy data are consistent with the number of people on treatment reported using programme registers or routine health information systems.
- Review results from any recent data quality assessments and adjust numbers as needed to exclude people who have died, people who have emigrated or people who have otherwise disengaged from treatment and are not receiving treatment elsewhere in the country.

# Summary of the changes to the indicator set for 2019 reporting

The 2019 reporting requires submitting data on indicators and the NCPI. The narrative report is optional.

Some indicators have been modified based on the recommendations from the review of Global AIDS Monitoring by the Global Monitoring Technical Advisory Group through virtual consultation in October 2018. One indicator has been added.

The changes for the 2019 reporting round are summarized below.

- An indicator has been introduced to report on trends in the number of HIV tests conducted and the effectiveness of HIV testing services in reaching people who are HIV positive:
  - 1.8 HIV testing volume and positivity.
- Further guidance on constructing Indicators 10.1–10.3 has been added as an annex.
- Eight indicators have been modified for this year's reporting:
  - 1.1 People living with HIV who know their HIV status.
    - Starting in 2019, countries with populations >250 000 will report on this indicator according to broad age and sex disaggregations within Spectrum. Results in the Global AIDS Monitoring online reporting tool will be updated once the national estimates file has been finalized.

- o Questions describing how data are collected and validated for this indicator have been moved into the NCPI.
- Countries with national population surveys are encouraged to use a UNAIDSsupported model consistent with the Spectrum model to estimate the first 90 (Indicator 1.1). The app is accessible at: https://shiny.dide.imperial.ac.uk/shiny90/.
- 1.2 People living with HIV on antiretroviral therapy.
  - Starting in 2019, countries with populations >250 000 will report on this indicator according to broad age and sex disaggregations within Spectrum. Results in the Global AIDS Monitoring online reporting tool will be updated once the national estimates file has been finalized.
  - o Questions describing how data are collected and validated for this indicator have been moved into the NCPI.
- 1.4 People living with HIV who have suppressed viral loads.
  - Starting in 2019, countries with populations >250 000 will report on this indicator according to broad age and sex disaggregations within Spectrum. Results in the Global AIDS Monitoring online reporting tool will be updated once the national estimates file has been finalized.

- o Questions describing how data are collected and validated for this indicator have been moved into the NCPI.
- 1.7 AIDS mortality.
  - A disaggregation of the number of people dying from AIDS-related causes by whether they were in an antiretroviral therapy programme or not has been added.
- 2.3 Preventing the mother-to-child transmission of HIV.
  - o Categories by which the numerator should be disaggregated have been simplified.
  - o Common examples of antiretroviral medicine regimens for Options B and B+ were updated.
- 3.10 Coverage of opioid substitution therapy.
  - An option to provide data disaggregated by service provider (government, community) has been added.
- 3.15 People who received pre-exposure prophylaxis (PrEP).
  - o Prisoners have been added as a key population for disaggregation.
- 8.1 Total HIV expenditure.
  - o As in previous reporting rounds, the HIV expenditures disaggregated by programme category and financing

sources are reported in the National Funding Matrix template. The Matrix remains mostly the same, since the classification of HIV programme categories continue to be aligned with the commitments of the 2016 Political Declaration on Ending AIDS, with the addition of categories to report expenditures not classified elsewhere. The definition of the core subindicators and associated metadata are provided in the guide; Annex 2 provides a full range of HIV programme categories.

 A matrix has been included since 2018 to capture the volumes and unit prices of antiretroviral commodities (Annex 3). An option to include regimen combinations not currently captured by the form has been added.

UNAIDS is working with key organizations in the framework of the Monitoring Technical Advisory Group to harmonize these new indicators with international standards. These global reporting indicators are intended to provide standardized data for comparison across countries and to enable aggregation at the global level.

## Submission of data on priority cities

Cities have a critical role to play in the HIV response because of their large number of people living with HIV and the increased vulnerability to HIV transmission associated with city dynamics, such as population density, migration, inequalities and high concentrations of key affected populations. Cities have a critical opportunity to provide leadership in the HIV response as drivers of economic and educational opportunity, innovation, accessible service delivery and inclusive, participatory approaches to governance.

By the end of 2018, more than 250 cities had signed the Paris Declaration on Fast-Track Cities: Ending the AIDS Epidemic, committing to address the significant disparities in access to basic services, social justice and economic opportunities, and to achieve the Fast-Track Targets towards ending AIDS by 2030.

Assessing progress in the HIV response and in reaching the Fast-Track Targets in cities requires city-level data on key HIV-related indicators. The Global AIDS Monitoring tool has been adapted to allow the user to collect relevant information on priority cities.

- Selection of cities: countries are requested to submit data for a select number of indicators (shown below) for the capital city and one or two other key cities of high epidemiological relevance, such as those that have the highest HIV burden or have committed to ending AIDS by 2030.
- Indicators: the indicators for which city-level data are requested include 1.1–1.4, 2.3, 2.6, 3.1–3.5, 3.6A–D, 3.8–3.10, 3.15–3.17, 4.2 and 10.1–10.3.
- It is highly recommended that relevant city counterparts be consulted when city-level data are gathered for submission.

## Submission of data by detailed age groups

Our understanding of the HIV epidemic can be improved by reporting data disaggregated by detailed age groups. For example, disaggregated detailed age group data allow countries to assess the extent to which programme coverage, including the percentage of people living with HIV on treatment, differs between adolescents aged 10–19 years and young people 15–24 years.

Indicators: the indicators for which detailed age-disaggregated data are requested include 1.1, 1.2, and 1.4.

## **Prisoners**

In these guidelines, the term *prisoner* is used rather than the terms *inmate* or *detainee* as in previous years. Rationale for terms: the term *prisoner* implies that a person has been sentenced by a court, whereas the term *inmate* does not necessarily mean that the person has been sentenced by a court. He or she also may be held for other legal reasons, like on remand until bail is posted or for a parole violation. Other populations, such as locked psychiatric ward residents, may be referred to as *inmates*.

The term *detainee* extends to people in administrative detention and can include those who are unwillingly, illegally or unethically detained in some sort of facility. Detainees can be displaced persons, migrants, refugees, mentally ill or otherwise incapacitated people.

The term prisoners was selected because programmes are more often available in prisons and the opportunity to intervene with services including testing and treatment—is greater given the typically longer length of stay in a prison. Summary of the changes to the online reporting tool for 2019 reporting

For 2019 reporting, countries will have the opportunity to import Spectrum data into the online reporting tool. Furthermore, there will be an analytical output of reported gender-disaggregated data and an analytical output of reported data in general. A feature is included in the online tool that will facilitate writing the narrative report.

## Importing Spectrum data into Global AIDS Monitoring

Every year, countries produce national Spectrum estimates and respond to the Global AIDS Monitoring reporting system. Both efforts compile coverage of antiretroviral therapy and prevention of mother-to-child transmission of HIV. The differences in the data submitted through the two systems are reconciled by UNAIDS and partners, and are shared on AIDSinfo.org. In addition, HIV incidence, AIDS-related mortality and the mother-to-child HIV transmission rates are pulled directly from Spectrum by UNAIDS and shared on AIDSinfo.org.

In 2018, a new process was introduced to the Global AIDS Monitoring online reporting tool that allowed the respective national estimates teams to export their Spectrum results into a .CSV file that the Global AIDS Monitoring focal point can import into the Global AIDS Monitoring online reporting tool. This step reduces both the data entry required and the chance for errors, and it improves the consistency of data between the two systems. In 2019, data for Indicators 1.1, 1.2 and 1.4 will be reported in Spectrum and then imported into the Global AIDS Monitoring online reporting tool for countries with populations ≥250 000.

A simple tool to export the Spectrum estimates required for Global AIDS Monitoring, which can then be imported into the Global AIDS Monitoring online reporting tool, has been developed. Importing the Spectrum estimates can be done at any point, and even multiple times during data entry into the Global AIDS Monitoring online tool. Once the final Spectrum file is agreed upon by the country, this final data should be imported into the online reporting tool. UNAIDS will verify that the final Spectrum file matches what was included in Global AIDS Monitoring, reverting to the country if there are any discrepancies.

Importing the estimates into the Global AIDS Monitoring tool requires communication between the national estimates teams and the Global AIDS Monitoring focal point (if they are separate individuals) to ensure the final file is used.

Overall notes on process:

- Before the import process, the Global AIDS Monitoring focal point should tick the box identifying which indicators should be imported (Use Spectrum estimates). Any data already entered for selected indicators will be overwritten with the Spectrum data.
- Not all detailed age disaggregation is required in Spectrum. The Global AIDS Monitoring focal point should review the data entry pages for Indicator 1.1 (People living with HIV who know their HIV status), 1.2 (People living with HIV on antiretroviral therapy) and 1.4 (People

Dates*	Activity	Responsible party
December-March	Develop Spectrum file and have it reviewed by UNAIDS	National estimates team
15–29 March	Send Spectrum estimates .CSV file to Global AIDS Monitoring focal point	National estimates team
15–29 March	Import Spectrum estimates into Global AIDS Monitoring for final review	Global AIDS Monitoring focal point
15–29 March	Hold stakeholders meeting to approve Global AIDS Monitoring submission	Global AIDS Monitoring focal point
1 April	Submit Global AIDS Monitoring data	Global AIDS Monitoring focal point
1 April	Send final Spectrum file to UNAIDS	National estimates team
1–30 April	Compare final Spectrum file with final Global AIDS Monitoring submission and revert to country if there are discrepancies	Global estimates team
20–30 April	Update Spectrum .CSV file import if needed	Global AIDS Monitoring focal point
1 May	Summary of estimates results sent to national AIDS coordinator for sign-off	Global estimates team
1–10 May	Review output from Spectrum and send clearance to UNAIDS	National estimates team

\* This timeline is slightly different for select countries that require early reporting for planning purposes

living with HIV who are virally suppressed) after the Spectrum import to enter additional age-disaggregated and subnational data, as available.

Steps for the national estimates team when exporting data from Spectrum:

- 1. Open the Spectrum software, but do not open your country file.
- 2. Select **Tools** from the tabs at the top of the page.
- 3. Select **More tools**, and under AIM tools, select **GAM**.
- 4. Spectrum will open a dialog box that allows you to select your national file (or subnational files, if available).
- 5. Select **Set GAM results file name** and give the file a clear name that reflects the Spectrum file name.
- 6. Be sure to remember where you are saving the .CSV file.
- Email the .CSV file to your Global AIDS Monitoring focal point or follow the next set of instructions if you are the Global AIDS Monitoring focal point.

Steps for the Global AIDS Monitoring focal point/ national rapporteur when importing the Spectrum extract into Global AIDS Monitoring:

- Log into the Global AIDS Monitoring online reporting tool (https:// aidsreportingtool. unaids.org).
- 2. Select **Spectrum import** from the top menu.
- 3. Select **Choose file** and choose the .CSV file to be exported from Spectrum.
- 4. Click Import.
- 5. The system will list all of the indicator data that have been updated by the import process. You may print the list by clicking **Print** at the bottom of the page.
- 6. Click **Close** to go back to the indicator data entry screens.

Indicators that can be imported from Spectrum include the following:

- 1.1 People living with HIV who know their HIV status (for 2011–2018).
- 1.2 People living with HIV on antiretroviral therapy (for 2011–2018).
- 1.4 People living with HIV who are virally suppressed (for 2011–2018).
  - By age and sex.
- 1.7 AIDS mortality per 100 000 (for 2011–2018).
  - All, <5, 5–14, 15+ by sex.
- 2.2 Mother-to-child transmission rate (for 2011– 2018).

- 2.3 Preventing mother-to-child transmission of HIV (for 2011–2018).
  - Regimens and coverage.
- 3.1 HIV incidence per 1000 uninfected population (for 2011–2018).
  - 0-99+, 15-49,15-24, 50+ by sex.
  - All ages, <15

Estimates of the size of key populations and HIV prevalence among key populations (Indicators 3.2 and 3.3, respectively) will only be imported for concentrated epidemic countries that have used the Estimates and Projection Package (EPP) to estimate incidence within Spectrum. These indicators will not overwrite what has been entered into Global AIDS Monitoring, but they will be shown as a comparison on the data entry page.

- 3.2 Key population size estimates (for countries using EPP concentrated epidemics and for comparison purposes only) (for 2011–2018).
  - For all key populations available.
- 3.3 Key populations HIV prevalence (for countries using EPP concentrated epidemics and for comparison purposes only) (for 2011–2018).
  - For all key populations available.

# Global AIDS Monitoring analytical output: measure of reporting of genderdisaggregated data

There will be an output in the online reporting tool of the proportion of indicators for which genderdisaggregated data were reported of all indicators for which countries reported data and genderdisaggregation are recommended.\*

**Numerator:** Number of indicators for which the country reported gender-disaggregated data.\*

**Denominator:** Number of indicators for which the country reported data and for which genderdisaggregation is recommended.\*

Calculation: Numerator/denominator.

**Source:** Analytical output in Global AIDS Monitoring online reporting tool.

Explanation of numerator and denominator:

Numerator: Countries will be considered to have reported gender-disaggregated data for an indicator if they have provided values for male and female disaggregations for the total indicator value.

Denominator: The number of indicators for which gender disaggregation is recommended in the Global AIDS Monitoring guidelines for the reporting year and that the country indicated were relevant and for which new data were available.\*

\*Excluding key populations indicators

# Producing the narrative report in the Global AIDS Monitoring reporting tool

Since 2018, a new feature in the online reporting tool facilitates data quality checks and production of the narrative report. For every indicator, a figure displays the data entered for this year's reporting and, in some cases, also for previous reporting rounds, in order to show trends over time. Countries will have the opportunity to select these figures in the online tool, comment on them and save them directly to the narrative report with their comments.

The narrative report can serve as a country report for national consultations, and UNAIDS will publish the narrative report with the approval of the country.

# Indicators for GAM

# 1.1 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

#### 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

#### 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 one of the 10 global indicators in the 2015 WHO *Consolidated strategic information guidelines for HIV in the health sector* and helps to monitor the first 90 of the UNAIDS 90–90–90 target: that 90% of the people living with HIV know their HIV status by 2020.

#### Numerator

Number of people living with HIV who know their HIV status

#### Denominator

Number of people living with HIV

#### Calculation

#### Numerator/denominator

**Note:** Starting in 2018, countries with a population of more than 250 000 will report on this indicator by broad age and sex groups within Spectrum. Results will be imported into the GAM reporting tool once the national file is finalized. Reporting on detailed age and sex groups will still be done using the GAM 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 well-functioning if reporting from all facilities providing confirmatory HIV testing, care and treatment services has been in place since at least 2013 and people who have died, been lost to follow-up or emigrated are removed. Countries should ensure that reporting delays are adjusted for by including an estimated number of people diagnosed but not yet reported during the calendar year.

#### 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 new HIV diagnosis data and CD4 count or AIDS-related deaths from vital registration data, the number of people who know their HIV status can be derived using the Case Surveillance and Vital Registration (CSAVR) fitting 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 survey data that either directly capture the number of HIV-positiverespondents 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 the first 90 be modelled using Shiny First 90 (https://shiny.dide.imperial.ac.uk/shiny90/). At this site, Shiny First 90 users can find more detailed recommendations and specifications, including the required inputs.

Estimates of the first 90 based only on self-reported knowledge of status or on historical survey data that have not been adjusted for changes over time since the survey was conducted 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 other estimates other than those produced through Spectrum are used.

On estimating knowledge of status among children for modelled estimates. Since household surveys are often restricted to respondents of reproductive age (15–49 years old), a separate estimate of knowledge of HIV status among children (0–14 years old) may have to be constructed using programme data (e.g., the number of children on treatment, as reported in Indicator 1.2, among the estimated total number of children). When antiretroviral therapy coverage among children is used, this represents the most conservative measure of knowledge of status in this population. To derive the overall estimate of the percentage living with HIV who know their HIV status, the age-specific estimates should be averaged, weighted by the numbers of children and adults (separately) living with HIV. UNAIDS will assist countries with these calculations, where needed.

#### **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.</li>
- · 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 GAM 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 individuals reported multiple times or from multiple facilities.
- There is sufficient 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 (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 the first 90 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 strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/bitstream/10665/164716/1/9789241508759\_eng.pdf?ua=1).

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

Demographic and Health Surveys (http://dhsprogram.com).

# 1.2 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. WHO currently recommends treatment for all.

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. It is one of the 10 global indicators in the 2015 WHO *Consolidated strategic information guidelines for HIV in the health sector.* 

This indicator also monitors progress toward the second 90 of the UNAIDS 90–90–90 target: that 90% of the people who know their HIV-positive status are accessing antiretroviral therapy by 2020.

#### 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)

Number of people among all people living with HIV who know their HIV status (to determine the second 90)

#### Calculation

#### Numerator/denominator

Note: Starting in 2018, countries with a population of more than 250, 000 will report on this indicator within Spectrum. Results will be imported into the GAM reporting tool once the national file is finalized. Reporting on detailed age and sex groups will still be done using the GAM 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.

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).

The count should include pregnant women living with HIV who are receiving lifelong antiretroviral therapy. Women taking antiretroviral medicines for preventing mother-to-child transmission and post-exposure prophylaxis (e.g., Option B) should not be counted.

The count should not include people who have stopped treatment, died or emigrated to another country, or those who were otherwise lost to followup at the facility during this period. 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.

**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 1.1 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.
- 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.</li>
- Cities and other administrative areas of importance.
- Numbers of people newly initiating antiretroviral therapy during the current reporting year (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 reporting through GAM, 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 DHIS, national reports, 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 children and separately by sex for adults. The subset of people newly initiating antiretroviral therapy during the last reporting year is requested.

For all countries, where available, 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 people from registries who stopped treatment, died or transferred facilities. Other errors, such as incorrectly abstracting data from facility-based registries or completing reporting forms, can lead to over and underreporting to varying degrees of magnitude.

## **Further information**

WHO guidance on treatment and care (http://www.who.int/hiv/topics/treatment/en/index.html).

# 1.3 Retention on antiretroviral therapy at 12 months

Percentage of adults and children living with HIV known to be on antiretroviral therapy 12 months after starting

#### What it measures

Progress in increasing survival among adults and children living with HIV by maintaining them on antiretroviral therapy.

#### Rationale

One goal of any antiretroviral therapy programme is to increase survival among people living with HIV. As antiretroviral therapy is scaled up around the world, understanding why people drop out of treatment programmes and how many do this is important. The data can be used to demonstrate the effectiveness of programmes and highlight obstacles to expanding and improving them.

#### Numerator

Number of adults and children who are still alive and receiving antiretroviral therapy 12 months after initiating treatment in 2017

#### Denominator

Total number of adults and children initiating antiretroviral therapy in 2017, within the reporting period, including those who have died since starting antiretroviral therapy, those who have stopped treatment and those recorded as lost to follow-up at month 12

#### Calculation

Numerator/denominator

#### **Method of measurement**

Programme monitoring tools; cohort and group analysis forms

Antiretroviral therapy registries and antiretroviral therapy cohort analysis report form.

The reporting period is defined as any continuous 12-month period that has ended within a predefined number of months from the submission of the report. National reporting requirements can determine the predefined number of months. If the reporting period is 1 January to 31 December 2018, countries will calculate this indicator by using everyone who started antiretroviral therapy any time between 1 January and 31 December 2017.

#### **Measurement frequency**

As people start antiretroviral therapy, monthly cohort data should be collected continuously. Data for monthly cohorts completing at least 12 months of treatment should then be aggregated.

#### Disaggregation

• 0-14 years for children and 15 years and older by sex (men and women) for adults.

Breastfeeding status when starting therapy.

#### Additional information requested

Where available, please provide city-specific data for this indicator. Space has been created in the data entry sheet 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.

#### **Explanation of the numerator**

The numerator is defined as the number of adults and children alive and receiving antiretroviral therapy 12 months after starting treatment. For a comprehensive understanding of survival, the following data must be collected:

- The number of adults and children in the antiretroviral therapy start-up groups starting antiretroviral therapy at least 12 months before the end of the reporting period.
- The number of adults and children still alive and on antiretroviral therapy at 12 months after initiating treatment.

The numerator does not require people to have been receiving antiretroviral therapy continuously for the 12-month period. People who missed one or two appointments or drug pick-ups and temporarily stopped treatment during the 12 months but are recorded as still receiving treatment at month 12 are included in the numerator. In contrast, people who have died, stopped treatment or been lost to follow-up at 12 months since starting treatment are not included.

For example, for people who started antiretroviral therapy in May 2017: if at any point between May 2017 and May 2018 they die, are lost to followup (and do not return) or stop treatment (and do not restart), then at month 12 (May 2018), they are not on antiretroviral therapy and are not included. However, a person who started antiretroviral therapy in May 2017 and who missed an appointment in June 2017 but is recorded as on antiretroviral therapy in May 2018 (at month 12) should be included in the numerator. What is important is that the person who started antiretroviral therapy in May 2017 is recorded as being alive and receiving antiretroviral therapy after 12 months, regardless of what happens in the intervening months.

Antiretroviral therapy registries should include a number of variables describing people, such as their age when they start treatment. In addition, many registries will include information indicating whether the person was breastfeeding when starting treatment. Retention for these subsets should be reported as of the starting date.

#### **Explanation of the denominator**

The denominator is the total number of adults and children in the antiretroviral therapy start-up groups who initiated antiretroviral therapy at any point during the 12 months before the beginning of the reporting period, regardless of whether they are still alive or have been lost, stopped therapy or died.

For example, the reporting period (1 January to 31 December 2018) will include everyone who started antiretroviral therapy during the 12-month period from 1 January to 31 December 2017. This includes everyone receiving antiretroviral therapy as well as those who died, stopped treatment or are lost to follow-up at month 12.

At the facility level, the number of adults and children receiving antiretroviral therapy at 12 months includes people transferring in at any point from the start of treatment to the end of the 12-month period and excludes people who have transferred out during this same period to reflect the net current cohort at each facility. In other words, at the facility level, people who have transferred out will not be counted in either the numerator or the denominator. Similarly, people who have transferred-out people. The numerator and denominator. At the national level, the number of transferred-in people should match the number of transferred-out people. The net current cohort (people whose outcomes the facility is currently responsible for recording; that is, the number of people in the start-up group plus any transfers in and minus any transfers out) at 12 months should therefore equal the number in the start-up cohort group 12 months before.

#### Strengths and weaknesses

This indicator will underestimate true survival, since some of the people who stopped treatment or were reported as being lost to follow-up will still be alive. The number of people alive and on antiretroviral therapy (retention on antiretroviral therapy) in a treatment cohort is captured here.

Priority reporting is for aggregate survival reporting at 12 months. If comprehensive cohort patient registries are available, then countries are encouraged to track retention on treatment at 24, 36 and 48 months and yearly thereafter. This will enable the comparison over time of survival on antiretroviral therapy. As it stands, identifying whether survival at 12 months increases or decreases over time is possible. However, cause cannot be attributed to these changes. For example, if survival at 12 months increases over time, this may reflect an improvement in care and treatment practices or earlier initiation of antiretroviral therapy. Retention at 12 months needs to be interpreted in relation to the baseline characteristics of the cohort when antiretroviral therapy started; mortality will be higher at sites at which people accessed antiretroviral therapy at a later stage of infection. Collecting and reporting data on survival over longer durations of treatment outcomes may therefore provide a better picture of the long-term effectiveness of antiretroviral therapy.

#### **Further information**

WHO guidance on treatment and care (http://www.who.int/hiv/topics/treatment/en/index.html).

# 1.4 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 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 is one of the 10 global indicators in the 2015 WHO consolidated strategic information guidelines for HIV in the health sector. This indicator also helps monitor the third 90 of the UNAIDS 90–90–90 target: that 90% of the people receiving antiretroviral therapy will have suppressed viral loads by 2020.

#### 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 90).

#### Calculation

### Numerator/denominator

Note: Starting in 2018, countries with a population of more than 250 000 will report on this indicator within Spectrum. Results will be imported into the GAM reporting tool once the national file is finalized. Reporting on detailed age and sex groups will still be done using the GAM reporting tool.

#### Method of measurement

Viral suppression is defined as <1000 copies/mL. For countries with other thresholds (such as undetectable, <50 copies/mL or <400 copies/mL), preliminary evidence from several studies suggests that the proportion of those with 50 copies/ml or above and less than 1000 copies/ml is small, so no further adjustment is required.

Viral load suppression may be measured using three different data sources: (1) clinical and programme data; (2) nationally representative surveys (such as the PHIAs); 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 actual or estimated number of people nationally who have suppressed viral loads during the reporting period (see the section below titled "Reporting the actual or estimated number of people nationally who have a suppressed viral load" for more information).

Viral load testing data should be routine rather than episodic. For example, a person's results should not be included if testing was done prior to treatment initiation or when treatment failure was suspected.

If viral load is tested repeatedly for a person during the year, only the last routine test result should be used.

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 90, please see Indicator 1.2.

Reporting the actual or estimated number of people nationally who have a suppressed viral load from clinical and programme data. Whether countries use actual or estimated numbers of people with suppressed viral load depends on coverage levels of viral load testing. As a result, the count of people with an annual, routine viral load test among those on treatment should be entered by all countries.

For countries where viral load testing coverage is 90% or greater, the actual number of people with suppressed viral loads among those on treatment and living with HIV should be reported. This assumes that people on treatment without a viral load test result are not yet suppressed.

For countries where viral load testing coverage is between 50% and 90%, the estimated number of people with suppressed viral loads may be reported. To derive this estimate, UNAIDS recommends that the proportion of people suppressed among those tested is multiplied by the number of people receiving antiretroviral therapy, where viral load suppression in the untested population is assumed to be the same as that in the tested population.

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 is not like that in the tested population, please contact UNAIDS for further discussion about approaches for estimating this count.

For countries that report that viral load suppression testing of less than 50%, only the number of routine viral load tests should be reported. It is not usually possible to estimate the percentage of people living with HIV or those on treatment who are virally suppressed when viral load testing is not routinely accessible. Countries wishing to use data where with viral load testing coverage is less than 50% should discuss this with UNAIDS to determine whether the percentage of people suppressed in the tested population is of a similar level to those in the population with no access to testing.

**Important:** Countries that have undertaken data quality assessments or reviews that monitor the extent to which facilities are able to accurately report the number of people who have suppressed viral load during reporting periods should adjust programme numerator data to account for these inconsistencies. UNAIDS will work with countries to agree on a set of best practices specific to the country for adjusting reported programme data.

#### 2. Recent nationally-representative population surveys

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 some people who naturally suppress the virus and are not on treatment will be included.

Note: Countries using survey data should still report on the number of people on treatment with routine viral load tests during the reporting period.

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 90, please see Indicator 1.2.

# 3. Early warning indicators of HIV drug resistance surveys

For the numerator. The proportion of those reported to have suppressed viral loads among people in the survey should be multiplied by the total number of people on antiretroviral treatment nationally; this will provide the total number of people who have a suppressed viral load. Either the 12- or 48-month cohort data may be used.

Note: Countries using survey data should still report on the number of people on treatment with routine viral load tests during the reporting period.

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 90, please see Indicator 1.2.

#### **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.</li>
- Cities and other administrative area of importance.

## Additional information requested

Provide city-specific data for this indicator. Space has been created in the GAM 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. In addition to this indicator, countries collecting data on retention and viral suppression at 12 months among cohorts may find it useful to triangulate these different measures to describe the impact of effective antiretroviral therapy.

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 the proportion of people newly initiating treatment is high or 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 90–90–90 targets may be overstated.

A second challenge arising from the currently available programme data is that viral load testing may be performed selectively to determine when to initiate treatment or to identify possible treatment failures. The data reported from the viral load testing of people suspected of treatment failure will underestimate viral load suppression levels. UNAIDS recommends that countries closely review reported data to exclude 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 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 final value when reporting on global and regional progress towards Indicator 1.4.

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 guidelines on the use of antiretroviral drugs for treating and preventing HIV infection. Recommendations for a public health approach—second edition. Geneva: World Health Organization; 2016 (http://www.who.int/hiv/pub/arv/arv-2016/en).

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://www.who.int/hiv/pub/ guidelines/ strategic-information-guidelines/en).

WHO guidance on treatment and care (http://www.who.int/hiv/topics/treatment/en/index.html).

# 1.5 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 who have not received a timely HIV diagnosis.

#### 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 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 people living with HIV with an initial CD4 cell count <200 cells/mm3 at the time of diagnosis

2. Numbers of people 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 with an initial CD4 cell count during the reporting period

#### 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 test was conducted within one month of the diagnosis date.

#### **Measurement frequency**

Annual

#### Disaggregation

0-14 years for children and 15 years and older by sex (men and women) for adults.

#### **Explanation of the numerator**

People living with HIV whose initial CD4 lymphocyte count was less than 200 cells/mm3 and people living with HIV whose initial CD4 lymphocyte count was less than 350 cells/mm3 in the reporting period. Reporting on the number of people with a CD4 lymphocyte count less than 350 cells/mm3 also should include those with a CD4 lymphocyte count less than 200 cells/mm3.

#### **Explanation of the denominator**

Number of people living with HIV who had an initial CD4 lymphocyte count at 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. Differentiating them 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.

# **1.6 Antiretroviral medicine stock-outs**

Percentage of treatment sites that had a stock-out of one or more required antiretroviral medicines during a defined period

#### What it measures

This indicator measures the effectiveness of the procurement and supply management system in making medicines available. The consequences of stockout—the scale of treatment interruption and risk for drug resistance—depend on the number of people whose treatment product stock-out will disrupt.

#### Rationale

As countries scale up antiretroviral therapy services, ensuring that antiretroviral medicines are there for the people who need them is important. Antiretroviral therapy is a long-term treatment strategy for people living with HIV, and interruptions may lead to treatment failure and HIV drug resistance. Efficient supply management is needed to ensure an uninterrupted supply of antiretroviral medicines.

#### Numerator

Number of health facilities dispensing antiretroviral medicines that experienced a stock-out of one or more required antiretroviral medicines during a defined period

#### Denominator

Total number of health facilities dispensing antiretroviral medicines during the same period

#### Calculation

Numerator/denominator

#### **Method of measurement**

This information is collected centrally at the level at which health facilities submit their inventory control reports or requisition forms for antiretroviral medicines.

This indicator requires:

- Stock inventory control reports from health facilities, also indicating the stock of each item.
- Requisition forms submitted by facilities during a defined period (such as previous order period, previous quarter and past year) for antiretroviral
  medicines.
- A list of the medicines that each facility is expected to dispense if these are not already included in the inventory control reports or requisition forms.

These work if the national logistics management information system is operational. If not, health facility surveys such as the service provision assessment or the service availability mapping may be used provided they include questions on antiretroviral medicine stock-outs.

If there is one logistics management information system with details on the availability of antiretroviral medicine at the health-facility level, information should be extracted to construct the indicator. Alternatively, the information may be collected through a survey or site visits.

If only a few health facilities dispense antiretroviral medicines, they should all be included in the survey or site visits. If a large number dispense antiretroviral medicines, selecting a representative sample may be necessary. The full list should be available at the national level.

In sampling, it is important to ensure that the sample includes facilities at different levels, such as central, district and peripheral. In countries dispensing antiretroviral medicines at pharmacies or other delivery points that are not health facilities, stock-outs should also be monitored at these venues; feasibility will depend on the coverage of the logistics management information system.

The HIV drug resistance early warning indicator on antiretroviral medicine stock-out monitors the percentage of months in the reporting year without stock-outs. This can be measured at the facility level and aggregated for the national estimate.

#### **Measurement frequency**

Annually

#### Disaggregation

Type of site: for example, general clinic, maternal and child site or TB site

#### Additional information requested

Comment on whether information is based on national data or survey data from a sample of facilities. Provide comments that would help interpret data: for example, if only public or private sector data are included and whether they may be an overestimate or underestimate.

#### Strengths and weaknesses

This indicator captures a crucial component of the antiretroviral therapy programme: whether there is an uninterrupted supply of antiretroviral medicines at the health-facility level.

It does not provide information on why stock-out problems occur, which antiretroviral medicines are or were out of stock, how long the stock-out lasted or the quality of antiretroviral medicine storage, delivery and distribution.

If stock-outs exist, assess whether the problem lies in the national distribution system or whether the problem is a financial flow or a global antiretroviral medicine shortage. Find out whether the cause is supply projections, the distribution system or another issue. Use this as an opportunity to see whether the logistics management information system is functioning.

In some situations, simply monitoring stock-outs could be misleading because a facility may keep reserve stock but maintain a policy of not issuing it. Such facilities would not be counted as having experienced a stock-out using this indicator definition, even though people would not receive a required medicine for treatment. In settings in which reserve stock is not issued, collecting information on a functional stock-out is preferable: that is, the inability to access or use a required antiretroviral medicine.

#### **Further information**

Harmonized monitoring and evaluation indicators for procurement and supply management systems. Early-warning indicators to prevent stock-outs and overstocking of antiretroviral, antituberculosis and antimalaria medicines. Geneva: World Health Organization; 2011 (http://www.who.int/hiv/pub/amds/monitoring\_evaluation/en).

# **1.7 AIDS mortality**

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

#### 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

#### 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).</li>

#### 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 strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/bitstream/10665/164716/1/9789241508759\_eng.pdf?ua=1).

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

# 1.8 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 number of HIV tests conducted and the effectiveness of HIV testing services (HTS) in reaching people who are HIV- positive.

#### 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 also 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 HTS 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 to monitor progress towards the first 90 (percentage of people living with HIV who know their HIV status). This model is used primarily in countries with weak case reporting systems that also have national population-based HIV surveys (see Indicator 1.1).

#### Numerator

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

#### Denominator

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

#### Calculation

Numerator/denominator

## Method of measurement

The numerator and denominator should be collected from HTS 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, she should be counted twice in the numerator and twice in the denominator. In an alternative scenario, if a person tests negative at a 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 people self-test kits that were distributed in a year; it is not the total number of people self-test est, nor is it the total number of people who received a self-test (as individuals may obtain more than one kit). No sex or age disaggregation or information on positivity are 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.
  - Community-level HTS reporting:
    - Mobile mobile testing (e.g., through vans or temporary testing facilities);
    - VCT centres (not within a health facility setting); and
    - Other other community-based testing.
  - Facility-level testing:
  - provider-initiated testing in clinics or emergency facilities;
  - ANC clinics (including labour and deliver);
  - VCT (within a health facility setting); and
  - Other 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 that might explain any changes to testing volumes when compared to previous years. If data on retesting rates among HIV -positive or HIV-negative individuals are available, please also provide this in the comments box.

#### Strengths and weaknesses

Not all countries have unique identifiers or underlying systems to deduplicate retesting among individuals. As a result, this indicator is not directly comparable to knowledge of status (as measured in Indicator 1.1). People who test positive may seek additional confirmatory testing and people who are HIV-negative may test repeatedly during the year.

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 or who were HIV- negative at their last test and people who already know their HIV-positive status to be positive and are seeking or otherwise requiring confirmatory testing). In future years, this indicator could be extended to request this information so as to better understand testing patterns and the efficiency of HTS.

#### **Further information**

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/ganization; 2015 (http://apps.who.int/iris/bitstream/10665/164716/1/9789241508759\_eng.pdf?ua=1).

# 2.1 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. 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 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: an estimation model, such as Spectrum software, using the output, the number of pregnant women needing services to prevent mother-to-child transmission as a proxy; or 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 and 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 cannot be used as a proxy for overall mother-to-child transmission rates. If either the overall national early infant diagnosis coverage or the 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 many other infants who are likely positive.

Although early virological testing is a critical intervention for identifying infants living with HIV, countries should also strengthen the quality of followup 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 2 months and 2 and 12 months. The GAM indicator described here includes only those diagnoses 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 PMTCT programme.

#### Further information

Progress reports on HIV (http://www.who.int/hiv/pub/progressreports/en).

Next generation indicators reference guide. Washington (DC): United States President's Emergency Plan for AIDS Relief; 2013 (http://www.pepfar. gov/documents/organization/206097.pdf).

Measuring the impact of national preventing the mother-to-child transmission of HIV 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).

# 2.2 Mother-to-child transmission of HIV

Estimated percentage of children newly infected with HIV from mother-to-child transmission among women living with HIV delivering in the past 12 months

#### What it measures

When compared with earlier values, this indicator shows the impact of providing women with antiretroviral medicines to reduce mother-to-child transmission of HIV

#### Rationale

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

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

#### Numerator

Estimated number of children newly infected with HIV from mother-to-child transmission among children born in the previous 12 months to women living with HIV

#### Denominator

Estimated number of births to women living with HIV who delivered 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 women who seroconvert while they are breastfeeding or those who were not identified as living with HIV during antenatal care. Modelled estimates are used for global reporting in settings where final outcomes at the population level are not available.

The probability of mother-to-child transmission differs with 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 receiving different antiretroviral regimens before and during delivery (peripartum) by the CD4 category of the mother.
- The distribution of women and children receiving antiretroviral medicines after delivery (postpartum) by the CD4 category of the mother.
- The percentage of infants who are not breastfeeding in programmes for preventing mother-to-child transmission by the age of the child.
- Probabilities of mother-to-child transmission of HIV based on various categories of antiretroviral medicine regimen and infant feeding practices.
- The estimated number of women living with HIV delivering.

The summary display for preventing mother-to-child 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 0–14 years old newly infected with HIV by the number of women who need services for preventing mother-to-child 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.

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) the PMTCT programme.

#### Strengths and weaknesses

Strengths. Over time, this indicator assesses the ability of programmes for preventing mother-to-child transmission by estimating the impact of increases in the provision of antiretroviral medicines and the use of more efficacious regimens and optimal infant feeding practices. This indicator allows countries to assess the impact of antiretroviral medicine programmes on the number of children acquiring HIV by estimating the HIV transmission rate from women living with HIV to their children. The modelled estimate enables this value to be estimated since capturing this indicator through direct measures is almost impossible. The modelled estimate overcomes multiple challenges:

- 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 mother-to-child 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 mother-to-child transmission. It also relies on programme data that often capture the antiretroviral medicine regimens provided rather than those consumed and could therefore underestimate mother-to-child transmission.

This indicator does not capture efforts to reduce the risk of mother-to-child 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**

WHO publications on HIV monitoring and evaluation (http://www.who.int/hiv/pub/me/en/index.html).

# 2.3 Preventing mother-to-child transmission of HIV

Percentage of pregnant women living with HIV who received antiretroviral medicine to reduce the risk of mother-to-child transmission of HIV

#### What it measures

Progress in preventing mother-to-child transmission of HIV during pregnancy and delivery by providing antiretroviral medicine.

This indicator allows countries to monitor the coverage of provision of antiretroviral medicines to pregnant women living with HIV to reduce the risk of transmitting HIV to infants during pregnancy and delivery. When disaggregated by regimen, it can show increased access to more effective antiretroviral regimens for pregnant women living with HIV. 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 (as lifelong therapy or as prophylaxis) for the mother during pregnancy and delivery can significantly reduce the risk of mother-to-child transmission. This entails antiretroviral medicine prophylaxis for the infant and antiretroviral medicines for the mother or child if breastfeeding and using safe delivery practices and safer infant feeding. The data will be used to track progress towards global and national goals of eliminating mother-to-child transmission; to inform policy and strategic planning; for advocacy; and for leveraging resources for accelerating scale-up. It will help measure the trends in the coverage of antiretroviral medicine prophylaxis and treatment and, when disaggregated by regimen type, it will also assess progress in implementing more effective antiretroviral therapy regimens.

#### Numerator

Number of pregnant women living with HIV who delivered during the past 12 months and received antiretroviral medicines to reduce the risk of mother-to-child transmission of HIV. Global reports summarizing the coverage of antiretroviral medicine for preventing mother-to-child 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 ARVs.

#### 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

- Cities and other administrative areas of importance.
- The numerator should be disaggregated across the regimens described below.

#### Additional information requested

Please provide city-specific data for this indicator. Space has been created in the data entry sheet 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.

#### **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).

#### **Disaggregation of regimen definitions**

#### Categories Further clarification Common examples The first two options include women A three-drug regimen intended to provide antiretroviral Standard national treatment regimen, for receiving lifelong antiretroviral therapy therapy for life: example: (including Option B+): TDF + 3TC + EFV. 1. Number of pregnant women living with HIV identified 1. Newly initiating treatment during the in the reporting period newly initiating lifelong antiretroviral therapy. current pregnancy. 2. Already receiving treatment before the 2. Number of pregnant women living with HIV identified pregnancy. in the reporting period 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

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.

therapy".

Maternal triple antiretroviral medicine prophylaxis (prophylaxis component of WHO Option B during pregnancy and delivery)	A three-drug regimen provided for prophylaxis of mother- to-child 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	<ul> <li>TDF + 3TC + EFV.</li> <li>AZT + 3TC + EFV.</li> <li>AZT + 3TC + LPV/r.</li> </ul>
Maternal AZT (prophylaxis component of WHO Option A during pregnancy and delivery)	Option B. 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.	<ul> <li>AZT at any point before labour + intrapartum NVP.</li> <li>AZT at any point before labour + intrapartum NVP + 7-day postpartum tail of AZT + 3TC.</li> </ul>
Single-dose nevirapine to the mother during pregnancy or delivery	<ul> <li>Count this if nevirapine is the only regimen provided to a pregnant woman living with HIV during pregnancy, labour or delivery.</li> <li>Do not count as single-dose nevirapine if:</li> <li>Nevirapine is provided as part of Option A during pregnancy.</li> <li>A pregnant woman living with HIV initiates Option A, B or B+ at labour and delivery.</li> </ul>	<ul> <li>Single-dose nevirapine for mother only at onset of labour.</li> <li>Single-dose nevirapine + 7-day AZT + 3TC tail only.</li> <li>Single-dose nevirapine for mother at onset of labour and single-dose nevirapine for baby only.</li> </ul>

The numerator must match the values included in Spectrum or an automated query will be sent requesting that the team make the values consistent.

Global AIDS Monitoring	Spectrum
1. Newly initiates treatment during the current pregnancy	Option B+: antiretroviral therapy started during current pregnancy (this is split among women who started antiretroviral therapy less than four weeks before delivery and women starting more than four weeks before delivery)
2. Already receiving treatment before the pregnancy	Option B+: antiretroviral therapy started before current pregnancy

Or, if you have chosen other regimens, they should be incorporated into Spectrum in the following categories:

<ol> <li>Maternal triple antiretroviral medicine prophylaxis (prophylaxis component of WHO Option B during pregnancy and delivery).</li> </ol>	Option B: triple prophylaxis from 14 weeks
<ol> <li>Maternal AZT (prophylaxis component of WHO Option A during pregnancy and delivery)</li> </ol>	Option A: maternal AZT
3. Single-dose nevirapine to the mother during pregnancy or delivery	Single-dose nevirapine
<ol> <li>Other (usually limited to countries still providing maternal AZT started late in the pregnancy)</li> </ol>	Maternal AZT according to the 2006 WHO guidelines. Spectrum requires data on historical regimens. This category is maintained to describe the regimens provided in previous years.

#### **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 mother-to-child transmission; 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 the various treatment regimens so that the impact of antiretroviral medicines on mother-to-child transmission of HIV can be modelled based on their efficacy. If countries do not have a system for collecting and reporting this data, they should establish one. Efforts should be made to remove women captured twice in the reporting systems. A critical determinant of the effectiveness of mother-to-child transmission regimens is whether women have suppressed viral loads when their children are conceived. It is therefore essential for PMTCT registers to disaggregate by whether a woman was already on antiretroviral therapy when she arrived for antenatal care.

#### **Further information**

The prevention of mother-to-child 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:

WHO publications on mother-to-child transmission of HIV (http://www.who.int/hiv/pub/mtct/en).

WHO publications on HIV monitoring and evaluation (http://www.who.int/hiv/pub/me/en/index.html).

# 2.4 Syphilis among pregnant women

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

#### What it measures

A. Coverage of syphilis testing in women attending antenatal care services

B. Percentage of pregnant women attending antenatal clinics with a positive (reactive) syphilis serology

C. Percentage of antenatal care attendees during a specified period with a positive syphilis serology who were treated adequately

#### Rationale

- A. Testing pregnant women for syphilis early in pregnancy is important for their health and that of the fetus. This contributes to monitoring the quality of antenatal care services and services to prevent HIV among pregnant women. It is also a process indicator for assessing the validation of eliminating the mother-to-child transmission of syphilis.
- B. Syphilis infection in antenatal care attendees can be used to guide programmes for preventing sexually transmitted infections and may provide early warning of potential changes in HIV transmission in the general population.
- C. Treating antenatal care attendees who test positive for syphilis directly measures the programme for eliminating the mother-to-child transmission of syphilis and efforts to strengthen primary HIV prevention. It is also a process indicator for validating the elimination of mother-to-child 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 antenatal care attendees with a positive syphilis test who received at least one dose of benzathine penicillin 2.4 mU intramuscularly

#### Denominator

- A. Number of women attending antenatal care services
- B. Number of antenatal care attendees who were tested for syphilis
- C. Number of antenatal care attendees who tested positive for syphilis

#### Calculation

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

#### Method of measurement

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

Screening may include either nontreponemal tests that measure reaginic antibody (such as Venereal Disease Research Laboratory (VDRL)) or rapid plasma reagin (RPR)) or treponemal tests that measure treponemal antibody (such as *Treponema pallidum* haemagglutination assay (TPHA), *Treponema pallidum* particle agglutination assay (TPPA), enzyme immunoassay or rapid treponemal tests). For this indicator, having either type of test is sufficient, although being tested with both is preferred. Indicate in the comments section what test type is generally used in your country. The type of test is factored into the analysis of the data.

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 if they are deemed representative of the national situation. Specify the source and coverage of your data (such as national programme data from all 12 provinces) in the comments section.

B. Syphilis positivity can be measured using either nontreponemal tests (for example, RPR or VDRL) or treponemal tests (TPHA, TPPA, enzyme immunoassay or a variety of available rapid tests) or, ideally, a combination of both. A reactive nontreponemal test, especially if the titre is high, suggests active infection, whereas positivity with a treponemal test indicates any previous infection even if treated successfully. For the purposes of 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 rapid treponemal test has enabled testing in settings without laboratory capacity, greatly increasing the number of women who can be tested and treated for syphilis in pregnancy. Data should be collected annually. It is important to report what test type is generally used in your country. The type of test is factored into data analysis. The following sources of data may be used: national programme records aggregated from health-facility data, sentinel surveillance or special surveys, using serological tests to detect reaginic and/or treponemal antibody. 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. Further, specify what test type is generally used in your country to define positivity in pregnant women: for example, nontreponemal (RPR or VDRL), treponemal (rapid tests or TPPA), people positive on both or unknown.

Countries are encouraged to use unique identifiers or registries that separate first and subsequent tests so that the data reflect the true prevalence or incidence of syphilis rather than test positivity.

Since most countries have data from a variety of test types, subanalysis (disaggregation) among women 15–24 years old may increase the likelihood that test positivity reflects recent infection.

C. Data should be collected annually. Seropositivity on either a treponemal or nontreponemal test is sufficient to be considered positive for syphilis for this indicator.

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

#### **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

A. Tested at any visit, tested at first visit

B. Age (15–24 and 25+ years)

C. None

#### **Additional information requested**

Comment on whether the data you are providing are routine programme data deemed to be representative of the entire country and what test type was used to define positivity among antenatal care attendees: for example, non-treponemal, treponemal, people positive on both or mixed or unknown.

#### Strengths and weaknesses

A. Countries may also monitor the week of pregnancy in which each woman is tested. 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 will indicate that women are not accessing antenatal care early or that testing is not occurring early in pregnancy.

Programmes that separately test pregnant women for syphilis and for HIV should work together to enhance the effectiveness of their work.

*Global.* Examine trends over time to assess progress towards target levels of testing coverage required for eliminating mother-to-child transmission of syphilis. Knowledge of testing policies and practices should be used to interpret trends in coverage. Data on testing pregnant women who attend antenatal care services can later be combined with data on antenatal care attendance to estimate the overall coverage of syphilis testing among pregnant women.

Local. Data can be used to identify clinics not fully implementing national policy.

B. Data on syphilis positivity among pregnant women are available in most countries through routine health-system reporting.

Differences in the test type used or changes in testing practices may affect data. Knowledge of testing practices within the country (such as the proportion of treponemal versus non-treponemal testing used) should be used to interpret disease trends.

Global and regional. Estimate the perinatal mortality and morbidity caused by syphilis that could be averted with effective programmes to eliminate the mother-to-child transmission of syphilis. Identify areas with the greatest need for comprehensive congenital syphilis prevention interventions. Data are used to estimate syphilis incidence and prevalence.

Local. Follow trends over time to assess changes in the burden of disease and the needs of programmes for preventing sexually transmitted infections. Data are used to estimate the incidence and prevalence of syphilis.

All levels. Compare data on trends in syphilis and HIV to look for early warning of increased risk of HIV transmission

C. Data on treating syphilis among antenatal care attendees are often routinely monitored in health facilities.

Collecting treatment data may require collaboration with maternal and child health programmes to ensure that such data are available at the national level.

For the purposes of this indicator, documentation of a single dose of penicillin is sufficient. Treating a pregnant woman positive for syphilis with a single injection of 2.4 mU of benzathine penicillin before 24 weeks of gestational age is sufficient to prevent syphilis from being transmitted mother to infant. However, three injections at weekly intervals are recommended to treat latent syphilis and prevent tertiary syphilis in the mother.

Global, regional and local. Estimate the effectiveness of the programme in reducing syphilis-associated perinatal morbidity and mortality.

Local. Identify areas that need assistance to implement programmes or additional resources.

All levels. Knowledge of treatment policies and practices should be used to interpret trends in treatment.

#### **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; 2014 (http://apps.who.int/iris/handle/10665/112858).

# 2.5 Congenital syphilis rate (live births and stillbirth)

Percentage of reported congenital syphilis cases (live births and stillbirths)

#### What it measures

Progress in eliminating the mother-to-child transmission of syphilis

#### Rationale

Untreated syphilis infection in pregnancy can not only increase the risk of the mother and the infant transmitting and acquiring HIV but also lead to stillbirth, neonatal death and congenital disease (collectively defined as congenital syphilis). Given the high efficacy, simplicity and low cost of syphilis testing and treatment, global and regional initiatives to eliminate the mother-to-child transmission of syphilis have been launched. The rate of congenital syphilis is a measure of the impact of programmatic interventions to eliminate the mother-to-child transmission of syphilis.

#### Numerator

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

#### Denominator

Number of live births

#### Calculation

Numerator/denominator

#### **Method of measurement**

Routine health information systems. It is important to indicate in the comment section the case definition of congenital syphilis used in your country.

#### **Measurement frequency**

The 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

#### Additional information requested

Countries should comment on any major differences between the national case definition and the global surveillance case definition, available on page 15 of: Baseline report on global sexually transmitted infection surveillance 2012. Geneva: World Health Organization; 2013 (http://www.who.int/reproductivehealth/publications/rtis/9789241505895/en/index.html).

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

#### Strengths and weaknesses

Diagnosing congenital syphilis is most reliable when specific diagnostic tests are used that are seldom available even in high-income countries. In most countries, therefore, diagnosis relies on clinical history and examination, making surveillance challenging. Although WHO has a global case definition for surveillance purposes, the actual case definition may vary between and within countries and regions.

It is important that countries, when reporting on syphilis, communicate 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.

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. However, using a consistent case definition may make trends over time useful.

#### **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; 2014 (http://apps.who.int/iris/handle/10665/112858).

# 2.6 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 mother-to-child transmission (PMTCT) cascade. 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 PMTCT cascade.

#### Rationale

The risk of mother-to-child transmission (MTCT) can be significantly reduced by providing antiretroviral medicines— either as lifelong therapy or as prophylaxis—for the mother during pregnancy and delivery, with antiretroviral prophylaxis for the infant and antiretroviral medicines to the mother or child during breastfeeding if applicable, and by 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 to eliminate MTCT; (b) to inform policy and strategic planning; (c) for advocacy; 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 having a facility-based delivery who were tested for HIV during pregnancy, or already knew they were HIV- positive

#### Denominator

Population-based denominator: Number of pregnant women who delivered within the past 12 months.

Programme-based denominator: Number of pregnant women who attended an antenatal clinic or had a facility-based delivery 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 HIV infection at antenatal clinic entry.
- Tested HIV-positive at antenatal care during current pregnancy.
- Tested HIV- negative at antenatal care during current pregnancy. This should be based on the latest test result in the case of repeat testing.
- Cities (optional).
- Pregnant women who inject drugs.

#### **Additional information requested**

Look at trends over time: if disaggregated data is 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.

Provide city-specific data for this indicator. Space has been created in the data entry sheet 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 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.

Further information Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112858/1/9789241505888\_eng.pdf?ua=1).

# **3.1 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 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 explained incidence rates for any and age the provide more geographical areas. applying incidence rates from small studies to a population more generally.

Further information Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/ bitstream/10665/164716/1/9789241508759\_eng.pdf?ua=1).

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

# 3.2 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. 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

- By defined key population (sex workers, men who have sex with men, people who inject drugs, transgender people, prisoners).
- 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.

#### **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 (http://www.who.int/hiv/pub/surveillance/final\_estimating\_populations\_en.pdf).

# 3.3 HIV prevalence among key populations (A-E)

Percentage of specific key populations living with HIV

This indicator is divided into five subindicators:

- A. HIV prevalence among sex workers.
- B. HIV prevalence among 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. 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 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

#### Disaggregation

- A, C, D and E: Sex (female, male and transgender).
- A-E: Age (<25 and 25+ years).
- A---E: Cities and other administrative areas of importance.

#### Additional information requested

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.

In previous reporting rounds, several countries have reported the HIV prevalence among subpopulations of transgender women through the additional comments field in the Global AIDS Response Progress Reporting online reporting tool. This demonstrates that the data are feasible to obtain in different settings.

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 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; 2011 (http://www.cpc.unc.edu/measure/publications/ms-11-49a).

# 3.4 HIV testing among key populations (A–D)

Percentage of people of a key population who tested for HIV in the past 12 months, or who know their current HIV status

This indicator is divided into four subindicators:

A. HIV testing among sex workers.

B. HIV testing 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 reducing the chance of transmitting HIV require that they know their HIV status. In many countries, targeting testing and counselling at 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 targeting populations at higher risk of HIV infection.

#### Numerator

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

#### or

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	Indeterminate
When was your last HIV test?	<6 months			
	6–12 months			
	>12 months			

The number of respondents in the yellow boxes are 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 Question 1 (below).

#### Calculation

Numerator/denominator

#### Method of measurement

- 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. 6 months
  - b. 6–12 months
  - c. More than 12 months
- 3. Was the result of your last test:
  - a. Positive
  - b. Negative
  - c. Indeterminate

#### Measurement frequency Annual

### Disaggregation

A, C and D: Gender (female, male and transgender).

**A--D:** Age (<25 and 25+ years).

A-D: Cities and other administrative areas of 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 must be aware of their HIV status and take the subsequent steps towards prevention and treatment services to prevent transmission of the virus. National programmes aim to have 90% of people who are living with HIV know their HIV status. The revision of this indicator strengthens its meaning, providing a more valid measure of progress in assuring that people affected by the HIV epidemic are taking up testing. By using a 12-month reference period, the previous testing indicator failed to capture people known to be living with HIV for a long time. This new formulation corrects that.

The new formulation of this question may not be fully implemented in many surveys yet, leading to reduced reporting in the near term. Respondents may be unwilling to accurately answer questions about their HIV status, 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 (http://www.who.int/hiv/pub/guidelines/biobehavioral-hiv-survey/en/).

# 3.5 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 subindicators:

A. Antiretroviral therapy coverage among sex workers living with HIV

B. Antiretroviral therapy coverage among 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

#### Biobehavioural surveys

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

#### Measurement frequency

Annual

#### Disaggregation

A, C, D and E: Sex (female, male and transgender)

1-D: Age (<25 and 25+ years)

A-E: Cities and other administrative areas of 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 90 of the 90–90–90 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; http://www. who.int/hiv/pub/guidelines/biobehavioral-hiv-survey/en/

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 (http://www.who.int/hiv/ pub/toolkits/kpp-monitoring-tools/en).

### 3.6A 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)</li>
- Cities and other administrative areas of 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

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.

In previous reporting rounds, several countries have reported the condom use among subpopulations of transgender women through the additional comments field in the Global AIDS Response Progress Reporting online reporting tool. This demonstrates that the data are feasible to obtain in different settings.

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 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.

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; 2011 (http://www.cpc.unc.edu/measure/publications/ms-11-49a).

### 3.6B Condom use among 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 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 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 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 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)</li>
- Cities and other administrative areas of 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

For 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 the men who have sex with men 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. 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 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.

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; 2011 (http://www.cpc.unc.edu/measure/publications/ms-11-49a).

### 3.6C 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)</li>
- Cities and other administrative areas of 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

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 third 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 WHO, UNODC and UNAIDS. Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug WHO, UNODC and UNAIDS. Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users. Geneva: World Health Organization; 2012 (http://www.who.int/hiv/pub/idu/targets\_universal\_access/en/index.html).

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-peoplewho-inject-drugs

### 3.6D 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 in their last sexual intercourse or anal sex

#### Denominator

Number of transgender people surveyed

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 or transwoman)
- Age (<25 and 25+ years)</li>
- Cities

#### 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 partners of both sexes

(including transgender people), 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.

In previous reporting rounds, several countries have reported condom use among subpopulations of transgender women through the additional comments field in the Global AIDS Response Progress Reporting online reporting tool. This demonstrates that the data are feasible to obtain in different settings.

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**

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.

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; 2011 (http://www.cpc.unc.edu/measure/publications/ms-11-49a).

### 3.7 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 subindicators:

A. Coverage of HIV prevention programmes among sex workers

B. Coverage of HIV prevention programmes among 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

#### 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

#### Calculation

Numerator/denominator

#### **Method of measurement**

There are two ways to measure this indicator. We encourage reporting both programme and survey data.

#### Behavioural surveillance or other special surveys

Percentage of respondents who report receiving at least two of the following HIV prevention services from an NGO, 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 men who have sex with men)
- Have you received new, clean needles or syringes in the past three months? (people who inject drugs)

#### Programme data

Number of sex workers reached with individual and/or small group-level HIV prevention interventions designed for the target population **and** number of condoms distributed to sex workers

Number of men who have sex with men or transgender people reached with individual and/or small group-level HIV prevention interventions designed for the target population **and** number of condoms + lubricant distributed to men who have sex with men

Number of people who inject drugs reached with individual and/or small group-level HIV prevention interventions designed for the target population and number of needles or syringes distributed to people who inject drugs

Plus, [3.7.1] Number of service provision sites dedicated to key populations per administrative area

#### Measurement frequency Annual

#### Disaggregation

- For surveys: age (<25 and 25+ years) and gender (male, female and transgender)
- For programme data: none

#### 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.

Programme data provide a national picture to the extent that programmes offer services nationally. Programme data reflect a national commitment to deliver services to specified key population communities. Programme data do not reflect well the individuals served. Data cannot typically be de-duplicated. Further, 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, (e.g., state/province/oblast,) or second, (e.g., county/district,) level 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 5 provinces. There are 7 provinces in Country A. If known, please report if the site is operated by the national programme (government) or the community (civil society or NGO),

#### **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 (http://www.who.int/hiv/pub/toolkits/kpp-monitoring-tools/en).

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

### 3.8 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

inumerator/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)</li>
- Cities and other administrative areas of 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

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 WHO, UNODC and UNAIDS. Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users. Geneva: World Health Organization; 2012 (http://www.who.int/hiv/pub/idu/targets\_universal\_access/en/index.html).

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-peoplewho-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-guidelinesfor-monitoring-and-evaluation-of-hiv-programmes-for-sex-workers-men-who-have-sex-with-men-and-transgender-people/operational-guidelines-for-

### 3.9 Needles and syringes distributed per person who injects drugs

Number of needles and syringes distributed per person who injects drugs per year by needle and 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 10% of the people acquiring HIV globally and 30% of those outside sub-Saharan Africa. Preventing HIV transmission caused by injecting drug use is one of the key challenges in reducing the burden of HIV.

Needle and syringe programmes are one of nine interventions in the WHO, UNODC and UNAIDS comprehensive package for the prevention, treatment and care of HIV among people who inject drugs.

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

#### Numerator

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

#### Denominator

Number of people who inject drugs in the country

#### Calculation

Numerator/denominator

#### Method of measurement

Programme data used to count the number of needles and syringes distributed (numerator) Estimation of the number of people who inject drugs in the country (denominator)

### **Measurement frequency**

Every two years

#### Disaggregation

Cities and other administrative areas of 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

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 and 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.</li>
- 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**

The following fully describes this indicator: WHO, UNODC and UNAIDS. Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users. Geneva: World Health Organization; 2012 (http://www.who.int/hiv/pub/idu/targets\_universal\_ access/en/index.html).

Needle and syringe programmes [website]. Geneva: World Health Organization; 2016 (http://www.who.int/hiv/topics/idu/needles/en/index.html).

Effectiveness of sterile needle and syringe programming in reducing HIV/AIDS among injecting drug users. Geneva: World Health Organization; 2004 (http://www.who.int/hiv/pub/idu/e4a-needle/en/index.html).

UNODC Global Assessment Programme on Drug Abuse. Estimating prevalence: indirect methods for estimating the size of the drug problem. Vienna: UNODC; 2003 (https://www.unodc.org/documents/GAP/GAP%20Toolkit%20Module%202%20Final%20ENGLISH%2002-60052.pdf).

Hickman M, Taylor C, Chatterjee A, Degenhardt L, Frischer M, Hay G et al. Estimating the prevalence of problematic drug use: a review of methods and their application. Bull Narcotics. 2002;54:15–32.

Most-at-risk populations: sampling strategies and design tool [website]. Atlanta: United States Department of Health and Human Services, Centers for Disease Control and Prevention, GAP Surveillance Team; 2009 (http://globalhealthsciences.ucsf.edu/sites/default/files/content/pphg/surveillance/CDC-MARPs/index.htm).

For details on the Injecting Drug Users Reference Group and to access reported country-level and global-level estimates of injecting drug use and HIV among people who inject drugs, please visit: https://ndarc.med.unsw.edu.au/project/injecting-drug-users-reference-group-reference-group-un-hiv-and-injecting-drug-use.

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 (http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2011/2011\_ Estimating\_Populations\_en.pdf).

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/en/media/unaids/contentassets/documents/epidemiology/2011/20110518\_Surveillance\_ among\_most\_at\_risk.pdf).

## 3.10 Coverage of opioid substitution therapy

Percentage of people who inject drugs receiving opioid substitution therapy

#### What it measures

A programme's ability to deliver opioid substitution therapy among people who inject drugs as a method of directly reducing injecting frequency. The target coverage is 40%.

#### Rationale

Opioid substitution 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 substitution 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 substitution 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 substitution therapy registries.

For the denominator.: Size estimations of opioid users or injectors.

Biobehavioral surveys can collect this information but are often biased by an inclusion criterion of being a current injector, whereas people receiving opioid substitution therapy should not be injecting anymore.

#### **Measurement frequency**

Annual

#### Disaggregation

- Gender (male, female and transgender).
- Age (<25 and 25+ years).</li>
- Cities and other administrative areas of importance.

#### Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site, and the provider (government or community) 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

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

#### **Further information**

WHO, UNODC and UNAIDS. Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users. Geneva: World Health Organization; 2012 (http://www.who.int/hiv/pub/idu/targets\_universal\_access/en/index.html).

For a proposed complete set of globally agreed indicators for people who inject drugs, see: People who inject drugs [website]. Geneva: World Health Organization; 2016 (http://www.who.int/hiv/topics/idu/en/index.html).

## 3.11 Active syphilis among sex workers

Percentage of sex workers with active syphilis

#### What it measures

Progress in decreasing high-risk sexual behaviour and intervention efforts to control syphilis among sex workers

#### Rationale

Testing sex workers for syphilis is important for their health and for second-generation surveillance purposes.

#### Numerator

Number of sex workers who tested positive for active syphilis

#### Denominator

Number of sex workers who were tested for active syphilis

#### Calculation Numerator/denominator

Numerator/denominato

#### **Method of measurement**

Measurement tools. Data from routine health information systems, sentinel surveillance or special surveys may be used.

How to measure. The traditional approach to determining seroprevalence has been to screen with a non-treponemal test that measures reaginic antibody (such as VDRL or RPR) and confirm positive results with a treponemal test that measures treponemal antibody (such as TPHA, TPPA, enzyme immunoassay or rapid treponemal test). Newer, rapid treponemal tests are comparatively easy to use, which encourages the use of these tests for screening, ideally paired with a non-treponemal test that detects reaginic antibody. Whichever approach is used, the proposed indicator requires both a positive non-treponemal test and a positive treponemal test to give a proxy for active infection.

Just a non-treponemal test, or just a treponemal test, although useful in some situations for therapeutic purposes, is not sufficiently specific for surveillance of sex workers. The requirement for both a positive non-treponemal test and a positive treponemal test among sex workers differs from the indicator on syphilis testing in antenatal care attendees because sex workers are more likely to have a history of previous infection. A positive treponemal test measures lifetime exposure, whereas the non-treponemal test better indicates active infection.

#### Disaggregation

Gender (male, female and transgender)

#### Strengths and weaknesses

Strengths. Requiring testing using both non-treponemal and treponemal tests enhances the specificity of the reported numbers of positive tests. In addition, requiring testing using both tests increases the likelihood of identifying active disease.

Weaknesses. Requiring testing using both tests increases the difficulty of acquiring data for this indicator.

#### **Further information**

Quality assurance. Quality assurance and quality control should be an integral part of syphilis testing to ensure reliable results.

Use of the data. Look at trends in comparable groups over time. Compare with data on the trends in syphilis and HIV if these are available.

Quality control of data and notes for the reporting tool. Please describe what type of sex workers the data represent and the setting in which the data were collected in the comments field. Do not count multiple tests run on the same person: if a person has been tested more than once in the past 12 months, they should not be counted more than once.

### 3.12 Active syphilis among men who have sex with men

Percentage of men who have sex with men with active syphilis

#### What it measures

Progress in decreasing high-risk sexual behaviour and intervention efforts to control syphilis among men who have sex with men

#### Rationale

Testing of syphilis among men who have sex with men is important for their health and for second-generation surveillance purposes.

#### Numerator

Number of men who have sex with men testing positive for active syphilis

#### Denominator

Number of men who have sex with men tested for active syphilis

### Calculation

Numerator/denominator

#### **Method of measurement**

Measurement tools. Routine health information systems, sentinel surveillance or special surveys.

How to measure. The traditional approach to determining seroprevalence has been to screen with a non-treponemal test that measures reaginic antibody (such as VDRL or RPR) and confirm positive results with a treponemal test that measures treponemal antibody (such as TPHA, TPPA, enzyme immunoassay or rapid treponemal test). Newer, rapid treponemal tests are comparatively easy to use, which encourages the use of these tests for screening, ideally paired with a non-treponemal test that detects reaginic antibody. Whichever approach is used, the proposed indicator requires both a positive non-treponemal test and a positive treponemal test to give a proxy for active infection.

Just a non-treponemal test, or just a treponemal test, although useful in some situations for therapeutic purposes, is not sufficiently specific for surveillance of men who have sex with men. The requirement for both a positive non-treponemal test and a positive treponemal test among men who have sex with men differs from the indicator on syphilis testing among antenatal care attendees because men who have sex with men are more likely to have a history of previous infection. A positive treponemal test measures lifetime exposure, whereas the non-treponemal test better indicates active infection.

## Disaggregation

None

#### Strengths and weaknesses

Strengths. Requiring testing using both tests enhances the specificity of the reported numbers of positive tests. In addition, requiring testing using both tests increases the likelihood of identifying active disease.

Weaknesses. Requiring testing using both tests increases the difficulty of acquiring data for this indicator.

#### **Further information**

Quality assurance. Quality assurance and quality control should be an integral part of syphilis testing to ensure reliable results.

Use of the data. Look at trends in comparable groups over time. Compare with data on trends in syphilis and HIV if these are available.

Quality control of data and notes for the reporting tool. Do not count multiple tests run on the same person: if a person has been tested more than once in the past 12 months, they should not be counted more than once. Please describe the setting in which the data were collected in the comments field.

## 3.13 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 substitution 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 or 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.

# 3.14 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

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

Integrated Biological and Behavioural Surveillance Survey

#### **Measurement frequency** Every two years

#### Disaggregation

- Age (<25 and 25+ years).</li>
- 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 (http://www.who.int/hiv/pub/guidelines/biobehavioral-hiv-survey/en/).

### 3.15 People who received PrEP

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

#### What it measures

Progress towards scaling up PrEP and the expanded Fast-Track Target of reaching 3 million people with PrEP by 2020.

#### 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 (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. Clinical trials have shown that oral PrEP can reduce the number of people acquiring HIV among serodiscordant couples, heterosexual men, women, men who have sex with men, people who inject drugs and transgender women.

WHO recommends 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. WHO provisionally defines substantial risk of HIV infection as HIV incidence of about 3 per 100 person-years or higher in the absence of PrEP. Implementation should be informed by local information, including the epidemiological context or trends, feasibility and demand, as well as individual assessment and consideration of the local environment related to people living with HIV and key populations in order to protect their safety. The implementation criteria may vary by country.

#### Numerator

Number of people who received oral PrEP 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 oral PrEP at least once during the reporting period (the previous calendar year), in accordance with national guidelines or WHO/UNAIDS standards. The numerator should only count individuals once: the first time they received oral PrEP during the reporting period. People who received oral PrEP through national programmes, demonstration projects, research, or through private means— but are taking it according to WHO/UNAIDS standards—should be included.

Age is defined as the age at the time the person 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.

#### **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).
- Key population (men who have sex with men, sex workers, people who inject drugs, and transgender people and prisoners).
- Cities and other administrative areas of 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 and using unique identifiers will likely 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 those 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 the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach. Second edition. Geneva: World Health Organization; 2016 (http://apps.who.int/iris/bitstream/10665/208825/1/9789241549684\_eng.pdf?ua=1, accessed 15 November 2016).

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/).

### Male circumcision indicators

Indicators 3.16 and 3.17 are required only from 16 countries with high HIV prevalence, low levels of male circumcision and generalized heterosexual epidemics: Botswana, Ethiopia, Eswatini, Central

African Republic, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

### 3.16 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. WHO/UNAIDS recommendations emphasize that male circumcision should be considered an efficacious intervention for HIV prevention in countries and regions with heterosexual epidemics, high HIV prevalence and low male circumcision prevalence.

#### 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

#### **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 and 25–49 years)
- Source or practitioner of circumcision procedure: formal health-care system or traditional
- · Cities and other administrative areas of importance

#### Additional information requested

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

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**

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).

### 3.17 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 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. WHO/UNAIDS recommendations emphasize that male circumcision should be considered an efficacious intervention for HIV prevention in countries and regions with heterosexual epidemics, high HIV prevalence and low male circumcision prevalence.

#### Numerator

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

### Denominator

Not applicable

#### Calculation Not applicable

пот арріїсарі

#### **Method of measurement**

Health facility recording and reporting forms, programme data, health information system

#### Measurement frequency

Annual

#### Disaggregation

- Age (<1, 1–9, 10–14, 15–19, 20–24, 25–49 and 50+ years)</li>
- Cities and other administrative areas of importance

#### Additional information requested

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

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.

Further disaggregation is recommended at the country level:

- HIV positive by test(s) on site, HIV negative by test(s) on site, HIV indeterminate result by test(s) on site or unknown or refused HIV test;
- type and location of health facility; and
- cadre of the provider.

Disaggregating the number of male circumcisions by HIV status and age will enable the impact of male circumcision programmes on HIV incidence using models to be determined. 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 taskshifting efforts are succeeding and 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 chronically infections and with low CD4 counts).

#### **Further information**

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).

### 3.18 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, noncohabiting 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

Sex

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

### 4.1 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, fuelling 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)
- Sex
- 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**

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).

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) (http://www.jiasociety.org/index.php/jias/issue/view/1464).

Stigma Action Network (http://www.stigmaactionnetwork.org).

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.

# **4.2** 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 subindicators:

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

- B. Avoidance of health care by 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 fuelling 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, men who have sex with men and transgender people.

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 90–90–90 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

Number of respondents

#### Calculation

Numerator/denominator

#### Method of measurement

Behavioural surveillance or other special surveys

#### **Measurement frequency** Every 2-3 years

#### Disaggregation

- A–D: age Age (<25 and 25+ years).</li>
- A and C: gender Gender (female, male and transgender).
- A-D: Cities.

#### Additional information requested

Please provide the questions included in the survey instruments.

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

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).

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 (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).www.jiasociety.org/index.php/jias/issue/view/1464

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).

### 4.3 Prevalence of recent intimate partner violence

Proportion of ever-married or partnered women 15–49 years old who experienced physical or sexual violence from a male intimate partner in the past 12 months

#### What it measures

Progress in reducing the prevalence of intimate partner violence against women, as an outcome itself and as a proxy for gender inequality

An intimate partner is defined as a cohabiting partner, whether or not they were married at the time. The violence could have occurred after they separated.

#### Rationale

Globally, high rates of HIV infection among women have brought into sharp focus the problem of violence against women. There is growing recognition that deep-rooted, pervasive gender inequalities, especially violence against women and girls, shape their risk of and vulnerability to HIV infection. Violence and HIV have been linked through direct and indirect pathways. Studies in many countries indicate that many women have experienced violence in some form or another at some point in their life. WHO estimates that one in three women globally has experienced intimate partner violence and/or non-partner sexual violence.

#### Numerator

Women 15–49 years old who have or have ever had an intimate partner and report experiencing physical or sexual violence from at least one of these partners in the past 12 months. See the numerator explanation below for the specific acts of physical or sexual violence to include.

#### Denominator

Total number of women 15-49 years old surveyed who currently have or have had an intimate partner

#### Calculation

Numerator/denominator

#### **Method of measurement**

Population-based surveys already being used within countries, such as WHO multicountry surveys, Demographic and Health Surveys or AIDS Indicator Surveys (domestic violence module) and the International Violence against Women Surveys.

Collecting data on violence against women requires special methods ensuring that information is gathered in a manner adhering to ethical and safety standards, that does not pose a risk to study participants and maximizes data validity and reliability.

#### **Measurement frequency**

3–5 years

#### Disaggregation

Age (15–19, 20–24 and 25–49 years)

HIV status (if available)

#### **Explanation of the numerator**

Ever-married or -partnered women 15–49 years old include those who have ever been married or have had an intimate partner. They are asked whether they have experienced physical or sexual violence from a male intimate partner in the past 12 months. Physical or sexual violence is determined by asking whether their partner did any of the following:

- Slapped her or threw something that could hurt her.
- Pushed or shoved her.
- Hit her with a fist or something else that could hurt her.
- Kicked, dragged or beat her up.
- Choked or burned her.
- Threatened or used a gun, knife or other weapon against her.
- Physically forced her to have sexual intercourse against her will.
- Forced her to do something sexual she found degrading or humiliating.
- Made her afraid of what would happen if she did not have sexual intercourse.

The numerator includes those reporting at least one incident corresponding to any item in the past 12 months.

#### **Explanation of the denominator**

Total number of women 15-49 years old surveyed who currently have or had an intimate partner.

#### Strengths and weaknesses

This indicator assesses progress in reducing the proportion of women experiencing recent intimate partner violence as an outcome in and of itself. It should also be interpreted as a proxy for gender equality. A change over time in the prevalence of recent violence will indicate a change in the level of gender equality, one of the structural factors driving the HIV epidemic.

The indicator focuses on recent intimate partner violence rather than any experience of it, to enable progress to be monitored. Any experience of intimate partner violence would show little change over time, no matter what the level of programming, since the numerator would include the same women as long as they fell into the target age group. Sustained reductions in intimate partner violence are not possible without fundamental changes in unequal gender norms, relations at the household and community levels, women's legal and customary rights, gender inequalities in access to health care, education and economic and social resources and male involvement in reproductive and children's health. Nor is this possible without promoting men's responsibility for HIV prevention. Changes in this intimate partner violence indicator will measure changes in the status and treatment of women in all societal domains, which directly and indirectly contribute to reduced risk of HIV transmission.

Even when WHO ethical and safety guidelines are adhered to and interviews are conducted in privacy, some women will not disclose information. This means that the estimates will probably be more conservative than the actual level of violence in the surveyed population.

The complex relationship between violence against women and HIV has been conceptually illustrated in a review of the state of evidence and practice in developing and implementing strategies addressing the intersection of violence and HIV. For more than a decade, research worldwide has documented the link between violence against women and HIV. Studies have demonstrated an association between violence against women and HIV as both a contributing factor for infection and a consequence of infection. This relationship operates through a variety of direct and indirect mechanisms.

- Fear of violence may keep women from insisting that a male partner whom they suspect is living with HIV use a condom.
- · Fear of intimate partner violence may keep women from disclosing their HIV status or seeking treatment.
- Forced vaginal penetration increases the likelihood of HIV transmission.
- Rape is one manifestation of gender inequality and can result in HIV infection, although it represents a minority of cases.
- Rape and other sexual and physical abuse can result in mental distress that is manifested in high-risk sexual behaviour, increasing the chances of HIV transmission.

#### **Further information**

Investing in gender equality: ending violence against women and girls. New York: UN Women; 2010 (http://www.unwomen.org/en/digital-library/ publications/2010/1/ending-violence-against-women-and-girls-unifem-strategy-and-information-kit).

WHO, UNAIDS. Addressing violence against women and HIV/AIDS: what works? Geneva: World Health Organization; 2010 (http://www.who.int/ reproductivehealth/publications/violence/9789241599863/en).

Programme on International Health and Human Rights, Harvard School of Public Health. Gender-based violence and HIV. Cambridge (MA): Harvard School of Public Health; 2009.

Maman S, Campbell J, Sweat MD, Gielen AC. The intersections of HIV and violence: directions for future research and interventions. Soc Sci Med. 2000;50:459–478.

WHO, Department of Reproductive Health and Research, London School of Hygiene and Tropical Medicine, South African Medical Research Council. Global and regional estimates of violence against women. Prevalence and health effects of intimate partner violence and non-partner sexual violence. Geneva: World Health Organization; 2013 (http://www.who.int/reproductivehealth/publications/violence/9789241564625/en).

WHO, UNAIDS. 16 ideas for addressing violence against women in the context of the HIV epidemic: a programming tool. Geneva: World Health Organization; 2013 (http://www.who.int/reproductivehealth/publications/violence/vaw\_hiv\_epidemic/en).

Unite with women—unite against violence and HIV. Geneva: UNAIDS; 2014 (http://www.unaids.org/en/resources/documents/2014/20140312\_JC2602\_UniteWithWomen).

World Health Organization and London School of Hygiene and Tropical Medicine. Preventing intimate partner and sexual violence against women: taking action and generating evidence. Geneva: World Health Organization; 2010 (http://www.who.int/reproductivehealth/publications/violence/9789241564007/en).

Dunkle KL, Decker MR. Gender-based violence and HIV: reviewing the evidence for links and causal pathways in the general population and high-risk groups. Am J Reprod Immunol. 2013;69(Suppl. 1):20–26.

Adolescents and young women. In: The gap report. Geneva: UNAIDS; 2014 :132–145 (http://www.unaids.org/en/media/unaids/contentassets/ documents/unaidspublication/2014/unaids\_gap\_report\_en.pdf).

## 4.4 Experience of HIV-related discrimination in health-care settings

Percentage of people living with HIV who report experiences of HIV-related discrimination in healthcare 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 fuelling 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.<sup>9</sup>

#### Denominator

Number of all respondents

### Calculation

Numerator/denominator

### Method of measurement

People Living with HIV Stigma Index<sup>10</sup>

Respondents of the survey 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 or transgender).
- Key population (identification with at least one of the key population groups).
- Age group (15–19 years, 20–24 years or 25–49 years).
- Length of time living with HIV (0-<1 years, 1-4 years, 5-9 years, 10-14 years, or 15+ years).</li>

<sup>9</sup> The minimum age range currently captured by most DHS surveys is 15–49 years old, but this range is not prescriptive.

<sup>10</sup> For further information on the People Living with HIV Stigma Index, please visit http://www.stigmaindex.org/.

#### **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 (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 4.1 (Discriminatory attitudes towards people living with HIV) and 4.2 (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, accessed 21 November 2017).

# 5.1 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)
- Sex (male and 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/What-We-Do/Survey-Types/AIS.cfm).

# 5.2 Demand for family planning satisfied by modern methods

Percentage of women of reproductive age (15–49 years old) who have their demand for family planning satisfied with modern methods

#### What it measures

Progress towards increasing the capacity of women and adolescent girls to access sexual and reproductive health services using the most effective methods

#### Rationale

This indicator assesses progress towards increasing the capacity of women and adolescent girls to access sexual and reproductive health services and being able to exercise their right to control and freely decide on matters related to their sexuality and sexual and reproductive health. It reflects the right of women and adolescent girls to decide whether and when to have children and having the methods to implement this decision.

This indicator is also used to measure progress towards Sustainable Development Goals target 3.7, which aims to ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and integrating reproductive health into national strategies and programmes by 2030.

Sexual and reproductive health services are also an entry point for HIV prevention, treatment, care and support services, and their integration will be key to ensuring the sustainability of HIV-related services.

#### Numerator

Number of women 15-49 years old who are using modern contraceptive methods

#### Denominator

Total number of women 15-49 years old with a demand for family planning

Calculation

Numerator/denominator

#### Method of measurement

Population-based surveys (Demographic and Health Survey or other representative survey)

#### Measurement frequency Every 3–5 years

Every 5-5 years

### Disaggregation

Age (15-19, 20-24, 25-49 and 15-49 years)

#### **Explanation of the numerator**

The numerator includes all women 15–49 years old who were using modern contraceptive methods at the time of the survey. The following are considered modern contraceptive methods:

- The pill (oral contraceptives)
- Intrauterine device (IUD)
- Injectables
- Female sterilization
- Male sterilization
- Female condoms
- Male condoms
- Implants
- Emergency contraception
- Standard days method
- Lactational amenorrhoea method (LAM)
- The diaphragm
- Foam or jelly.

#### **Explanation of the denominator**

The denominator includes all women of reproductive age (15–49 years old) who have a demand for family planning. Women are considered to have a demand for family planning if they want to delay, space or limit childbearing. A woman is considered to have a demand for family planning if:

- She or her partner is currently using a contraceptive method.; or,
- She has an unmet need for family planning:
- · Women who are currently pregnant or postpartum amenorrhoeic whose current pregnancy or last birth was unwanted or mistimed, or,
- Women who are currently married or sexually active and able to become pregnant who say that they want to delay pregnancy by two or more years or do not know when or whether they want any more children and who are not currently using any contraceptive method.

A detailed explanation of the calculation of unmet need can be found in the following document: Revising unmet need for family planning: DHS Analytical Studies 25 (https://dhsprogram.com/pubs/pdf/AS25/AS25%5B12June2012%5D.pdf).

The denominator includes women who are not using any contraceptive method as well as those who are using a modern or a traditional contraceptive method.

#### Strengths and weaknesses

By referring to modern methods, this indicator measures access to more effective methods of contraception, which will lead to fewer unwanted pregnancies and improved maternal and child health.

Construction of this indicator requires complex calculations. The consistent application of a standard definition can provide measures of demand for family planning satisfied by modern methods that are comparable over time and across countries.

#### **Further information**

Demand satisfied by modern methods indicator snapshot [video]. Rockville (MD): DHS Programme; 2016 (https://www.youtube.com/watch?v=RceOuLjJwKY&feature=youtu.be).

Bradley, Sarah E.K., Trevor N. Croft, Joy D. Fishel, and Charles F. Westoff. 2012. Revising Unmet Need for Family Planning. DHS Analytical Studies No.

25. Calverton, Maryland, USA: ICF International (https://dhsprogram.com/pubs/pdf/AS25/AS25/S5B12June2012%5D.pdf).

# 8.1 Total HIV expenditure

Domestic and international HIV expenditure by programme categories and financing sources

#### What it measures

Financing flows and expenditures of in-country HIV programmes/services by source in a standardized and comparable manner according to mutually exclusive categories. The HIV expenditures by programme or service here reported would need to be consistent with the number of people who have received the services reported elsewhere.

#### Rationale

The international and domestic resource availability for the HIV response reached an estimated US\$ 20.6 billion in low- and middle-income countries by the end of 2017. 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 successes achieved. Yet, 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/services in the targeting of key or other specific populations.

The National AIDS Spending Assessment classifications and definitions developed by UNAIDS are recommended as the framework to track and report HIV expenditure.

NASAs have been applied in more than 70 countries worldwide. NASA's classifications were defined by aligning the AIDS Spending Categories (ASC) to the programmes or services costed as part of the resource needs estimation process, which are the interventions/services with known impact on the HIV-relevant outcomes, i.e. HIV incidence and AIDS-related mortality. In addition, NASAs provide a comprehensive set of mutually exclusive AIDS Spending Categories (ASC) to classify additional expenditures that may exist in any given country, even if they do not correspond to the resource needs estimation. The alignment between resources available and resource needs by specific services or programmes was designed to measure the financing gap and indicate insufficiency of resources or potential efficiency gains to be achieved by each programme for the combination of sources and providers.

There are other resource tracking approaches which have also been applied to assess HIV expenditures from domestic and international sources, including Health Accounts, Budget reviews, and ad-hoc surveys. We recommend the use of social accounting frameworks (NASA and SHA) to best report on this indicator.

The indicator and sub-indicators here described can be extracted directly from a NASA exercise. Other approaches may or may not directly provide the whole set of sub-indicators here listed. In such instances, it is recommended to provide the information in the AIDS funding matrix at the level of granularity available from the resource tracking methodology employed by the country and explicitly indicate the non-availability of disaggregated information as applicable.

As in previous years, the basis for this report is the National Funding Matrix, a reporting template which sets out HIV programme areas disaggregated by individual interventions or services and by financing source. This matrix was designed to include the totality of resources invested in HIV in a given year by all sources, thus there is a longer list of services/programmes which can be used to describe the use of the resources, while only a subset will be used to inform the sub-indicators.

The vast majority of the AIDS Spending Categories (ASCs) or the sub-indicators are not new, but are drawn from existing frameworks and are now structured around the 10 commitments derived from the 2016 Political Declaration on HIV and AIDS: On the Fast-Track to accelerate the fight against HIV and to end the AIDS epidemic by 2030.

The cover page of the funding matrix has been expanded to capture information on budgets and the resource tracking exercises conducted in the country.

The indicator to be reported is "Total HIV Expenditure" by services or programme categories and by financing sources. There are eight core subindicators as outlined hereafter:

COMMITMENT 8: Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers

8.1. Total HIV Expenditure (by service/programme category and financing source)

- A. Expenditure on HIV testing and counselling (non-targeted)
- B. Expenditure on antiretroviral therapy (adults and paediatric)
- C. Expenditure on HIV-specific laboratory monitoring (CD4 cell counts, VL quantification)
- D. Expenditure on TB/HIV
- E. Expenditure on the five pillars of combination prevention:
  - Prevention for young women and adolescent girls (10-24 years, exclusively in high prevalence countries)
  - Voluntary medical male circumcision (exclusively in high prevalence countries)
  - Pre-exposure prophylaxis (PrEP) stratified by key population (gay men and other men who have sex with men (MSM); sex workers; persons
    who inject drugs (PWIDs); transgender persons; prisoners; young women and adolescent girls (10-24 years); serodiscordant couples)
  - Condoms (non-targeted)
  - Prevention among key populations (gay men and other MSM; sex workers and their clients; PWIDs; transgender people; prisoners and other incarcerated people).

F. Expenditure on prevention of vertical transmission of HIV

G. Expenditure on social enablers

H. Expenditure on cash transfer for young women and girls (10-24 years, high prevalence countries; HIV-earmarked budgets)

The definition of the core sub-indicators and associated criteria such as scope, disaggregation, target populations, methods of measurement are summarily provided below. More detailed information on the full range of HIV programme areas and interventions is provided in Annex 2. In addition, to assist with data collection and reporting Annex 2 provides a crosswalk between HIV programme categories of the national funding matrix and the AIDS Spending Categories of the National AIDS Spending Assessment. The definition, scope and boundaries for the services included in the National Funding Matrix to be reported in the online reporting tool will be described in more detail in the indicator registry.

#### Numerator

Not applicable

### Denominator

Not applicable

#### Data type

Currency and monetary values; monetary values and volumes of ARVs and commodities in general procured and distributed.

#### Calculation

Social accounting and costing principles are applied. 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 provider of services). 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, volumes of antiretroviral drugs procured and distributed and disaggregates by the expenditures using international development assistance funds and the expenditures incurred using public or private funds.

There are certain requirements for data collection and quality to ensure 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 documented significant discrepancies between budgetary allocations and actual expenditures. Thus budget analysis is not recommended as the sole basis to report total in-country HIV expenditure.

It might be good practice to validate expenditures funded by international sources, national financing sources and financing agents, as well as all relevant stakeholders.

## Method of measurement

Primary:

National AIDS Spending Assessments (NASA)

 Logistics Management Information systems (LMIS) and Procurement Supply Chain Management systems for information on commodities *Alternative:*

System of Health Accounts 2011 (SHA 2011)

#### Note:

- Countries may use centrally produced results for PEPFAR Expenditure Analysis to report on in-country expenditure financed by PEPFAR and the different agencies involved.
- Health Accounts using the System of Health Accounts-2011 framework with full disease distribution attempt to capture top-level elements of National AIDS spending categories. However, depending on the objectives of a given resource-tracking exercise, the System of Health Accounts 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 costing principles to disaggregate HIV part of the joint costs incurred by the system.

#### Data collection tools

Countries develop their reports on HIV expenditure by programme/service categories and financing sources using the national funding matrix template. A full range of HIV programme categories is provided in the 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 financing.

## **Measurement frequency**

Annually for calendar or fiscal year. Since the final 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 up any number of annual final reports available from the last 5 years, indicating their status as preliminary or final and whether these substitute previous reports. It is not required to re-submit the data that have previously been reported and remained unchanged. UNAIDS team can be contacted for assistance if countries would like to submit more recent reports on expenditures prior to 2010.

## Disaggregation

- Financing source
- HIV and AIDS programme categories
- · For selected sub-indicators, countries are encouraged to report expenditures on the most salient commodities under such programme (e.g.
- Antiretrovirals in the antiretroviral treatment sub-indicator) separately from the rest of other direct and indirect expenditures like service delivery, etc.
- Commodities, unit prices and volumes are to be reported by funding source in the respective table.

### Strengths and weaknesses

Countries which have implemented a full National AIDS Spending Assessment (NASA) appropriately are able to fill the template with an output table from the NASA exercise. However, NASAs are labour intensive (and potentially relatively costly) and take time to be properly developed, use a

combination of accounting and costing techniques, thus the costing estimates are not certified data as some accounting principles might require. Final country estimates need to be validated with all stakeholders and triangulated to increase reliability and validity.

The countries which have implemented a 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 which 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, in particular the overall level, potential duplication and significant unaccounted expenditures. The non-health expenditures need to be added. The implementation of health accounts need medium- to long-term planning, are resource intensive and depend on coordination between health accountants and programme managers.

Countries using budget analysis need to ensure that allocated budgets were actually spent as planned -or otherwise, and supplement the estimates for the expenditures which do not occur based on an earmarked budget.

#### List of core sub-indicators and associated statistical metadata

Sub-indicators	Disaggregation	Target population	What it measures
8.1. Total HIV expenditure	Funding source, service/ programme category	Not Applicable	Total expenditure from all sources spent on HIV and AIDS at the national level, including health and non-health.
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 with counselling, including: client-initiated HIV testing and counselling; provider-initiated testing and counselling; HTC as part of a campaign, or through outreach services or through home-based 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	Funding source, adults and children	Persons living with	Antiretroviral therapy.
antiretroviral (ARV) therapy (adults and pediatric; specific	(younger than 15 years old)	HIV	Direct expenditures in the purchase of antiretrovirals separately from other from other costs as available).
commodities separately)			Unit prices and volumes of commodities procured/ distributed.
C. Expenditure on HIV-	Funding source	Persons living	Diagnostic services related to HIV clinical monitoring.
specific laboratory monitoring (specific commodities separately)		with HIV on Antiretroviral Therapy	Direct expenditures in the purchase of reagents for laboratory for CD4+ cell counts and viral load quantification separately from other commodities and service delivery from other costs as available).

D. Expenditure on TB/ HIV (specific commodities separately)	Funding source	Persons living with HIV and people living with tuberculosis	Examinations, clinical monitoring, related laboratory services, treatment and prevention of TB (including isoniazid and drugs for treating active TB) as well as 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 tuberculosis (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)	<ul> <li>Funding source, five pillars of combination prevention:</li> <li>Prevention for young women and adolescent girls (10-24 years, exclusively high prevalence countries)</li> <li>Voluntary medical male circumcision (exclusively high prevalence countries)</li> <li>Pre-exposure prophylaxis (PrEP) stratified by key population (gay men and other MSM; sex workers; PWIDs; transgender people; prisoners; young women and adolescent girls; serodiscordant couples).</li> <li>Condoms (non-targeted))</li> <li>Prevention among key populations (gay men and other MSM; sex workers and their clients; PWIDs; transgender people; prisoners)</li> </ul>	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 (10-24 years) in high prevalence countries, men who have sex with men, sex workers and their clients, people who inject drugs, voluntary male medical circumcision, pre-exposure prophylaxis stratified by key populations, as well as condom promotion and provision for general population. Direct expenditures in the purchase of condoms, needles, 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 and antiretroviral medicine prophylaxis for newborns, safe childbirth practices; counselling and support for maternal nutrition and 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 antiretroviral treatment should be included under ARV therapy for adults.
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 and human rights programmes.
H. Expenditure on cash transfers for young women and girls (10-24 years, high prevalence countries; HIV earmarked budgets)	Funding source	Young women and girls (10-24 years)	Total expenditure on cash transfers for young women and girls (10-24 years). This is defined as a development synergy with implications for HIV prevention.

Further information National AIDS Spending Assessment guidelines are available at: http://www.unaids.org/en/dataanalysis/datatools/nasapublicationsandtools National AIDS Spending Assessment country reports are available at: http://www.unaids.org/en/dataanalysis/knowyourresponse/nasacountryreports System of Health Accounts 2011 guidelines are available at: http://www.who.int/health-accounts/methodology/en

Health Accounts reports are available at the WHO Global Health Expenditure Database: http://apps.who.int/nha/database/DocumentationCentre/ Index/en

Health Expenditures by Diseases and Conditions (HEDIC). Statistical working papers. Eurostat. 2016. Available at: http://ec.europa.eu/eurostat/web/ products-statistical-working-papers/-/KS-TC-16-008

# **10.1 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 among people living with HIV

#### 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 2017 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).</li>
- Cities.

#### Additional information requested

Please provide city-specific data for this indicator. Space has been created in the data entry sheet 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

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/10665/44789/1/9789241503006\_eng.pdf?ua=1&ua=1).

Global tuberculosis report 2018. Geneva: World Health Organization; 2018 (http://www.who.int/tb/publications/global\_report/en).ganization; 20178 (http://www.who.int/tb/publications/global\_report/en).

A guide to monitoring and evaluation for collaborative TB/HIV activities: 2015 revision. Geneva: World Health Organization; 2015 (http://www.who. int/tb/publications/monitoring-evaluation-collaborative-tb-hiv/en).

# 10.2 People living with HIV with active TB disease

Total number of people living with HIV with active TB expressed as a percentage of those who are newly enrolled in HIV care (pre-antiretroviral therapy or antiretroviral therapy) during the reporting period

#### What it measures

The burden of active TB among people living with HIV who are newly enrolled in HIV care. 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. Further, newly enrolled people living with HIV may be less aware of TB symptoms and the importance of early detection and treatment and 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 medicines.

#### Numerator

Total number of people living with HIV newly enrolled in care who have active TB disease during the reporting period

#### Denominator

Total number of people newly enrolled in HIV care: that is, those registered for pre-antiretroviral therapy or 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 care/antiretroviral therapy card (in the investigations column in the encounters section) and in the pre-antiretroviral therapy and antiretroviral therapy registers (monthly and quarterly follow-up sections, respectively). Similarly, TB patients who are found to be HIV-positive should be enrolled into HIV care 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 care (pre-antiretroviral therapy and antiretroviral therapy registers) who have active TB disease.

For the denominator. Count the total number of people living with HIV newly enrolled in HIV care: that is, enrolled in pre-antiretroviral therapy or starting antiretroviral therapy during the reporting period.

Double counting of the same individual in both pre-antiretroviral therapy and antiretroviral therapy registers should be avoided. Further, the information on TB status in the pre-antiretroviral therapy and 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** Cities

#### Additional information requested

Please provide city-specific data for this indicator. Space has been created in the data entry sheet 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 Reviewing the trends in TB among people living with HIV newly enrolled in care over a period of time may provide useful information on the TB burden among them and 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 patients detected through provider-initiated HIV testing and counselling but not enrolled in HIV care or 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 (http://www.who.
int/tb/publications/monitoring-evaluation-collaborative-tb-hiv/en).

# 10.3 People living with HIV who started TB preventive therapy

Number of people who started treatment for latent TB infection, expressed as a percentage of the total number of people newly enrolled in HIV care during the reporting period

#### What it measures

The extent to which people living with HIV newly registered in HIV care start treatment for latent TB infection.

#### Rationale

All people in HIV care should be screened for TB at every visit, using a clinical algorithm recommended by WHO. Adults and adolescents living with HIV who do not report any of the symptoms—current cough, fever, weight loss or night sweats—are unlikely to have active TB and should be offered TB preventive therapy: that is, treatment for latent TB infection. Similarly, children who do not have poor weight gain, fever or current cough should be offered TB preventive therapy to reduce the risk of developing active TB, both those receiving antiretroviral therapy and those who do not.

#### Numerator

Total number of people living with HIV newly enrolled in HIV care who start treatment for latent TB infection during the reporting period.

If data on people newly enrolled in HIV care starting TB preventive treatment are not available, enter data for those starting treatment for latent TB infection among all people living with HIV who are currently enrolled in HIV care.

#### Denominator

Total number of people newly enrolled in HIV care: that is, those registered for pre-antiretroviral therapy or antiretroviral therapy during the reporting period. This denominator should be the same as the denominator of Indicator 10.2.

If data on people newly enrolled in HIV care starting TB preventive treatment are not available, enter the number of people living with HIV who are currently enrolled in HIV care.

#### Calculation

Numerator/denominator

#### Method of measurement

TB preventive therapy should be started for all eligible people and the start date recorded on the HIV care/antiretroviral therapy card (encounter section). Those who accept treatment and receive at least the first dose should then be recorded in the pre—antiretroviral therapy and antiretroviral therapy registers (isoniazid start month and year column).

Numerator. Count the total number of people living with HIV newly enrolled in HIV care during the reporting period who start treatment for latent TB infection: that is, those who receive at least one dose of anti-TB drugs such as isoniazid.

Denominator. Count the total number of people living with HIV newly registered for pre-antiretroviral therapy plus those registered for antiretroviral therapy during the reporting period.

For accurate planning and drug management, more detailed information needs to be collected in addition to the above. A pharmacy-based register may be used to record client attendance and drug collections. Alternatively, the antiretroviral therapy facility may maintain a latent TB infection 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 latent TB infection treatment, as well as treatment completion rates and adverse events.

See Annex 5 for further understanding of the indicator.

If data on people newly enrolled in HIV care starting TB preventive treatment are not available:

Numerator: Count the number of people living with HIV who are currently enrolled in HIV care who started TB preventive therapy during the reporting period.

Denominator: Count the number of people living with HIV who are currently enrolled in HIV care during the reporting period.

#### Measurement frequency

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

**Disaggregation** Cities

#### Additional information requested

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 This indicator measures the coverage of TB preventive therapy among people newly enrolled in HIV care. However, 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.

Further information A guide to monitoring and evaluation for collaborative TB/HIV activities: 2015 revision. Geneva: World Health Organization; 2015 (http://www.who. int/tb/publications/monitoring-evaluation-collaborative-tb-hiv/en).

# 10.4 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).

# 10.5 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).

# 10.6 Hepatitis B testing

Proportion of people starting antiretroviral therapy who were tested for hepatitis B

#### What it measures

It monitors trends in hepatitis B testing among people starting antiretroviral therapy, a critical intervention to ensure that they receive a drug combination that treats hepatitis B.

The presence of hepatitis B surface antigen indicates chronic infection with hepatitis B virus (HBV). Knowing people's HIV and hepatitis B status enables antiretroviral medicines to be prescribed that are effective against HBV and HIV infection.

#### Rationale

Testing for hepatitis B identifies coinfection to adapt treatment

#### Numerator

Number of people started on antiretroviral therapy who were tested for hepatitis B during the reporting period using hepatitis B surface antigen tests

#### Denominator

Number of people 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)</li>
- People who inject drugs

#### Strengths and weaknesses

This indicator monitors progress in hepatitis B testing activities on a regular basis but does not reflect the overall proportion of people coinfected with HIV and HBV in HIV care who are aware of their hepatitis B coinfection. This would be reflected by indicator C.6 of the 2016 WHO viral hepatitis monitoring and evaluation framework, disaggregated by HIV status.

This indicator corresponds to the LINK.27 (Rev.1) indicator of the 2015 WHO consolidated strategic information guidelines for HIV in the health sector. The revision comprised considering people starting antiretroviral therapy since this is the best moment to test people living with HIV for coinfection to initiate treatment.

# 10.7 People coinfected with HIV and HBV receiving combined treatment

Proportion of people coinfected with HIV and HBV receiving combined treatment

#### What it measures

Proportion of people coinfected with HBV and HIV enrolled in HIV care being treated with antiretroviral medicines that are effective against both viruses

#### Rationale

People living with HIV are often coinfected with HBV. The prevalence of coinfection is especially high in the WHO African Region and European Region because of early childhood transmission and injecting drug use, respectively. Treating hepatitis B among people living with HIV influences quality of life, life expectancy and mortality. Some antiretroviral medicines are effective against both HIV and HBV, which simplifies the treatment of coinfected people.

#### Numerator

Number of people coinfected with HIV and HBV who receive treatment with antiretroviral medicines effective against both HIV and HBV during the reporting period

#### Denominator

Number of people diagnosed with HIV and HBV coinfection in HIV care during a reporting period (12 months)

#### Calculation

Numerator/denominator

#### Method of measurement

The numerator and denominator are calculated from the clinical records of health-care facilities providing HIV treatment and care.

#### Measurement frequency Annual

**Disaggregation** People who inject drugs

### Additional information requested

This indicator corresponds to indicator C.7a of the viral hepatitis monitoring and evaluation framework, disaggregated by HIV status.

If this indicator is produced only in a subset of facilities, comment on the source of information, sample size and whether the information is representative of all sites where HIV treatment and care are delivered.

#### Strengths and weaknesses

This indicator is simple to calculate. Since both HIV and HBV treatment are given for life, the indicator is a measure of coverage, similar to HIV treatment.

# **10.8 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
- Jex
- Age (<15 and 15+ years)</li>
- People who inject drugs

#### 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.

This indicator corresponds to indicator LINK.28 (Rev.1) of the 2015 WHO consolidated strategic information guidelines for HIV in the health sector. The revision comprised considering people starting antiretroviral therapy, since this is the best moment to test people living with HIV for coinfection to initiate treatment.

# 10.9 People coinfected with HIV and HCV starting HCV treatment

Proportion of people coinfected with HIV and 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.

#### Numerato

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.

#### **Further information**

This indicator corresponds to indicator C.7b of the 2016 WHO viral hepatitis monitoring and evaluation framework, disaggregated by HIV status.

# 10.10 Cervical cancer screening among women living with HIV

Proportion of women living with HIV (aged 30–49) old who report being screened for cervical cancer using any of the following methods: visual inspection with acetic acid (VIA), Pap smear or human papillomavirus (HPV) test

#### What it measures

Proportion of women living with HIV screened for cervical cancer

#### Rationale

Cervical cancer is the second most common type of cancer among women living in low- and middle-income countries, with an estimated 530 000 new cases in 2012 (84% of the new cases worldwide). In high-income countries, programmes are in place that enable women to get screened, making most precancerous lesions identifiable at stages when they can easily be treated and cured. Achieving high coverage of screening of women and treatment of precancerous lesions detected by screening can ensure a low incidence of invasive cervical cancer in high-income countries.

Women living with HIV are more vulnerable than HIV-negative women to being affected by cervical cancer and to developing invasive cancer. Invasive cervical cancer is an AIDS-defining condition. For this reason, screening women living with HIV is important. This can prevent up to 80% of the cases of cervical cancer in these countries.

#### Numerator

Number of women living with HIV 30–49 years old who report ever having had a screening test for cervical cancer using any of these methods: VIA, Pap smear and HPV test.

#### Denominator

All women respondents living with HIV 30-49 years old.

### Calculation

Numerator/denominator

#### Method of measurement

- Nationally representative population-based surveys
- Programmatic data: If you do not have the number of women living with HIV (aged 30–49 years) who have ever been screened for cervical cancer, you also can provide the number of women who tested positive for HIV among all women (aged 30–49 years) who were screened for cervical cancer.

## Measurement frequency

Data should be collected at least every five years

#### Disaggregation

- Age (30–49 years old or according to national guidelines)
- Place of residence (urban or rural)

### Strengths and weaknesses

Potential limitations include bias through self-report, including mistakenly assuming that any pelvic exam was a test for cervical cancer, and the limited validity of survey instruments.

#### **Further information**

Follow-up to the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, WHO Sixty-Sixth World Health Assembly, WHA66.10, World Health Organization (http://apps.who.int/gb/ebwha/pdf\_files/WHA66/A66\_R10-en.pdf)

Noncommunicable Diseases Global Monitoring Framework: indicator definitions and specifications. Geneva: World Health Organization; 2014 (http://www.who.int/nmh/ncd-tools/indicators/GMF\_Indicator\_Definitions\_Version\_NOV2014.pdf).

Ferlay J, Soerjomataram I, Ervik M, Dikshit R, Eser S, Mathers C et al. Globocan 2012. Estimated cancer incidence, mortality and prevalence worldwide in 2012. Lyon: International Agency for Research on Cancer; 2012 (IARC CancerBase No. 11; http://globocan.iarc.fr).

WHO guidelines for screening and treatment of precancerous lesions for cervical cancer prevention. Geneva: World Health Organization; 2013 (http://www.who.int/reproductivehealth/publications/cancers/screening\_and\_treatment\_of\_precancerous\_lesions/en).

Guidelines for completing the National Commitments and Policy Instrument

# Introduction

Policy monitoring has been a component of global AIDS reporting since 2003, and it has been implemented every two years, most recently in 2017 through the National Commitments and Policy Instrument (NCPI) and in 2018 through the interim NCPI. 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 by doing the following:

- Promoting consultation and dialogue between key stakeholders at the national level, especially government and civil society, to capture their perspectives on the AIDS response.
- Supporting countries in assessing the status of their HIV epidemic and response and 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 or provide context on progress towards achieving the 10 Fast-Track commitments and expanded targets to end AIDS by 2030.

The NCPI is to be completed and submitted as part of GAM reports every two years. This time frame reflects the consideration that changes to laws, policies and regulations are expected to occur slowly, and 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.

A new NCPI questionnaire and proposed process for its completion were integrated into GAM reporting for the first time in 2017 after an extensive consultative review. The wording of some of the questions has been further refined for interim reporting in 2019 based on the experience of 2017 and 2018 reporting.

# **NCPI structure**

The NCPI has two parts. Part A is to be completed by national authorities, and Part B is to be completed by civil society and other nongovernmental partners involved in the national AIDS response.

The questions in both Parts A and B are structured around the 10 Fast-Track commitments and expanded targets to end AIDS by 2030.<sup>11</sup>

# 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.

- Establish a working group to accompany NCPI reporting. This could be an existing multisectoral monitoring and evaluation technical working group.
- Identify a focal point to coordinate the completion of each Part A (from the national AIDS programme or equivalent) and Part B (a civil society representative).

3. An NCPI working group conducts a stakeholder mapping exercise to systematically select contributors for both Parts A and B.

Such mapping can ensure that the most updated and accurate data can be collected through the NCPI by involving relevant experts and avoid the influence of potential biases in the reporting process. This can also ensure that the reporting reflects a broad range of perspectives. Involving a broad range of stakeholders can help in interpreting qualitative or potentially ambiguous data.

The list of all 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 and through contacts with other people knowledgeable of the national HIV response and by reviewing relevant documentation.

Stakeholders can be identified from the following sectors and groups, among others:

- Health ministry or the equivalent.
- Education ministry or the equivalent.
- Gender ministry or the equivalent.
- Justice ministry or the equivalent.
- Trade ministry or the equivalent.
- Representatives of people living with HIV, including women and young people living with HIV.
- Representatives of the various key population groups.
- Bilateral and multilateral organizations engaged in the HIV response.
- Other nongovernmental organizations or foundations engaged in the HIV response.

<sup>&</sup>lt;sup>11</sup> Fast-Track commitments to end AIDS by 2030. Geneva: UNAIDS; 2016 (http://www.unaids.org/sites/default/files/media\_asset/fast-track-commitments\_ en.pdf, accessed 24 October 2018).

Private sector.

Geographical diversity should be considered in identifying stakeholders to ensure representativeness.

The following information should be recorded for all stakeholders contacted throughout the NCPI reporting process:

- Name.
- Contact details.
- Organization affiliation.
- Role in the organization.
- Stakeholder type: health ministry, other ministry, private sector, civil society, international NGO, bilateral organization, UNAIDS or other United Nations.

This information could be helpful to document the multisectorality of the process and to support preparations for future rounds of NCPI reporting.

4. Collect responses to NCPI questions: to ensure accuracy and avoid respondent fatigue, it is suggested to direct specific questions to specific respondents knowledgeable in that area, as relevant. Focal points for Parts A and B, or consultant(s) recruited to support the process, coordinate contact with identified stakeholders, such as through in-person interviews, by phone or email, to share the NCPI questions in their area of expertise with them and gather their responses.

If possible, it is recommended to send the same question to more than one stakeholder knowledgeable in the area. If there are discrepant answers, the coordinator for that part of the NCPI could share a summary of the information received for that question with the various stakeholders that have provided that information to clarify the source of the different responses and reach 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.

The responses to questions included in both Parts A and B do not need to be the same, but identifying similar or different responses for discussion during the consultation may be useful.

The PDF version of the questionnaire (Parts A and B) is available on the UNAIDS website and can also be downloaded through the NCPI header in the indicator list in the GAM online reporting tool (https://AIDSreportingtool.unaids.org).

- 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 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 on the link "Print all NCPI to PDF" in the indicator list page.
- 7. Conduct a validation consultation:
- To review NCPI responses for selected questions.
- To analyse NCPI data jointly with indicator data, identifying progress, gaps, barriers and facilitators to the AIDS response.
- 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 focus on specific questions identified as key for discussion during the data collection and review process before the workshop and on discussing progress and gaps for each commitment area more broadly.

- 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 1 April 2019.
- 10. Respond to queries posted through the online reporting tool during the data validation process.

This suggested process aims to integrate consistency checks for NCPI data collected throughout the process and to promote as objective analysis of the information as possible.

# Operationalizing and using the NCPI data

Data collected through the NCPI will complement indicator and expenditure data 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 national strategic planning efforts.

Globally, NCPI data will also be used to monitor the 10 Fast-Track commitments and expanded targets directly or to provide context to quantitative data collected through GAM indicators and to inform global strategies and reports. The responses from each country to NCPI questions will be aggregated to generate regional and global values. The NCPI data by country will also be available through AIDSInfo.

# Pre-populated data from external databases

Countries that submitted responses to questions through a previous NCPI can choose to load those responses into the 2019 GAM online reporting tool. Responses can then be updated or resubmitted where there has been no change.

# Definitions

The following definitions of key terms included in the NCPI questionnaire should be used to complete the questionnaire. Consistent use of definitions over time and across countries will strengthen comparability and trend analyses. The terms defined in the list below are marked with an asterisk (\*) in the questionnaire.

# Community accountability mechanisms in the context of programmes for preventing the mother-to-child transmission of HIV. These may include any of the following mechanisms.

- Citizen report cards. Large-scale surveys of user feedback used for advocacy to increase public accountability.
- Community scorecards. Facilitated meetings for communities and health workers to score service quality and then to develop remedial action plans in consensus.
- Community client oriented provider efficient (COPE). A complement to a facility-based quality improvement programme that involves the health workers gathering information from surrounding communities.
- Partnership-defined quality. With outside facilitation, health workers and community define and examine quality, set priorities among issues and develop and implement an action plan.
- Patient-focused quality assurance. A process that involves conducting 50–100 client exit interviews every 3–6 months, collating data, setting priorities among issues, drawing up action plans and displaying results.
- Peer and participatory rapid health appraisal for action. Rapidly diagnosing quality using

checklists, setting priorities among issues identified, disseminating results and developing a remedial action plan. Community input comes through client interviews and female and male focus group discussions in which quality is ranked on specific indicators.

- Integrated supportive supervision. Quarterly facility visits by a team that includes community representatives. Methods include client interviews and checklists.
- Health committees. Local committees that include community members and monitor service quality. Some make ad hoc visits; others have a more formal monitoring schedule.

**Participation**. Active and informed participation in formulating, implementing, monitoring and evaluating all decisions, policies and interventions that affect one's health 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.<sup>12</sup>

**Grave or systematic human rights abuses**. The qualification of grave indicates a serious, flagrant, egregious human rights violation. A violation of the right to life or physical integrity would constitute a grave violation of human rights. Systematic refers to the number of people affected and the frequency.

It implies a pattern of violations and not an isolated case.

Antidiscrimination laws. Antidiscrimination laws or other provisions include prohibiting discrimination in employment based on sexual orientation, constitutionally prohibiting discrimination based on sexual orientation, other non-discrimination provisions specifying sexual orientation, prohibiting incitement to hatred based on sexual orientation and considering hate crimes based on sexual orientation an aggravating circumstance.

**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 marginalised; with the overall objective of reducing the economic and social vulnerability of poor, vulnerable and marginalized groups."<sup>13</sup>,<sup>14</sup> 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.<sup>15</sup>

**Domestic violence**. Violence between spouses, within the family or members of the same household or in interpersonal relationships, including intimate partner violence that is subject to criminal sanctions or provides for protection orders for domestic violence.<sup>16</sup>

**Intimate partner violence**. "Behaviour within an intimate relationship that causes physical, sexual or psychological harm, including acts of physical

<sup>&</sup>lt;sup>12</sup> 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 24 October 2018).

<sup>&</sup>lt;sup>13</sup> HIV and social protection guidance note. Geneva: UNAIDS; 2014 (http://www.unaids.org/sites/default/files/media\_asset/2014unaidsguidancenote\_ HIVandsocialprotection\_en.pdf, accessed 24 October 2018).

<sup>&</sup>lt;sup>14</sup> Devereux S, Sabates-Wheeler R. Transformative social protection. Brighton: Institute of Development Studies; 2004 (https://www.unicef.org/

socialpolicy/files/Transformative\_Social\_Protection.pdfhttp://www.ids.ac.uk/publication/transformative-social\_protection1, accessed 29 October 2018).
 HIV and social protection guidance note. Geneva: UNAIDS; 2014 (http://www.unaids.org/sites/default/files/media\_asset/2014unaidsguidancenote\_ HIVandsocialprotection\_en.pdf, accessed 24 October 2018).

<sup>&</sup>lt;sup>16</sup> Women, business and the law – methodology. In: The World Bank [website]. Washington (DC): World Bank; 2016 (http://wbl.worldbank.org/ methodology, accessed 29 October 2018).

aggression, sexual coercion, psychological abuse and controlling behaviours."<sup>17</sup>

**Gender-based violence**. Violence that establishes, maintains or attempts to reassert unequal power relations based on gender. It encompasses acts that inflict physical, mental or sexual harm or suffering, threat of such acts, coercion and other deprivations of liberty.<sup>18</sup>

**Life skills–based HIV and sexuality education**. An age-appropriate, culturally relevant approach to teaching about sex and relationships by providing scientifically accurate, realistic and non-judgemental information.<sup>19</sup>

International standards for sexuality education. Standardized benchmarks for the sexuality education curriculum to ensure quality, including teaching on: (1) generic life skills (such as decision-making, communication and negotiating skills); (2) sexual and reproductive health and sexuality education (such as human growth and development, relationships, reproductive health, sexual abuse and transmission of sexually transmitted infections); and (3) HIV transmission and prevention.<sup>20</sup>

**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 children's school attendance, or unconditional, not being attached to specific behavioural requirements. Gender transformative. Gender-transformative approaches encourage critical awareness of gender roles and norms and include ways to change harmful to more equitable gender norms to foster more equitable power relationships between women and men and between women and others in the community. They promote women's right and dignity; challenge the unfair and unequal distribution of resources and allocation of duties between men and women; and consider the specific needs of women and men. Such approaches can be implemented separately with women and girls and with men and boys. However, they are also being increasingly implemented with both women and girls and men and boys together and across generations—either simultaneously or in a coordinated way to challenge harmful masculine and feminine norms and unequal power relations that may be upheld by everyone in the community.<sup>21</sup>

**Gender-sensitive indicators**. Indicators that help understand gender-based inequities and gender inequality as a social determinant of health. Gendersensitive indicators are used to measure the current situation of women or men in relation to a specific norm or in comparison with another reference group, such as the proportion of girls enrolled in primary school compared with boys. They are also used to measure and monitor inequalities in access to health services (for example, the difference in the proportion of women and men with access to antiretroviral therapy) and the success of efforts to reduce gender inequality over time.<sup>22</sup>

<sup>&</sup>lt;sup>17</sup> Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence. Geneva: World Health Organization; 2013 (http://apps.who.int/iris/bitstream/10665/85239/1/9789241564625\_eng.pdf?ua=1, accessed 24 October 2018).

<sup>&</sup>lt;sup>18</sup> UNAIDS 2015 terminology guidelines. Geneva: UNAIDS; 2015 (http://www.unaids.org/sites/default/files/media\_asset/2015\_terminology\_guidelines\_ en.pdf, accessed 24 October 2018).

<sup>&</sup>lt;sup>19</sup> UNESCO, UNAIDS, UNFPA, UNICEF, WHO. International technical guidance on sexuality education. Volume I. Paris: UNESCO; 2009.

<sup>&</sup>lt;sup>20</sup> Emerging evidence, lessons, and practice in comprehensive sexuality education: a global review. Paris: UNESCO; 2015 (http://unesdoc.unesco.org/ images/0024/002431/243106e.pdf, accessed 24 October 2018).

<sup>&</sup>lt;sup>21</sup> WHO, UNAIDS. 16 ideas for addressing violence against women in the context of HIV epidemic: a programming tool. Geneva: World Health Organization; 2013 (http://www.who.int/reproductivehealth/publications/violence/vaw\_hiv\_epidemic/en, accessed 24 October 2018).

<sup>&</sup>lt;sup>22</sup> WHO, UNAIDS. A tool for strengthening gender-sensitive national HIV and sexual and reproductive (SRH) monitoring and evaluation systems. Geneva: WHO; 2016 (http://www.unaids.org/sites/default/files/media\_asset/tool-SRH-monitoring-eval-systems\_en.pdf, accessed 24 October 2018).

# Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) flexibilities:

"The Agreement on Trade-related Aspects of Intellectual Property Rights (or TRIPS), supervised by the World Trade Organization, provides certain flexibilities to low- and middle - income countries with respect to pharmaceutical patent protection. TRIPS is one of the three primary agreements of the World Trade Organization (WTO). It requires all WTO Member States to provide a minimum level of protection for various types of intellectual property, including patents on essential medicines (such as antiretroviral medicines). The TRIPS Agreement contains certain public health-related flexibilities and safeguards, such as compulsory licensing, that can be used to increase access to essential medicines. Least developed countries are exempt from granting pharmaceutical patents until 1 January 2016."<sup>23</sup> For more information, please see https://www.wto.org/english/docs\_e/legal\_e/27trips.pdf.

**Stock-out**. Unplanned interruption in the stock of a health product.

<sup>&</sup>lt;sup>23</sup> UNAIDS 2015 terminology guidelines. Geneva: UNAIDS; 2015 (http://www.unaids.org/sites/default/files/media\_asset/2015\_terminology\_guidelines\_ en.pdf, accessed 24 October 2018).

# NCPI

# Abbreviations and acronyms

3TC	lamivudine
ABC	abacavir
ATV/r	atazanavir with a ritonavir boost
AZT	zidovudine
d4T	stavudine
DTG	dolutegravir
EFV	efavirenz
FTC	emtricitabine
LGBTI	lesbian, gay, bisexual, transgender and intersex
LPV/r	lopinavir with a ritonavir boost
NGO	nongovernmental organization
NNRTI	non-nucleoside reverse-transcriptase inhibitor
NRTI	nucleoside reverse-transcriptase inhibitor
PCR	polymerase chain reaction
PrEP	pre-exposure prophylaxis
RPR	rapid plasma reagin
TDF	tenofovir disoproxil fumarate
TPHA	Treponema pallidum haemagglutination assay
TPPA	Treponema pallidum particle agglutination assay
TRIPS	Agreement on Trade-related Aspects of Intellectual Property Rights
VDRL	Venereal Disease Research Laboratory
WHO	World Health Organization

# **National Commitments and Policy Instrument: Part A**

\* The guidelines for the NCPI define the terms marked with an asterisk (\*).

1. Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90–90 targets by 2020.

- Commit to the 90–90–90 targets.
- Address regulations, policies and practices that prevent access to safe, efficacious and affordable generic medicines, diagnostics and related health technologies, including by ensuring the full use of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) flexibilities, and strengthen regional and local capacity to develop, manufacture and deliver quality-assured affordable health products.

## **HIV testing**

1.	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
	Community-based testing and counselling
	Home testing
	Lay provider testing
	Self-testing
	Assisted partner notification/index testing
	Other (please specify):
2.	Has your country adapted the recommendations from the 2015 WHO Consolidated guidelines on HIV testing services in a national process on testing guidelines?
	Yes, fully
	Yes, partially
	No
	Don't know
3.	Has your country adopted or included HIV self-testing as a national policy or plan?
	Yes
	No
3.1	If yes, is HIV self-testing implemented?
	Yes, fully implemented
	No, it is being piloted
	No pilots or implementation
3.2	If no, is a national policy on HIV self-testing in development?
	Yes
	No
3.2a	If yes to Question 3.2, please indicate the year in which self-testing is planned to be included:
	No planned year
	2019
	2020
	2021

4.	Has your country included assisted HIV partner notification in its national policy?
	Yes
	No
4.1	If no, does it have plans to include assisted HIV partner notification in its national policy in the future?
	Yes
	No
4.1a	If yes to Question 4.1, please indicate the year in which assisted HIV partner notification is planned to be included:
	No planned year
	2019
	2020
	2021
	2022
5.	Does your country have a policy specifying that HIV testing will be provided:
	Free to all
	Free to some
	At a cost
6.	Is there a law, regulation or policy specifying that HIV testing:
a)	Is mandatory before marriage?
	Yes
	No
b)	Is mandatory to obtain a work or residence permit?
	Yes
	No
c)	Is mandatory for certain groups?
	Yes
	No
c.i.	c.i. If yes, please specify these groups:
7.	Does your country have national policies and/or strategies on linking HIV testing and counselling and enrolment with care?
	Yes
	No
7.1	If yes, what do they include (please select all that apply)?
	Streamlined interventions (enhanced linkage, disclosure, tracing)
	Peer support and patient navigation approaches
	Quality improvement approaches
	CD4 testing at the point of care
	Others (please specify):
	C

# Antiretroviral therapy

8.	Has your country adapted the recommendations from the 2018 update to the WHO Consolidated guidelines on the use of antiretroviral
0.	drugs for treating and preventing HIV infection in a national process:
	Yes, completed
	Ongoing
	No
	Other (please specify):
	Please upload a copy of any available updated national guideline documents.
9.	What is the recommended CD4 threshold for initiating antiretroviral therapy in adults and adolescents who are asymptomatic, as per Ministry of Health (MOH) guidelines or directive?
	No threshold; treat all regardless of CD4 count
	≤500 cells/mm3
	≤350 cells/mm3
	Other (please specify):
9.1	What is the status of implementing treat all regardless of CD4 count?:
	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):
9.2	If your country has not yet adopted a treat all policy in accordance with the 2016 WHO <i>Consolidated guidelines on the use of</i> antiretroviral drugs for treating and preventing HIV infection, is there a plan to move towards adopting and implementing a treat all policy in the future?
	Yes
	No
9.2a	If yes, please indicate the year in which it is planned for treat all to be implemented:
	No planned year
	2019
	2020
	2021
	2022
10.	Has your country adopted the WHO 2017 Recommendation on rapid initiation of ART?
	Yes, rapid initiation within 7 days of HIV diagnosis
	No
	Other (please specify):
11.	Does your country offer the possibility to start antiretroviral therapy on the same day as an HIV diagnosis?
	Yes
	No
12.	Does your country use point-of-care CD4 technology?
	Yes
	No

13.	What percentage (estimated) of primary health-care facilities in your country have access to any form of CD4 cell count for testing their patients, whether on-site or nearby by referral?
	%
14.	Is nurse-initiated antiretroviral therapy allowed in your country for any of the following populations (please select all that apply)?
	Non-pregnant adults (men, women and transgender)
	Pregnant women
	Adolescents (10–19 years old)
	Children younger than 10 years old
	None of the above
15.	Does your country have a national policy promoting community delivery (such as outside health facilities) of antiretroviral therapy?
	Yes
	No
15.1	If yes, please specify what approaches are used to support community delivery of antiretroviral therapy:
16.	Is antiretroviral therapy provided in community settings (such as outside health-facilities) for people who are stable on antiretroviral therapy in your country?
	Yes
	Νο
16.1	If yes, is it implemented:
	Nationally
	Regionally
	At pilot sites
	Other (please specify):
17.	Does your country have a national policy on prioritization of people with advanced HIV disease?
	Yes
	No
10	December sources have a patient policy on the fragments of divisities for people who are stable on articular inditional therapy 2
18.	Does your country have a national policy on the frequency of clinic visits for people who are stable on antiretroviral therapy? Yes
	No
18.1	If yes, please specify the frequency of clinic visits in the national policy:
	Once a month
	Every 3 months
	Every 6 months
	Every 12 months
19.	Does your country have a national policy on how frequently people who are stable on antiretroviral therapy should pick-up antiretroviral medicine?
	Yes
	Νο
19.1	If yes, please specify the frequency of antiretroviral medicine pick-up included in the national policy:
	Once a month
	Every 3 months
	Every 6 months
	Every 12 months

20. Please provide the country's national criteria for (or definition of) lost to follow-up. For example, lost to follow-up is defined as a patient who has not received antiretroviral medicines within four weeks of their last missed drug collection appointment:

- Has your country adopted the WHO 2017 recommendation to offer a package of interventions to all patients presenting with advanced 21. HIV disease (defined by WHO as CD4<200)?
- $\square$ Yes, fully adopted
- $\square$ Yes, partially adopted
- No

#### 21.1 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):
- 22. 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
- Antiretroviral therapy providers provide TB treatment in antiretroviral therapy settings
- Maternal, newborn and child health service providers provide antiretroviral therapy in maternal, newborn and child health (MNCH) clinics
- Nutrition assessment, counselling and support provided to malnourished people living with HIV
- Antiretroviral therapy provided in settings providing opioid substitution therapy
- Primary health care providers provide antiretroviral therapy in primary health care settings
- Patient support
- 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):

#### **Antiretroviral therapy regimens**

#### Adults and adolescents

23. Are TDF/3TC or (FTC)/EFV the preferred first-line antiretroviral medicine combinations for treatment initiation in national guidelines, among: Adults and adolescents a) Yes No

- Other (please specify): \_
- b) Pregnant women

- Yes
- No
- Other (please specify): \_

24.	Is dolutegravir (DTG) being introduced as the first-line antiretroviral regimen in your country?
	Yes, introduction of DTG in national guidelines is planned for 2019
	Yes, DTG has been introduced in national guidelines, but procurement has not yet been initiated
	Yes, DTG has been introduced in national guidelines and procurement has been initiated
	No

25.	Does your country use fixed-dose (FDC) antiretroviral therapy combinations as the preferred first-line therapy (please select all that apply):
	Yes, 3 drugs fixed-dose combination taken once a day
	Yes, 2-drug, fixed-dose combination + 1 other drug
	No
	Other (please specify):
26.	Is AZT/3TC (or FTC)/ATV/r (or LPV/r) the preferred second-line antiretroviral combination for adults and adolescents with HIV in the national guidelines?
	Yes
	No
	Other (please specify):
Childro	en
27.	What is the preferred nucleoside reverse transcriptase inhibitor (NRTI) for treatment initiation in children aged less than three with HIV?
	Abacavir (ABC)
	Zidovudine (AZT) Stavudine (d4T)
	Other (please specify):
28.	Are LPV/r based-regimens the preferred treatment option for all infants and children <36 months with HIV (irrespective of NNRTI exposure) in the national guidelines?
	Yes, for all
	No, but recommended for NNRTI-exposed infants only
	Not recommended
29.	Is efavirenz (EFV) recommended as the preferred NNRTI for treatment initiation in children aged three 3 years and older?
	Yes
	No
	Other (please specify):
30.	What is the recommended NRTI backbone for treatment initiation in children aged 3–10 years in the national guidelines?
	TDF + 3TC (or FTC)
	AZT + 3TC (or FTC)
	ABC + 3TC (or FTC)
	Other (please specify):
31.	What is the recommended NRTI backbone for treatment initiation in adolescents >35kg and at least 10 years of age in the national guidelines?
	TDF + 3TC (or FTC)
	AZT + 3TC (or FTC)
	ABC + 3TC (or FTC)
	Other (please specify):
Viral lo	oad
32.	Please identify from national treatment guidelines the measured threshold at which viral load suppression in an individual is defined as a success:

- <1000 copies/ml
- <400 copies/ml
- <200 copies/ml
- <50 copies/ml
- Other (please specify): \_

33.	Does your country have a current national policy on routine viral load testing for monitoring antiretroviral therapy, and to what extent is it implemented?
a)	For adults and adolescents
	Yes, fully implemented
	Yes, partially implemented
	Yes, but not implemented
	No, targeted viral load testing only
	No policy on viral load testing
	No policy on viral load testing
b)	For children
	Yes, fully implemented
	Yes, partially implemented
	Yes, but not implemented
	No, targeted viral load testing only
	No policy on viral load testing
33.1	If your country has a national policy on routine viral load testing, what is the frequency of testing for viral suppression recommended in national policy?
	Annual
	Episodic
	Both annual and episodic
	Other (please specify):
34.	Where is viral load testing currently available in your country?
	Available at specialized centres only
	Available at antiretroviral therapy facilities, either on-site or by referral
	Other (please specify):
34.1	If viral load testing is available at antiretroviral therapy facilities in your country, please provide an estimate of the percentage of antiretroviral therapy facilities that have it available:
34.1	
34.1 35.	antiretroviral therapy facilities that have it available:
35.	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country?
35. □	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No
35. □ □ 36.	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing?
35. 	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes
35. 	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes No
35. 	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes
35. 	antiretroviral therapy facilities that have it available:% Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes No Other (please specify): If yes, what is the level of implementation?
35. 	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes No Other (please specify):
35. 36. 36. 36.1	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes No Other (please specify): If yes, what is the level of implementation? Fully Partially
35. 	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes No Other (please specify): If yes, what is the level of implementation? Fully
35. 	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes No Other (please specify): If yes, what is the level of implementation? Fully Partially
35. 36. 36.1 36.1	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes No Other (please specify):  If yes, what is the level of implementation? Fully Partially Not implemented Does the country have a policy to prioritize viral load testing in select populations and/or situations (i.e., pregnant women, infants,
35. 36. 36.1 36.1 37.	antiretroviral therapy facilities that have it available: % Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes No Other (please specify):  If yes, what is the level of implementation? Fully Partially Not implemented Does the country have a policy to prioritize viral load testing in select populations and/or situations (i.e., pregnant women, infants, adolescents)?
35. 36. 36.1 36.1 37.	antiretroviral therapy facilities that have it available:%% Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes No Other (please specify):
35. 36. 36.1 37. 37.	antiretroviral therapy facilities that have it available:% Is point-of-care viral load testing available at any health facility in your country? Yes No Are dried blood spot specimens recommended in the national policy for viral load testing? Yes No Other (please specify):

HIV drug resistance and toxicity monitoring<sup>24</sup>

38.	Does your country have systems a national plan to monitor HIV drug resistance?
	Yes No
38a.	If yes, please specify the years covered by the plan:
39.	In the past three years, has your country carried out HIV drug resistance (HIVDR) surveillance according to any of the following WHO protocols?
a)	Pre-treatment drug resistance (PDR) surveys <sup>25</sup> 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
a.i.	If yes, please specify:
	Year the last PDR survey started:
b)	Acquired drug resistance surveys among adults <sup>26</sup>
	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
b.i.	If yes, please specify:
	Year the last survey started:
c)	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
c.i.	If yes, please specify:
	Year the last survey started:
d)	HIV drug resistance among infants (<18 months) using early infant diagnosis <sup>27</sup>
	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
d.i.	If yes, please specify:
	Year the last infant survey started:
e)	Survey or routine monitoring of clinic performance using early warning indicators for HIV drug resistance
	Yes
	No
e.i.	If yes, please specify:
	Year it was last monitored:
	Number of clinics monitored:
e.ii.	The early warning indicators for HIV drug resistance were collected through:
	EWI survey in a sample of clinics
	Routine patient monitoring systems
1	Koutine patient monitoring systems

 <sup>&</sup>lt;sup>24</sup> Data from HIV drug resistance surveys should be routinely uploaded to the WHO HIVDR database. Ministry of Health/ART programme designated users can request access by contacting hiv-aids@who.int. For details, please see: http://www.who.int/hiv/topics/drugresistance/hiv-drug-resistance-database/en.
 <sup>25</sup> For details, please see: Surveillance of HIV drug resistance in adults initiating antiretroviral therapy. Geneva: WHO; 2014 (http://www.who.int/hiv/pub/drugresistance/en/, accessed 24 October 2018).
 <sup>26</sup> For details, please see: Survey of HIV drug resistance in adults receiving ART. Geneva: WHO; 2014 (http://www.who.int/hiv/pub/drugresistance/ance/accessed 24 October 2018).
 <sup>27</sup> For details please see: HIV drug resistance. In: World Health Organization: Health Topics [website]. Geneva; WHO; c2018 (http://www.who.int/hiv/topics/drugresistance/en/, accessed 24 October 2018).

40.	Excluding passive pharmacovigilance approaches, does your country make an ongoing systematic effort to monitor the toxicity of antiretroviral medicines in the country?
	Yes
	No
40.1	If yes, what approaches are used (please select all that apply):
	Routine toxicity monitoring as part of the national M&E system
	Active toxicity monitoring/surveillance within cohorts
	Pregnancy registry and surveillance of birth defects
41.	Have toxicity monitoring approaches been introduced to monitor adverse drug reactions to dolutegravir use?
	Yes
	No
41.1	If yes, what approaches are used (please select all that apply)?
	Routine toxicity monitoring as part of the national M&E system
	Active toxicity monitoring/surveillance within cohorts
	Pregnancy registry and surveillance of birth defects
41.2	If yes to Question 41.1, has training of health-care workers on the management, capture and reporting of adverse drug reactions related to dolutegravir been implemented?
	Yes
	No
Adher	ence and retention
42.	Does your country have national policies and/or strategies on adherence support?
<b>42</b> .	Does your country have national policies and/or strategies on adherence support? Yes
42.	Does your country have national policies and/or strategies on adherence support?
<b>42</b> .	Does your country have national policies and/or strategies on adherence support? Yes
<b>42.</b>	Does your country have national policies and/or strategies on adherence support? Yes No
42. 	Does your country have national policies and/or strategies on adherence support? Yes No If yes, do they include (please select all that apply):
42. 	Does your country have national policies and/or strategies on adherence support? Yes No If yes, do they include (please select all that apply): Peer counsellors
42. 	Does your country have national policies and/or strategies on adherence support? Yes No If yes, do they include (please select all that apply): Peer counsellors Text messages
42. 	Does your country have national policies and/or strategies on adherence support? Yes No If yes, do they include (please select all that apply): Peer counsellors Text messages Use of reminder devices
42. 	Does your country have national policies and/or strategies on adherence support? Yes No If yes, do they include (please select all that apply): Peer counsellors Text messages Use of reminder devices Cognitive-behavioural therapy
42. 	Does your country have national policies and/or strategies on adherence support?         Yes         No         If yes, do they include (please select all that apply):         Peer counsellors         Text messages         Use of reminder devices         Cognitive-behavioural therapy         Behavioural skills training/medication adherence training
42. 	Does your country have national policies and/or strategies on adherence support?         Yes         No         If yes, do they include (please select all that apply):         Peer counsellors         Text messages         Use of reminder devices         Cognitive-behavioural therapy         Behavioural skills training/medication adherence training         Fixed-dose combinations and once-daily regimens
42. 42.1	Does your country have national policies and/or strategies on adherence support? Yes No If yes, do they include (please select all that apply): Peer counsellors Text messages Use of reminder devices Cognitive-behavioural therapy Behavioural skills training/medication adherence training Fixed-dose combinations and once-daily regimens Case management
42. 42.1	Does your country have national policies and/or strategies on adherence support? Yes No If yes, do they include (please select all that apply): Peer counsellors Text messages Use of reminder devices Cognitive-behavioural therapy Behavioural skills training/medication adherence training Fixed-dose combinations and once-daily regimens Case management Peer navigation Other (please specify):
42. 42.1 42.1 0 0 0 0 0 0 0 0 0 0 0 0 0	Does your country have national policies and/or strategies on adherence support?         Yes         No         If yes, do they include (please select all that apply):         Peer counsellors         Text messages         Use of reminder devices         Cognitive-behavioural therapy         Behavioural skills training/medication adherence training         Fixed-dose combinations and once-daily regimens         Case management         Peer navigation
42. 42.1	Does your country have national policies and/or strategies on adherence support?         Yes         No         If yes, do they include (please select all that apply):         Peer counsellors         Text messages         Use of reminder devices         Cognitive-behavioural therapy         Behavioural skills training/medication adherence training         Fixed-dose combinations and once-daily regimens         Case management         Peer navigation         Other (please specify):
42. 42.1	Does your country have national policies and/or strategies on adherence support?         Yes         No         If yes, do they include (please select all that apply):         Peer counsellors         Text messages         Use of reminder devices         Cognitive-behavioural therapy         Behavioural skills training/medication adherence training         Fixed-dose combinations and once-daily regimens         Case management         Peer navigation         Other (please specify):         Does your country have national policies and/or strategies on retention in antiretroviral therapy:

- Community-based interventions
- Adherence clubs and peer support
- Other (please specify): \_\_\_\_\_

44.	Are any of the following adherence support services available in your country (please select all that apply):
	Peer counsellors
	Text messages
	Use of reminder devices
	Cognitive-behavioural therapy
	Behavioural skills training/medication adherence training
	Fixed-dose combinations and once-daily regimens
	Case management
	Peer navigation
	Other (please specify):
45	Are treatment literacy programmer available in your country to people living with HIV including information on side effects, drug

45.	Are treatment literacy programmes available in your country to people living with HIV, including information on side effects, drug resistance, etc.?
	Yes

□ No

#### TRIPS

# 46. What public health-related Trade-related Aspects of Intellectual Property Rights (TRIPS) flexibilities\* are incorporated in your country's national legislation on industrial and/or intellectual property, and which have been used to enhance access to HIV-related products and/ or other health products?

Public health-related TRIPS flexibilities	Are they incorporated in national legislation on industrial/intellectual property?	If yes, what is the most recent year in which it was used?	If yes, for which commodity have they been used?
Exhaustion of rights (parallel importation) (Article 6)	Yes/No		
Patentable subject matter (Article 27)	Yes/No		
Research and experimental use exception (Article 30)	Yes/No		
Regulatory (Bolar) exception (Article 30)	Yes/No		
Compulsory licensing (Article 31)	Yes/No		
Public, non-commercial use (government use) (Article 31)	Yes/No		
Scope of pharmaceutical test data protection (Article 39.3)	Yes/No		
Competition law (Article 40)	Yes/No		
Transition periods (Articles 65.2, 65.4 and 66.1)	Yes/No		

2. Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018.

Preve	ntion of mother-to-child transmission of HIV
47.	Does your country have a policy on retesting HIV-negative women during pregnancy, delivery and/or the post-partum/breastfeeding period?
	Yes
	No
47.1	If yes, please select the period(s) when retesting is done (please select all that apply):
	During pregnancy
	At delivery
	Post-partum/breastfeeding
48.	Does your country have a national plan for the elimination of mother-to-child transmission (MTCT) of HIV:
	Yes
	No
48.1	If yes, please specify:
	Target(s) for the mother-to-child transmission rate:
	Year:
	Elimination target(s) (such as the number of cases/population):
	Year:
49.	What is the current nationally recommended regimen for preventing the mother-to-child-transmission of HIV, in accordance with Ministry of Health guidelines or directives: <sup>28</sup>
	Treat all pregnant women and/or breastfeeding women for life
	Antiretroviral therapy during pregnancy and/or breastfeeding only
	Other (please specify regimen):
49.1	If your country is applying a treat all policy for pregnant and breastfeeding women living with HIV, how is it being implemented?
	Implemented in a small number (<50%) of maternal and child health (MCH) sites
	Implemented in a large number (>50–95%) of MCH sites
	Implemented countrywide (>95% of MCH sites)
	Not implemented in practice
	Other (please specify):
	Other (please specify):
50.	What is the current nationally recommended first-line antiretroviral therapy regimen for pregnant and breastfeeding women living with HIV:
	TDF/3TC(FTC)/EFV
	Other (please specify):
51.	What is the current nationally recommended regimen for preventing the mother-to-child transmission of HIV for HIV-exposed infants?
a)	Please specify the infant prophylaxis regimen:
b)	Recommended duration of the regimen:

<sup>28</sup> In countries where breastfeeding is not recommended for women living with HIV please click this response if it only applies to pregnant women.

52.	Does your country have a national recommendation on infant feeding for HIV-exposed infants?
	Yes, breastfeeding
	Yes, replacement feeding
	Yes, both are recommended, left to individual choice or different settings
	No
52.1	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
53.	Is food and nutrition support in your country integrated within PMTCT programmes?
	Implemented in few (<50%) of maternal and child health sites
	Implemented in many (>50–95%) of maternal and child health sites
	Implemented countrywide (>95%) of maternal and child health sites)
	Not implemented in practice
	Other (please specify):
54.	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
	Νο
55.	ls vertical transmission of HIV criminalized in your country?
	Yes
	No
Elimin	ation of mother-to-child transmission of syphilis
56.	Does your country have a national plan for the elimination of mother-to-child transmission of syphilis?
	Yes, integrated with HIV or other elimination initiative(s)
	Yes, standalone (not integrated with HIV or other elimination initiatives)
	No national plan
57.	Does your country have a national policy for routinely screening pregnant women for syphilis?
	Yes
	No
57.1	If yes, what tests are used:
	Laboratory-based non-treponemal (such as RPR/VDRL)
	Laboratory-based treponemal (such as TPPA, TPHA)
	Rapid syphilis treponemal tests (such as those from Bioline, Determine, Chembio)
	Dual HIV/syphilis rapid tests

# Early infant diagnosis

58.	At what age do your national guidelines recommend that infants be tested for HIV (please select all that apply)?
	At birth
	4–6 weeks
	2 months
	6 months
	9 months
	12 months
	18 months
	24 months
59.	In addition to PMTCT 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
	Other (please specify):
60.	Does the country have a policy to provide nucleic acid testing for HIV-exposed infants (early infant diagnosis, nucleic acid test [NAT]) a birth?
	Yes
	Νο
61.	Are HIV-exposed infants tested for HIV antibodies at nine months in your country?
	Yes
	No
62.	Is an HIV antibody test at 18 months of age or final diagnosis HIV antibody test at three months after breastfeeding ends being implemented in your country?
	Yes, at 18 months of age
	Yes, final diagnosis three months after breastfeeding
	Νο
63.	Does your country have a policy or recommendation for point-of-care early infant diagnosis testing?
	Yes
	Νο
63.1	If yes, 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):

64. How many health facilities in your country are providing services for preventing mother-to-child transmission (PMTCT) in the country?\_\_\_\_\_

64.1 How many of the health facilities providing PMTCT services have community accountability mechanisms\* in place?

\_\_\_\_\_

65.	Are there targeted interventions that address any of the following human rights considerations as part of PMTCT programmes (please select all that apply):
	Voluntary and informed consent as sole basis for testing and/or treatment for HIV
	Voluntary and informed consent as sole basis for abortion, contraception and/or sterilization of women living with HIV
	Confidentiality and privacy
	Prevention of grave or systematic human rights abuses* as part of PMTCT programmes
	Due diligence to address any human rights abuses as part of PMTCT programmes
66.	Has a meeting been held at the national level to review PMTCT progress in the past 12 months?
	Yes
	No
66.1	If yes:
a)	Were community and civil society represented at the national review meeting?
	Yes
	No
b)	Were women living with HIV represented at the national review meeting?
	Yes
	No
c)	Was the opportunity provided for community and civil society to provide comments?
	Yes
	No
d)	Was analysis by community and civil society provided in a systematic manner?
	Yes
	No
e)	Was analysis provided by community and civil society documented and disseminated following the meeting?
	Yes
	No
f)	Do women living with HIV in your country participate* in developing national policies, guidelines and strategies relating to PMTCT?
	Yes
	No
Child a	intiretroviral therapy
67.	Do the national guidelines recommend treating all infants and children living with HIV irrespective of symptoms?
	Treat all, regardless of age
	Yes, treat all, aged <10 years Yes, treat all, aged <5 years
	Yes, treat all, aged <2 years
	Yes, treat all, aged <1 years
	Other (please specify):
67.1	What is the status of implementing the treat all policy regardless of age in your country?
	Implemented in a few (<50%) treatment sites Implemented in many (>50–95%) treatment sites
	Implemented in many (>50–95%) treatment sites Implemented countrywide (>95% of treatment sites)
	Not implemented in practice
	Other (please specify):

68.	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
69.	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
70.	Are cohorts of children receiving antiretroviral therapy cohorts monitored (i.e., ensuring that these children are alive and receiving antiretroviral therapy) in national registers at 6 month and 12 month intervals?
	Yes
	No
71.	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):

3. Ensure access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circumcision, harm reduction and condoms, to at least 90% of people, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender people, sex workers and their clients, people who inject drugs and prisoners.

- Ensure that 90% of people at risk of HIV infection have access to comprehensive HIV prevention services, including sex workers and their clients, men who have sex with men, transgender people, people who inject drugs and prisoners.
- Reach 3 million people with pre-exposure prophylaxis by 2020.
- Reach 25 million men with voluntary medical male circumcision in high-incidence countries by 2020.
- Make 20 billion condoms available annually by 2020 in low- and middle-income countries.

Laws	
72.	Are transgender people criminalized and/or prosecuted in your country?
	Both criminalized and prosecuted
	Criminalized
	Prosecuted
	Neither criminalized nor prosecuted
73.	Is cross-dressing criminalized in your country?
	Yes
	Yes, only in parts of the country
	Yes, only under certain circumstances
	Νο
74.	Is sex work criminalized in your country (select all that apply)?
	Selling sexual services is criminalized
	Buying sexual services is criminalized
	Ancillary activities associated with selling sexual services are criminalized
	Ancillary activities associated with buying sexual services are criminalized
	Profiting from organizing and/or managing sexual services is criminalized
	Other punitive and/or administrative regulation of sex work
	Sex work is not subject to punitive regulations and is not criminalized
	Issue is determined/differs at subnational level
75.	Does your country have laws criminalizing same-sex sexual acts?
	Yes, death penalty
	Yes, imprisonment (14 years–life)
	Yes, imprisonment (up to 14 years)
	Yes, penalty not specified
	No specific legislation
	Laws penalizing same-sex sexual acts have been decriminalized or have never existed

76.	Does your country retain the death penalty in law for people convicted of drug-related offences, regardless of whether it is implemented?
	Yes
	Νο
76.1	If yes, what is the level of application?
	High application (sentencing of people convicted of drug offences to death and/or carrying out executions are routine and mainstreamed part of the criminal justice system)
	Low application (executions for drug offences may have been carried out in recent years, but in practice such penalties are relatively rare)
	Symbolic application (the death penalty for drug offences is included in legislation but executions are not carried out)
	Insufficient data to classify the country as having a high, low or symbolic application
77.	Is drug use or possession for personal use an offence in your country (please select all that apply)?
	The law allows possession of a certain amount of drugs
	Drug use or consumption is specified as a criminal offence
	Drug use or consumption is specified as a non-criminal offence
	Possession of drugs for personal use is specified as a criminal offence
	Possession of drugs for personal use is specified as a non-criminal offence
	No
78.	Does your country apply compulsory detention for people who use drugs?
	Yes
	Νο
79.	Apart from criminalization, does your country have other punitive laws affecting lesbian, gay, bisexual, transgender and intersex (LGBTI) people?
	Yes, promotion ("propaganda") laws
	Yes, morality laws or religious norms that limit lesbian, gay, bisexual, transgender and intersex freedom of expression and association
	Yes, others (please specify):
	No

#### Legal protections for key populations

80.	Does your country have any of the following legal protections for transgender people (please select all that apply)?
	Constitutional prohibition of discrimination based on sex
	Constitutional prohibition of discrimination based on gender diversity
	Constitutional prohibition of discrimination based on any grounds
	Prohibitions of discrimination in employment based on gender diversity
	A third gender is legally recognized
	Other non-discrimination provisions specifying gender diversity
	No
81.	No Does your country have any of the following legal protections for sex workers (please select all that apply)?
81.	Does your country have any of the following legal protections for sex workers (please select all that apply)?
81.	Does your country have any of the following legal protections for sex workers (please select all that apply)? Constitutional prohibition of discrimination based on occupation

□ No

82.	Does your country have any laws or other provisions specifying protections based on grounds of sexual orientation (please select all that apply):
	Constitutional prohibition of discrimination based on sexual orientation
	Constitutional prohibition of discrimination based on sex
	Constitutional prohibition of discrimination based on any grounds
	Hate crimes based on sexual orientation considered an aggravating circumstance
	Incitement to hatred based on sexual orientation prohibited
	Prohibition of discrimination in employment based on sexual orientation
	Other non-discrimination provisions specifying sexual orientation
	No
83.	Does your country have any specific antidiscrimination laws* or other protective provisions that apply to people who use drugs?
	Yes
	No
84.	Is there explicit supportive reference to harm reduction in national policies?
	Yes
	No
84.1	If yes, do policies address the specific needs of women who inject drugs?
	Yes
	No
HIV pre	vention for sex workers
85.	Does your country have a national prevention strategy to reduce new infections among sex workers and provide services to sex workers and their clients?
	Yes
	No
05.4	
85.1	If yes, does the national strategy include (please select all that apply):
	Community empowerment and capacity-building for sex worker organizations
	Community-based outreach and services for sex workers and their clients
	Distribution of condoms for sex workers and their clients Clinical services for sex workers and their clients
	Legal support services for sex workers
	Actions to address gender based violence
	Actions to reduce stigma and discrimination in the health setting
85.2	Are there national standard operating procedures (SOPs) or detailed national implementation guidelines for organizations implementing HIV prevention programmes for sex workers?
	Yes, national SOPs apply for all organizations
	No, SOPs only for organizations under specific programme(s)
	No, all organizations use their own procedures
04	
86.	Has your country set national HIV prevention targets for sex workers and their clients for 2020?
	Yes No
86.1	If yes, what are the national prevention targets for sex workers and their clients for 2020?
a)	Annual number of new HIV infections among sex workers and their clients:
b)	Percentage of sex workers and their clients reached by HIV prevention services:
	Sex workers:

HIV r	prevention	for	men	who	have	sex	with	men
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87.	Does your country have a national prevention strategy to reduce new infections among and provide services to gay men and other men who have sex with men?
	Yes
	No
87.1	If yes, does the national strategy include for gay men and other men who have sex with men (please select all that apply)?
	Community empowerment and capacity-building for organizations of men who have sex with men
	Community-based outreach and services
	Distribution of condoms and condom-compatible lubricants
	Sexually transmitted infection (STI) prevention, screening and treatment services
	Clinical services
	Psychosocial counselling and/or mental health services
	Legal support services
	Actions to address homophobic violence
	Actions to reduce stigma and discrimination
87.2	Are there national standard operating procedures (SOPs) or detailed national implementation guidelines for organizations implementing HIV prevention programmes for gay men and other men who have sex with men?
	Yes, national SOPs apply for all organizations
	No, SOPs only for organizations under specific programme(s)
	No, all organizations use their own procedures
88.	Has your country set national prevention targets for gay men and other men who have sex with men for 2020?
	Yes
	No
88.1	If yes, what are the national prevention targets for 2020 for gay men and other men who have sex with men?
a)	Annual number of new HIV infections among gay men and other men who have sex with men:
b)	Percentage of gay men and other men who have sex with men reached by prevention programmes:
HIV pre	vention for people who inject drugs
89.	Do national policies exclude people who are currently using drugs from receiving antiretroviral therapy?
	Yes
	No
90.	Are needle and syringe programmes operational in your country?
	Yes
	No, not at all
	No, but needles and syringes can be purchased legally in pharmacies without a prescription
01	
<b>91</b> .	Can possession of a needle or syringe without a prescription be used as evidence of drug use or cause for arrest in your country?
	Yes
	No
92.	Are opioid substitution therapy (OST) programmes operational in your country?
92.	Are opioid substitution therapy (OSI) programmes operational in your country? Yes
	No

93.	Are drug dependence treatment interventions other than opioid substitution therapy implemented in the country?
	Yes
	No
93.1	If yes, are they for:
	Opioid dependence
	Non-opioid dependence
94.	Is naloxone (used to reverse opioid overdoses) available through community distribution in your country?
	Yes
	No
95.	Do safe injection spaces/rooms exist?
	Yes
	No
95.1	If yes, please specify:
	Number of spaces/rooms:
	Number of enrollees:
1107	
	evention services for prisoners
96.	Are needle and syringe programmes operational in prisons in your country?
	Yes
	No
97.	Are opioid substitution therapy (OST) programmes operational in prisons in your country?
	Yes
	No
98.	Are condoms and lubricants available to prisoners in your country?
	Yes
	No
99.	Are HIV tests in prisons in your country:
a)	Carried out with the informed consent of prisoners?
	Yes
	No
b)	Systematically offered at entry and/or exit?
	Yes
	No
c)	Free of charge?
	Yes
	No
d)	Confidential?
	Yes
	No
_	

e)	Available at any time during detention?
	Yes
	No
f)	Accompanied by relevant and accessible information?
	Yes
	No
g)	Accompanied by confidential pre- and post-test counselling?
9/	Yes
_	No
	NO
<b>L</b> )	Faugly assessible to all price are?
h)	Equally accessible to all prisoners?
	Yes
	No
h.i.	If no, which prisoners do not have equal access?
100.	Is antiretroviral therapy accessible to all prisoners living with HIV in your country?
	Yes
	No
	ention among adolescent girls, young women and their male partners in communities with high HIV incidence
inv piev	endon among addrescent gins, young women and their male partners in communices with high rive incluence
101.	Does your country have a national prevention strategy to reduce new HIV infections among adolescent girls, young women and their male partners in communities with high HIV incidence?
	Yes
	No
	Not applicable
101.1	If yes, does the national strategy include (please select all that apply)?
	Community-based outreach
	Community-based promotion and distribution of condoms specifically for these populations
	Youth-friendly health services
	School-based HIV prevention campaigns (in addition to or as part of sexuality education)
	New media interventions
	Social support/economic empowerment
102.	Has your country set national HIV prevention targets for adolescent girls, young women and their male partners in communities with high HIV incidence?
	Yes
	No
102.1	If yes, what are the national prevention targets for adolescent girls and young women and their male partners for 2020?
a)	Annual number of new HIV infections among adolescent girls and young women aged 15–29 years (please specify number):
b)	Percentage of adolescent girls, young women and their male partners in high-incidence communities reached by HIV prevention services:
	Young women (aged 15–29 years; please specify percentage):
	Male partners (aged 20–34 years; please specify percentage):
	iviale partitiers (ageu 20–34 years, piease specify percentage).
Participa	tion of key populations in the national response

103.	Do men who have sex with men participate* in developing national policies, guidelines and strategies relating to their health in your country?
	Yes
	No

104.	I. Do sex workers participate* in developing national policies, guidelines and strategies relating to their health in your country? Yes			
	No			
105.	Do people who inject drugs participate* in developing national policies, guidelines and strategies relating to their health in your country?			
	Yes			
	No			
106.	Do transgender people participate* in developing national policies, guidelines and strategies relating to their health in your country?			
	Yes			
	No			
107.	Do former and/or current prisoners participate* in developing national policies, guidelines and strategies relating to their health in your country?			
	Yes			
	No			

Services for people affected by humanitarian emergencies

108.	Are the following services accessible to people affected by humanitarian emergencies in your country? (This includes all people affected by emergencies, including but not limited to non-displaced people, refugees and asylum seekers, internally displaced people and migrants.)
a)	HIV counselling and testing
	Yes
	No
	Not applicable
b)	Preventing mother-to-child transmission
	Yes
	No
	Not applicable
c)	HIV treatment
	Yes
	No
	Not applicable
d)	TB screening and treatment
	Yes
	No
	Not applicable
e)	Preventing and treating sexually transmitted infections
	Yes
	No
	Not applicable
f)	Services for key populations
	Yes
	No
	Not applicable

g)	Services for survivors of sexual and gender-based violence*
	Yes
	No
	Not applicable
h)	Food and nutrition support
	Yes
	No

□ Not applicable

# Pre-exposure prophylaxis (PrEP)

109.	Has the WHO recommendation on oral PrEP been adopted in your country's national guidelines?
	Yes, PrEP guidelines have been developed and are being implemented
	Yes, PrEP guidelines have been developed but are not yet being implemented
	No, guidelines have not been developed
109.1	If the WHO recommendation on oral PrEP has not yet been adopted in the national guidelines, is there a plan to adopt a PrEP recommendation in the future?
	Yes
	No
109.1	
а	If yes, please indicate the year when adoption of the PrEP recommendations is planned:
	No planned year
	2019
	2020
	2021
	2022
	Other (please specify):
109.2	If national PrEP guidelines have been developed, please specify for which populations PrEP is provided as per the guidelines:
	Gay men and other men who have sex with men
	Sex workers
	People who inject drugs
	Transgender people
	Serodiscordant couples
	Young women (aged 15–24 years)
	Prisoners
	Other (please specify):
109.3	If national PrEP guidelines have been developed, is a training programme on PrEP provided to health-care personnel?
	Yes
	No
109.4	If national PrEP guidelines have not been developed, indicate the applicable reasons (please select all that apply):
	There is no identified population group with sufficiently high incidence in accordance with the WHO guidelines
	It is not a funding priority
	The medicines are not available in the country
	The technical capacity to consider PrEP is limited
	Other (please specify):
_	- ···· (

109.5	Is PrEP available through any of the following in your country (please select all that apply):
	Research (including pilot studies and demonstration projects)
	Public facilities
	Private providers
	The Internet
	Educational institutions
	Other (please specify):

Voluntary medical male circumcision (VMMC)

Please note these questions are only asked from 16 countries with high HIV prevalence, low levels of male circumcision and generalized heterosexual epidemics: Botswana, Central African Republic, Eswatini, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

110.	Does your country have a national strategy for voluntary medical male circumcision?
	Yes No
110.1	If yes, does it refer to a specific age group?
	Yes, refers to a specific age group (please specify):
	No age group specified
110.1.a	If the national VMMC strategy refers to a specific age group, has a target been set for the number of men in this age group to be reached?
	Yes
	No
110.1.a.i.	If yes, please specify:
	The target number or proportion of men in that age group:
	The target year:
110.2	If yes, does it include any of the following (please select all that apply):
	Guidance on obtaining informed consent from clients
	Guidance on filing client records, including informed consent forms, to ensure client confidentiality
	Guidance on avoiding coercion
	None of the above
111.	What medical male circumcision methods are recommended/approved by the national programme (please select all that apply)?
	Conventional surgical methods (dorsal slit, forceps guided, sleeve resection)
	WHO prequalified device method approved for use
112.	Is voluntary medical male circumcision in your country offered:
	Free of charge
	Free for some
	Full cost to the user
	At a cost shared between user and programme
Condom	s
113.	Does your country have a strategy or plan related to condoms?

113.	Does your country have a strategy or plan related to

Yes No

113.1	If yes, does the national condom strategy or plan explicitly address the needs of and targeted condom programming for the following populations (please select all that apply):
	People living with HIV
	Sex workers (male and female)
	Men who have sex with men
	People who inject drugs
	Young people (15–24 years old)
	People with sexually transmitted infections (STI)
	Prisoners
	The general public
113.2	If yes, does the national condom strategy or plan include (please select all that apply):
	Free distribution to key populations
	Subsidized condom marketing
	Private sector sales
	Condom promotion through mass media
	Condom promotion in (secondary) schools
	Condom distribution in (secondary) schools
	Condom promotion through outreach to communities with high HIV incidence
114.	Have the national needs for condoms been estimated?
	Yes
	No
114.1	If yes, what is the estimated number of condoms needed?
114.2	If yes, for what year is the condom needs estimate?
114.3	If yes, what method was used to estimate the number of condoms needed?
	General population (condoms per sexually active man/year)
	Historical (same as last year + 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):
115.	Can any individuals be prosecuted or punished for carrying condoms in your country?
	Yes
	No
116.	Are there age restrictions for accessing condoms in your country?
	Yes
	No
117.	Are there restrictions on distributing condoms in public places in your country?
	Yes (please specify):
	No

118.	Is there a policy or guidance for provider-initiated condom promotion and distribution in place (i.e., for a health service provider actively offering condom counselling and a condom supply)?
	Yes, for all people of reproductive age visiting a health facility
	Yes, for all key populations and other people at higher risk of HIV infection
	Yes, for all young people who are sexually active
	Yes, for all people accessing HIV testing services
	Yes, for all people accessing hormonal or other methods of contraception
	Yes, for all serodiscordant couples
	No guidance in place
119.	Have there been condom stock-outs* in the past 12 months?
a)	National stock-outs
	Yes
	No
b)	Local stock-outs
	Yes
	No
120.	How many condoms and lubricants were distributed (that left the central or regional warehouses for onward distribution) in the previous calendar year by type of provider?
a)	Male condoms
	Total:
	Public:
	Private:
	NGOs:
b)	Female condoms
	Total:
	Public:
	Private:
	NGOs:
c)	Lubricants
	Total:
	Public:
	Private:
	Private: NGOs:

4. Eliminate gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020.

- Ensure universal access to quality and affordable sexual and reproductive health-care services, including HIV services, for women.
- Eliminate HIV-related stigma and discrimination in health-care settings by 2020.
- Review and reform laws that reinforce stigma and discrimination, including on age of consent, HIV non-disclosure, exposure and transmission, travel
  restrictions and mandatory testing.

Violeno	fiolence		
121.	Does your country have a national plan or strategy to address gender-based violence* and violence against women that includes HIV?		
	Yes		
	Νο		
122.	Does your country have specific legislation on domestic violence*?		
	Yes		
	No		
122.1	If yes, what does this legislation cover (please select all that apply)?		
	Physical violence		
	Sexual violence		
	Psychological violence		
	Emotional violence		
	Economic violence		
	Explicit criminalization of marital rape		
	Protection of former spouses		
	Protection of unmarried intimate partners		
123.	Have any of the following provisions related to domestic violence* been implemented in your country (please select all that apply)?		
	Court injunctions for the safety and security of survivors		
	Special prosecution units in law enforcement		
	Protection services for survivors of domestic violence, such as legal services or shelters		
	Services for the person perpetrating violence		
	Other (please specify):		
124.	Does your country have criminal penalties specifically for domestic violence*?		
	Yes		
	No		
124.1	If yes, have there been any successful prosecutions in the past two years?		
	Yes		
	No		
124.2	If no, is the fact that the violence occurred in a domestic situation cause for specific criminal penalties or consideration by the court if		
	general criminal laws are applied?		
	general criminal laws are applied? Yes		

125.	Does your country have any of the following to protect key populations and people living with HIV from violence (please select all that apply)?
	General criminal laws prohibiting violence
	Specific legal provisions prohibiting violence against people based on their HIV status or belonging to a key population
	Programmes to address intimate partner violence*
	Programmes to address workplace violence
	Interventions to address police abuse
	Interventions to address torture and ill-treatment in prisons
126.	Does your country have service delivery points that provide the following appropriate medical and psychological care and support for women and men who have been raped and experienced incest, in accordance with the recommendations of the 2013 WHO guidelines Responding to intimate partner violence and sexual violence against women?
a)	First-line support or what is known as psychological first aid
	Yes
	No
b)	Emergency contraception for women who seek services
	Yes
	No
c)	Safe abortion if a woman becomes pregnant as a result of rape in accordance with national law
	Yes
	No
d)	Post-exposure prophylaxis for sexually transmitted infections and HIV (within 72 hours of sexual assault) as needed
	Yes
	No
Stigma	and discrimination <sup>29</sup>

127.	Does your country have laws and/or policies in place requiring health-care settings (specifically or as part of broader laws/policies for service providers) to provide timely and quality health care regardless of gender, nationality, age, disability, ethnic origin, sexual orientation, religion, language, socioeconomic status, HIV or other health status, or because of selling sex, using drugs, living in prison or any other grounds?
	Yes, policies exist but are not consistently implemented
	Yes, policies exists and are consistently implemented
	No, policies do not exist
128.	Does your country have interventions targeting health-care workers to build their human rights competencies, to address stigma and discrimination and gender-based violence?
	Yes, at scale*
	Yes, as one-off activities
	Yes, on a small scale
	No
129.	Does your country have laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission?
	Yes
	No, but prosecutions exist based on general criminal laws

<sup>29</sup> Data on the existence of laws or policies restricting the entry, stay and/or residence of people living with HIV are being collected separately by UNAIDS.

No

Parental/guardian and spousal consent for accessing services

130.	Does your country have laws requiring parental/guardian consent for adolescents to access contraceptives, including condoms?
	Yes, for adolescents younger than 18 years
	Yes, for adolescents younger than 16 years
	Yes, for adolescents younger than 14 years
	Yes, for adolescents 12 years or younger
	No
130.1	If yes, is there a process by which adolescents can be deemed mature, allowing them to access contraceptives, including condoms, without parental/guardian consent?
	Yes
	No
131.	Does your country have laws requiring parental/guardian consent for adolescents to access HIV testing and receive the results?
	Yes, for adolescents younger than 18 years
	Yes, for adolescents younger than 16 years
	Yes, for adolescents younger than 14 years
	No
131.1	If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV testing and receive the results without parental/guardian consent?
	Yes
	No
132.	Does your country have laws requiring parental/guardian consent for adolescents to access HIV treatment?
132.	Does your country have laws requiring parental/guardian consent for adolescents to access HIV treatment? Yes, for adolescents younger than 18 years
	Yes, for adolescents younger than 18 years
	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years
	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years
	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years No If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV treatment without parental/
□ □ □ 132.1	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years No If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV treatment without parental/ guardian consent?
□ □ □ 132.1	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years No If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV treatment without parental/ guardian consent? Yes
□ □ □ 132.1	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years No If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV treatment without parental/ guardian consent? Yes
     132.1	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years No If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV treatment without parental/ guardian consent? Yes No
132.1 133.	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years No If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV treatment without parental/ guardian consent? Yes No Does your country have laws requiring spousal consent for married women to access any sexual or reproductive health services?
□ □ □ 132.1 □ 133. □	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years No If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV treatment without parental/ guardian consent? Yes No Does your country have laws requiring spousal consent for married women to access any sexual or reproductive health services? Yes
□ □ □ 132.1 □ 133. □	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years No If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV treatment without parental/ guardian consent? Yes No Does your country have laws requiring spousal consent for married women to access any sexual or reproductive health services? Yes
132.1 133.	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years No If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV treatment without parental/ guardian consent? Yes No Does your country have laws requiring spousal consent for married women to access any sexual or reproductive health services? Yes No
□ □ □ 132.1 □ □ 133. □ □ 134.	Yes, for adolescents younger than 18 years Yes, for adolescents younger than 16 years Yes, for adolescents younger than 14 years No If yes, is there a process by which adolescents can be deemed mature, allowing them to access HIV treatment without parental/ guardian consent? Yes No Does your country have laws requiring spousal consent for married women to access any sexual or reproductive health services? Yes No Does your country have laws requiring spousal consent for married women to access HIV testing?

5. Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year.

135.	Does your country have education policies that guide the delivery of life skills-based HIV and international standards*, in:	l sexuality educatior	n*, according to
a)	Primary school		
	Yes		
	No		
ı.i.	If yes, what percentage of primary schools have fully implemented these policies?		
	76–100%		
	51–75%		
	26–50%		
	0–25%		
<b>b</b> )	Secondary school		
	Yes		
	No		
o.i.	If yes, what percentage of secondary schools have fully implemented these policies?		
	76–100%		
	51–75%		
	26–50%		
	0–25%		
:)	Teacher training		
	Yes		
	No		
136.	Do young people in your country (age 15—24 years old) participate* in developing national p to their health in your country?	policies, guidelines a	nd strategies relatir
_		policies, guidelines a	nd strategies relatir
	to their health in your country?	policies, guidelines a	nd strategies relatir
136. ] ] 136.1	to their health in your country? Yes		
	<b>to their health in your country?</b> Yes No		, where these exist? Do young peopl
	to their health in your country? Yes No If yes, do young people participate* in any of the following decision-making spaces in the na	tional HIV response,	, where these exist? Do young peopl participate in thi
	to their health in your country? Yes No If yes, do young people participate* in any of the following decision-making spaces in the na Decision-making space	tional HIV response, Does it exist?	, where these exist? Do young peopl participate in thi space?
]	to their health in your country? Yes No If yes, do young people participate* in any of the following decision-making spaces in the na Decision-making space Technical teams for the development, review and update of national AIDS strategies and plans Technical teams for the development or review of programmes that relate to young people's	tional HIV response, Does it exist? Yes/No	, where these exist? Do young peopl participate in thi space? Yes/No
	to their health in your country? Yes No If yes, do young people participate* in any of the following decision-making spaces in the na Decision-making space Technical teams for the development, review and update of national AIDS strategies and plans Technical teams for the development or review of programmes that relate to young people's access to HIV testing, treatment, care and support services	tional HIV response, Does it exist? Yes/No Yes/No	, where these exist? Do young peopl participate in thi space? Yes/No Yes/No
]	to their health in your country? Yes No If yes, do young people participate* in any of the following decision-making spaces in the na Decision-making space Technical teams for the development, review and update of national AIDS strategies and plans Technical teams for the development or review of programmes that relate to young people's access to HIV testing, treatment, care and support services National AIDS Coordinating Authority or equivalent, with a broad-based multi-sector mandate	tional HIV response, Does it exist? Yes/No Yes/No Yes/No	, where these exist? Do young peopl participate in thi space? Yes/No Yes/No Yes/No
]	to their health in your country? Yes No If yes, do young people participate* in any of the following decision-making spaces in the na Decision-making space Technical teams for the development, review and update of national AIDS strategies and plans Technical teams for the development or review of programmes that relate to young people's access to HIV testing, treatment, care and support services National AIDS Coordinating Authority or equivalent, with a broad-based multi-sector mandate Global Fund Country Coordinating Mechanism	tional HIV response, Does it exist? Yes/No Yes/No Yes/No Yes/No	, where these exist? Do young peopl participate in th space? Yes/No Yes/No Yes/No Yes/No

6. Ensure that 75% of people living with, at risk of and affected by HIV benefit from HIV-sensitive social protection by 2020.

137.	Does the country have an approved social protection* strategy, policy or framework?
	Yes, and it is being implemented
	Yes, but it is not being implemented
	No
137.1	If yes:
a)	Does it refer to HIV?
	Yes
	Νο
b)	Does it recognize people living with HIV as key beneficiaries?
	Yes
	No
c)	Does it 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
c.i.	If yes, which key populations are recognized as key beneficiaries (select all that apply):
	Sex workers
	Gay men and other men who have sex with men
	Transgender persons
	People who inject drugs
	Prisoners
d)	Does it recognize adolescent girls and young women as key beneficiaries?
	Yes
	No
e)	Does it recognize children affected by HIV as key beneficiaries?
	Yes
	No
f)	Does it recognize families affected by HIV as key beneficiaries?
	Yes
	No
g)	Does it address the issue of unpaid care work in the context of HIV?
g)	Yes
	No
138.	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
139.	Are any cash transfer programmes* for young women aged 15–24 years being implemented in the country?
	Yes
	No

□ No

# 7. Ensure that at least 30% of all service delivery is community-led by 2020.

140.	Are there any of the following safeguards in laws, regulations and policies that provide for the operation of civil society organizations (CSOs) or community-based organizations (CBOs) in your country (please select all that apply)?
	Registration of HIV CSOs is possible
	Registration of CSOs/CBOs working with key populations is possible
	HIV services can be provided by CSOs/CBOs
	Services to key populations can be provided by CSOs/CBOs
	Reporting requirements for CSOs/CBOs delivering HIV services are streamlined
	There are no safeguards in laws, regulations or policies that provide for the operation of CSOs/CBOs in the country
	Other (please specify):
141.	Are there laws, policies or regulations that enable access to funding for CSOs/CBOs?
141. □	Are there laws, policies or regulations that enable access to funding for CSOs/CBOs? 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 service delivery by communities from domestic funding
	Social contracting or other mechanisms allowing for funding of service delivery by communities from domestic funding From international donors
	Social contracting or other mechanisms allowing for funding of service delivery by communities from domestic funding From international donors Both from domestic funding and international donors

8. Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers.

9. Empower people living with, at risk of and affected by HIV to know their rights and to access justice and legal services to prevent and challenge violations of human rights.

142.	In the past two years, have there been training and/or capacity-building programmes for people living with HIV and key populations to educate them and raise their awareness concerning their rights (in the context of HIV) in your country?
	Yes, at scale at the national level
	Yes, at scale at the sub-national level
	Yes, one-off activities
	Yes, at a small scale
	No
143.	Does your country have training programmes for the following groups on human rights and non-discrimination legal frameworks as applicable to HIV?
a)	For police and other law enforcement personnel
	Yes, at scale at the national level
	Yes, at scale at the sub-national level
	Yes, one-off activities
	Yes, small scale
	No
<b>5</b> )	For members of the judiciary
	Yes, at scale at the national level
	Yes, at scale at the sub-national level
	Yes, one-off activities
	Yes, small scale
	No
c)	For elected officials (lawmakers/parliamentarians)
	Yes, at scale at the national level
	Yes, at scale at the sub-national level
	Yes, one-off activities
	Yes, small scale
	No
d)	For health-care workers
	Yes, at scale at the national level
	Yes, at scale at the sub-national level
	Yes, one-off activities
	Yes, small scale
	No
144.	Does your country have training programmes on the prevention of violence against women and gender-based violence for the following groups?
a)	For police and other law enforcement personnel
	Yes, at scale at the national level
	Yes, at scale at the sub-national level
	Yes, one-off activities
	Yes, small scale

□ No

b)	For members of the judiciary
	Yes, at scale at the national level
	Yes, at scale at the sub-national level
	Yes, one-off activities
	Yes, small scale
	No
c)	For elected officials (lawmakers/parliamentarians)
	Yes, at scale at the national level
	Yes, at scale at the sub-national level
	Yes, one-off activities
	Yes, small scale
	No
d)	For health-care workers
	Yes, at scale at the national level
	Yes, at scale at the sub-national level
	Yes, one-off activities
	Yes, small scale
	No
145.	Are there any of the following barriers to providing these trainings and/or capacity-building activities (please select all that apply)?
	Lack of political will
	Lack of ponted with
	Lack of randing Lack of capacity for delivery of trainings
	Barriers that hinder the target audience in accessing such trainings or capacity-building
146.	Does your country have laws protecting against discrimination on the basis of HIV status?
	Yes, constitutional or legislative protections that specify HIV status as a protected attribute
	Yes, constitutional or legislative protections that protect against HIV under another status (such as health, disability or "other status")
	No
147.	Are mechanisms established by the government in place to record and address individual complaints cases of HIV-related discrimination (based on perceived HIV status and/or belonging to any key population), such as (but not limited to) a national human rights institution, ombudsperson, tribunal or commission?
	Yes, please describe:
	No
148.	Does your country have any of the following accountability mechanisms in relation to discrimination and violations of human rights in health-care settings?
	Complaints procedure
	Mechanisms of redress
	Procedures or systems to protect and respect patient privacy or confidentiality
149.	Does your country have any the following human rights monitoring and enforcement mechanisms?
a)	Existence of independent functional national institutions for the promotion and protection of human rights, including human rights commissions, law reform commissions, watchdogs, and ombudspersons which consider HIV-related issues within their work
	Yes
	No
b)	Oversight for implementation of concluding observations and recommendations from treaty monitoring bodies and UPR
	Yes
	No

#### 150. Does your country have mechanisms in place for accessing affordable legal services (please select all that apply)?

- Yes, legal aid systems applicable to HIV casework
- Yes, pro bono legal services provided by private law firms
- Yes, legal services provided by (university-based) legal clinics
- Yes, community paralegals
- Yes, other (please describe): \_ No

10. Commit to taking AIDS out of isolation through people-centered systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C.

• Reduce tuberculosis-related deaths among people living with HIV by 75% by 2020.

Services	Level of integration		
	Fully integrated in all health facilities	Integrated in some health facilities	Delivered separately
HIV counselling and testing with sexual and reproductive health			
HIV treatment and care with sexual and reproductive health			
HIV counselling and testing integrated in TB services			
TB screening in HIV services			
Antiretroviral therapy and TB treatment			
HIV and hepatitis C treatment			
HIV counselling and testing and chronic non-communicable diseases			
Antiretroviral therapy and chronic non-communicable diseases			
HIV counselling and testing and general outpatient care			
Antiretroviral therapy and general outpatient care			
Violence screening and mitigation integrated in HIV services			
HIV testing and counselling integrated in cervical cancer screening and treatment services			
Cervical cancer screening integrated in HIV services			
PMTCT with antenatal care/maternal and child health			
HIV treatment and care with nutrition support			
HIV testing with child health services (including growth monitoring, nutrition and immunization)			
HIV treatment and care with child health services (including growth monitoring, nutrition and immunization)			
HIV and harm reduction services			

152.	Is cervical cancer screening and treatment for women living with HIV recommended in the following?
a.	The national strategy, policy, plan or guidelines for cancer, cervical cancer or the broader response to non-communicable diseases (NCDs)
	Yes
	No
b.	The national strategic plan governing the AIDS response
	Yes
	No
c.	National HIV-treatment guidelines
	Yes
	No
153.	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 TB case finding among people living with HIV
	TB infection control in HIV health-care settings
	Co-trimoxazole prophylaxis
	Hepatitis B screening and management in antiretroviral therapy clinics
	Hepatitis C screening and management in antiretroviral therapy clinics
	Hepatitis B vaccination provided at antiretroviral therapy clinics
	Hepatitis C treatment (direct-acting antiviral agents) provided in antiretroviral therapy clinics
	Other (please specify):
Sexual	y transmitted infections (STIs)
154.	Does your country have national STI treatment guidelines or recommendations?
	Yes
	No
154.1	If yes, in what year were they last updated?
155.	Does your country have a national strategy or action plan for the prevention and control of STIs?
	Yes
	No
156.	Is gonococcal antimicrobial-resistance monitoring conducted in the country?
	Yes, annually
	Yes, less than annually
	No
457	
157.	Does the national definition for congenital syphilis include stillbirths?
	Yes

□ No

# Strategy

158.	Does your country have a national strategy or policy that guides the AIDS response?
	Yes, a stand-alone AIDS strategy or policy
	Yes, a health strategy or policy that integrates the AIDS response
	No
	Other (please specify):
158.1	If yes, has the national HIV strategy or policy been reviewed in the past two years?
	Yes
	No
158.2	If yes, does the national strategy or policy guiding the AIDS response explicitly address the following key populations or vulnerable groups (please select all that apply)?
	Adolescent key populations
	Men who have sex with men
	People in prisons and other closed settings
	People who inject drugs
	Sex workers (male and female)
	Transgender people
	Non-displaced people affected by emergencies
	Refugees
	Internally displaced people
	Migrants and asylum-seekers
158.3	If yes, does the national strategy or policy guiding the AIDS response (please select all that apply):
	Specifically include explicit plans or activities that address the needs of key populations
	Specifically include explicit plans or activities that address the needs of young women and girls
	Draw on the most recent evidence about the national HIV epidemic and the status of the response
	Integrate inputs from a multisectoral process, including various government sectors as well as non-governmental partners
158.4	If yes, does the national strategy or policy guiding the AIDS response include gender-transformative* interventions, including interventions to address the intersections of gender-based violence and HIV?
	Yes
	No
158.4. a	If yes, does the national strategy or policy guiding the AIDS response include a dedicated budget for implementing gender- transformative interventions*?
	Yes
	No
Monito	ring and evaluation
159.	Does your country have a national monitoring and evaluation plan or strategy for HIV?
	Designed Country nave a national monitoring and evaluation plan of strategy for the:

137.	Does your country have a national monitoring and evaluation plan of strategy for hiv?
	Yes, a stand-alone HIV monitoring and evaluation strategy or plan
	Yes, HIV monitoring and evaluation is integrated in a broader health monitoring and evaluation strategy or plan
	No
	Other (please specify):
159.1	If yes, has it been updated in the past two years?
	Yes
	No
159.2	If yes, does it integrate gender-sensitive indicators*?
	Yes
	No

# information system

160.	Does your country routinely collect data on HIV service delivery data that are included in a health information system?
	No system exists for routinely collecting data on HIV service delivery
	Multiple unharmonized or parallel information systems exist that various entities manage and operate separately
	One information system, or a harmonized set of complementary public sector information systems, exists that includes specific indicators on HIV service delivery for national level reporting
	One information system, or a harmonized set of complementary information systems, including community health information systems, exists that includes specific indicators on HIV service delivery for national-level reporting
161.	Does your country have a functioning health information system that is electronic, paper-based or both?
	Yes, electronic
	Yes, paper-based
	Yes, both
	No functioning health information system
161.1	If "Yes, both" above, roughly what percentage of the following are currently captured within national electronic health information system reporting?
	Health facilities delivering HIV services:
	National HIV treatment cohort (i.e., all patients on antiretroviral therapy):
161.2	If a health information system exists, are patient-level viral load testing results routinely available within the health information system?
	Yes, fully
	Yes, partially
	No
161.3	Are treatment cascade data included in the health information system at the district level?
	Yes, fully
	Yes, partially
	No

# Surveillance

# 162. Does the country carry out sentinel surveillance in the following special populations?

Population	Sentinel surveillance conducted	How often is it conducted (in years)?	In what year was the most recent survey conducted?	In what number of sites was surveillance conducted?
Sex workers				
Men who have sex with men				
People who inject drugs				
Transgender people				
In prisons and other closed settings				
Other (please specify):				

163.	Is the country using data from antenatal clinic attendees on the number of women who tested positive for HIV and the number of women already known to be HIV-positive to monitor trends in HIV prevalence?
	Yes
	No

#### Patient monitoring systems

164.	Has the country updated the patient monitoring system indicators and tools using the 2017 WHO Consolidated guidelines on person- centered HIV patient monitoring and case surveillance guidelines?		
	Yes, fully		
	Yes, partially		
	No		
	Don't know		

# Unique identification codes for patients

165.	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?
a)	For treatment services
	Yes
	No
b)	For testing services
	Yes
	No
c)	For HIV prevention services designed for any key population group to track combination prevention uptake (i.e., linking outreach to condoms distribution and/or needle and syringe programmes or other relevant services)
	Yes
	No
c.i.	If yes, for which key population(s) (please select all that apply)?
	Gay men and other men who have sex with men
	Sex workers
	Transgender persons
	People who inject drugs
	Other (please specify):
d)	For laboratory services
	Yes
	No
165.1	If "yes" to 163 a or b:
a)	Data are linked using a national unique person identifier (NUPI), such as a national identification number, national health care number, passport number or social security number
	Yes
	No
b)	Data are linked using a national HIV-specific unique identifier
	Yes
	No
c)	Data are linked using a combination of routinely collected personal identifying information, such as first name, last name and date of birth
	Yes
	No

d)	Data are linked using a biometric (e.g., fingerprint or eye scan)
	Yes
	No
e)	Other methods to link patient information (please specify):
Case re	eporting
166.	Is HIV a nationally notifiable condition by law?
	Yes
	No
166.1	If yes to 167, does the country mandate that subsequent sentinel events for diagnosed HIV cases—such as date and result of first CD4 cell count, date of antiretroviral therapy initiation, and dates and results of first and follow-up viral load tests—be reported?
	Yes
	No
166.2	If yes to 167 and a health information system exists, is case-based surveillance included in the health information system?
	Yes
	No
Mortal	ity
167.	Does the country mandate that all deaths be reported to the civil registration and vital statistics system using a standard death report form that includes cause of death?
	Yes
	No
167.1	If "yes" to 168 and a case reporting system exists, can individual-level data on reported deaths be:
a)	Linked to the country's national HIV case reporting system?
	Yes
	No
b)	Reported directly to the country's national HIV case reporting system?
	Yes
	No
90-90-	90
168.	What is the source of data on the number of people who know their HIV status that is available for Indicator 1.1 for 2018?
	HIV case surveillance
	Modelling
	No data available
	Other (please specify):
168.1	If data are from HIV case surveillance, in what year did national case reporting begin?

- Before 2008
   Between 2009 and 2013
- □ After 2013

169.	What is the source of the number of people living with HIV who are on antiretroviral therapy for Indicator 1.2 for 2018?
	Programme data, primarily reported in aggregate
	Programme data, primarily reported using identifiers
	National estimates based on population survey results
	National estimates based on nationally representative cohort monitoring
	No data available
	Other (please specify):
170.	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
170.1	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 1.2?
	Yes
	No
171.	What is the source of the number of people living with HIV who are virally suppressed for Indicator 1.4 for 2018?
	Aggregate routine programme data from laboratory systems
	Data from case surveillance systems
	Survey
	No data available
	Other (please specify):

# **National Commitments and Policy Instrument: Part B**

\* The guidelines for the NCPI define the terms marked with an asterisk (\*).

1. Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90–90 targets by 2020.

- Commit to the 90–90–90 targets.
- Address regulations, policies and practices that prevent access to safe, efficacious and affordable generic medicines, diagnostics and related health technologies, including by ensuring the full use of the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) flexibilities, and strengthen regional and local capacity to develop, manufacture and deliver quality-assured affordable health products.

2. Where is viral load testing available in your country?	
Available a specialized centres only	
$\Box$ Available at antiretroviral therapy facilities, either on-site or by referral	
Other (please specify):	
<ol> <li>Are any of the following retention support services available in your country (please select all that apply):</li> </ol>	
Community-based interventions	
$\Box$ Adherence clubs and peer support	
Other (please specify):	
<ol> <li>Are any of the following adherence support services available in your country (please select all that apply):</li> </ol>	
Peer counsellors	
Text messages	
Use of reminder devices	
Cognitive behavioural therapy	
Behavioural skills training/medication adherence training	
Fixed-dose combinations and once-daily regimens	
Case management	
Peer navigation	

Other (please specify):\_\_\_\_\_

2. Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018.

5.	How many health facilities in the country are providing services for preventing mother-to-child transmission (PMTCT) of HIV?
6.	How many of the health facilities providing PMTCT services have community accountability mechanisms* in place?
7.	Has a meeting been held at the national level to review PMTCT progress in the past 12 months?
	Yes
	Νο
7.1	If yes:
a)	Were community and civil society represented at the national review meeting?
	Yes
	No
b)	Were women living with HIV represented at the national review meeting?
	Yes
	No
c)	Was the opportunity provided for community and civil society to provide comments?
	Yes
	No
d)	Was analysis by community and civil society provided in a systematic manner?
	Yes
	No
e)	Was analysis provided by community and civil society documented and disseminated following the meeting?
	Yes
	Νο
8.	Do women living with HIV in your country participate* in developing national policies, guidelines and strategies relating to PMTCT?
	Yes
	No
9.	In the context of PMTCT programmes in your country, are there reports or is there documentation of any of the following (please select all that apply):
	Mandatory or coerced testing and/or treatment for HIV
	Lack of informed, voluntary and prior obtained consent
	Forced and coerced abortion, contraception and/or sterilization
	Lack of confidentiality and privacy
	Other grave or systematic human rights abuses* (please describe):
9.1	If there are reports of any of these situations in your country, is the government carrying out due diligence in responding to them?
	Yes
	No
	Don't know

3. Ensure access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circumcision, harm reduction and condoms, to at least 90% of people, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender people, sex workers and their clients, people who inject drugs and prisoners.

- Ensure that 90% of people at risk of HIV infection have access to comprehensive HIV prevention services, including sex workers and their clients, men who have sex with men, transgender people, people who inject drugs and prisoners.
- Reach 3 million people with pre-exposure prophylaxis by 2020.
- Reach 25 million men with voluntary medical male circumcision in high-incidence countries by 2020.
- Make 20 billion condoms available annually by 2020 in low- and middle-income countries.

### Law enforcement

10.	Can possession of a needle/syringe without a prescription be used as evidence of drug use or cause for arrest in your country?
	Yes
	No
11.	Have transgender people in your country been arrested or prosecuted for manifestations of their gender identity in the past three years?
	Yes
	No
	Don't know
12.	Have sex workers in your country been arrested or prosecuted in relation to selling sex in the past three years?
	Yes
	No
	Don't know
13.	Have people in your country been arrested or prosecuted for consensual same-sex sexual acts in the past three years?
	Yes
	No
	Don't know
14.	Have people in your country been arrested or prosecuted for using drugs in the past three years?
	Yes
	No
	Don't know

### 15. Does your country have any of the following legal protection for transgender people (please select all that apply)? Constitutional prohibition of discrimination based on sex Constitutional prohibition of discrimination based on gender diversity Constitutional prohibition of discrimination based on any grounds Prohibitions of discrimination in employment based on gender diversity A third gender is legally recognized Other non-discrimination provisions specifying gender diversity No

### 16. Does your country have any of the following legal protections for sex workers (please select all that apply)? Constitutional prohibition of discrimination based on occupation Constitutional prohibition of discrimination based on any grounds Sex work is recognized as work Other non-discrimination provisions specifying sex work No 17. Does your country have any laws or other provisions specifying protections based on grounds of sexual orientation (please select all that apply)? Constitutional prohibition of discrimination based on sexual orientation Constitutional prohibition of discrimination based on sex Constitutional prohibition of discrimination based on any grounds Hate crimes based on sexual orientation considered an aggravating circumstance Incitement to hatred based on sexual orientation prohibited Prohibition of discrimination in employment based on sexual orientation Other non-discrimination provisions specifying sexual orientation No 18. Does your country have any specific antidiscrimination laws\* or other protective provisions that apply to people who use drugs? $\square$ Yes $\square$ No HIV prevention services for people who inject drugs 19 Are needle and syringe programmes operational in your country? Yes No, not at all No, but needles and syringes can be legally purchased in pharmacies without a prescription

- 20. Is naloxone (used to reverse opioid overdoses) available through community distribution in your country? Yes No
- Are opioid substitution therapy (OST) programmes operational in your country? Yes No HIV prevention services in prisons 22. Are needle and syringe programmes operational in prisons in your country? Yes No 23. Are opioid substitution therapy (OST) programmes operational in prisons in your country? Yes
- No 24. Are condoms and lubricants available to prisoners in your country? Yes No

21.

25.	Is antiretroviral therapy available to all prisoners living with HIV in your country?
	Yes
	No
26.	Are HIV tests in prisons in your country:
a)	Carried out with the informed consent of prisoners?
	Yes
	No
b)	Systematically offered at entry and/or exit?
	Yes
	Νο
-1	
c)	Free of charge?
	Yes
	No
d)	Confidential?
	Yes
	No
2)	Available at any time during detention?
e)	Yes
	Νο
f)	Accompanied by relevant and accessible information?
	Yes
	No
g)	Accompanied by confidential pre- and post-test counselling?
	Yes
	No
h)	Equally accessible to all prisoners?
	Yes
	No
	If no, which prisoners do not have equal access (please specify):
Partici	pation
27.	Do men who have sex with men participate* in developing national policies, guidelines and/or strategies relating to their health in your country?
	Yes
	No
_	
28.	Do sex workers participate* in developing national policies, guidelines and strategies relating to their health in your country?
	Yes
	No
29.	Do people who inject drugs participate* in developing national policies, guidelines and strategies relating to their health in your country?

- Yes
- No

30.	Do transgender people participate* in developing national policies, guidelines and strategies relating to their health in your country?
	Yes
	No
31.	Do former and/or current prisoners participate* in developing national policies, guidelines and strategies relating to their health in
31.	your country?
31.	
31.	your country?
31. □	your country? Yes

# Pre-exposure prophylaxis (PrEP)

32.	Is pre-exposure prophylaxis (PrEP) available through any of the following in your country (please select all that apply):?
	Research (including pilot studies and demonstration projects)
	Public facilities
	Private providers
	The Internet
	Educational institutions
33.	Do any of the following barriers limit access to PrEP in your country (please select all that apply):
	Possession of PrEP used as evidence of sex work or other criminalized sexual activity
	PrEP is only provided in centralized locations
	PrEP is only provided in specialized HIV treatment locations

□ High out-of-pocket cost of PrEP services

4. Eliminate gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020.

- Ensure universal access to quality and affordable sexual and reproductive health-care services, including HIV services, for women.
- Eliminate HIV-related stigma and discrimination in health-care settings by 2020.
- Review and reform laws that reinforce stigma and discrimination, including on age of consent, HIV non-disclosure, exposure and transmission, travel
  restrictions and mandatory testing.

## 34. Have any of the following provisions related to domestic violence\* been implemented in your country (please select all that apply)?

- $\hfill\square$  Court injunctions to ensure the safety and security of survivors
- □ Special prosecutions unit in law enforcement
- $\Box$  Protection services for survivors of domestic violence, such as legal services or shelters
- $\Box$  Services for the person perpetrating violence
- Other (please specify): \_\_\_\_

35. Does your country have any of the following to protect key populations and people living with HIV from violence (please select all that apply)?

- □ General criminal laws prohibiting violence
- Specific legal provisions prohibiting violence against people based on their HIV status or belonging to a key population
- Programmes to address intimate partner violence\*
- Programmes to address workplace violence
- □ Interventions to address police abuse
- □ Interventions to address torture and ill-treatment in prisons

36 Does your country have service delivery points that provide the following appropriate medical and psychological care and support for women and men who have been raped and experienced incest in accordance with the recommendations of the 2013 WHO guidelines Responding to intimate partner violence and sexual violence against women:

- a) First-line support or what is known as psychological first aidYes
- □ No
- b) Emergency contraception for women who seek services within five days
- Yes
- □ No
- c) Safe abortion if a woman becomes pregnant as a result of rape in accordance with national law
- Yes
- □ No

d) Post-exposure prophylaxis for sexually transmitted infections and HIV (within 72 hours of sexual assault) as needed

Yes

🗆 No

37. Does your country have laws and/or policies in place requiring health-care settings (specifically or as part of broader laws/policies for service providers) to provide timely and quality health care regardless of gender, nationality, age, disability, ethnic origin, sexual orientation, religion, language, socioeconomic status, HIV or other health status, or because of selling sex, using drugs, living in prison or any other grounds?

- Yes, policies exist but are not consistently implemented
- $\Box$  Yes, policies exist and are consistently implemented
- No, policies do not exist

5. Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year.

### 38. Do young people (15–24 years old) participate\* in developing national policies, guidelines and strategies relating to their health in your country? Yes No 38.1 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? Yes/No Yes/No 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 multi-sector mandate Global Fund Country Coordinating Mechanism Yes/No Yes/No Civil society coordination spaces of populations most affected by HIV Yes/No Yes/No

Community advisory body for hospitals, clinics and/or research projects

Other (please specify):

Yes/No

Yes/No

Yes/No

Yes/No

6. Ensure that 75% of people living with, at risk of and affected by HIV benefit from HIV-sensitive social protection by 2020.

39.	Do any of the following barriers limit access to social protection* programmes in your country (please select all that apply)?
	Social protection programmes do not include people living with HIV, key populations and/or people affected by HIV
	Lack of information available on the programmes
	Complicated procedures
	Fear of stigma and discrimination
	Lack of documentation that confers eligibility, such as national identity cards
	Laws or policies that present obstacles to access
	High out-of-pocket expenses
	People living with HIV, key populations and/or people affected by HIV are covered by another programme
	Other (please specify):

7. Ensure that at least 30% of all service delivery is community-led by 2020.

40.	Does your country have restrictions to the registration and operation of civil society and community-based organizations that affect HIV service delivery (please select all that apply)?
	Restrictions on registration
	Territorial restrictions to operations, such as zoning
	Restrictions on providing services to key populations
	Cumbersome reporting and other restrictions on operations
	Other (please specify):
	No
41.	Does your country have other regulatory barriers to community-led service delivery (please select all that apply)?
	Restrictions requiring that HIV services only be provided in health-care facilities
	Restrictions on providing services to key populations
	Overly restrictive criteria for eligibility for community-based service delivery (please describe):
	Other (please describe):
	No
42.	Does your country have laws, policies or regulations that hinder access to funding for work by civil society organizations and community-based organizations for HIV-related work (please select all that apply)?
	Lack of social contracting or other mechanisms allowing for funding of community-led service delivery to be funded from domestic funding
	"Foreign agents" or other restrictions to accessing funding from international donors
	Other (please describe):
	No

8. Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers.

9. Empower people living with, at risk of and affected by HIV to know their rights and to access justice and legal services to prevent and challenge violations of human rights.

<b>Rights</b>	literacy
43.	In the past two years have there been training and/or capacity-building programmes for people living with HIV and key populations to educate them and raise awareness about their rights (in the context of HIV) in your country?
	Yes, at scale at the national level
	Yes, at scale at the sub-national level
	Yes, one-off activities
	Yes, at a small scale
	No
44.	Are there any of the following barriers to providing training and/or capacity-building for people living with HIV and key populations to educate them and raise their awareness about their rights (please select all that apply)?
	Lack of political will
	Lack of funding
	Lack of capacity for delivery of trainings
	Barriers that hinder the target audience in accessing such trainings or capacity-building
	Others (please describe):
Accoun	tability mechanisms
45.	Does your country have mechanisms established by the government in place to address cases individual complaints of HIV-related discrimination (based on perceived HIV status and/or belonging to any key population), such as (but not limited to) a national human rights institution, ombudsperson, tribunal or commission?
	Yes (please describe):
	No
46.	Does your country have any of the following accountability mechanisms in relation to discrimination and violations of human rights in health-care settings?
	Complaints procedure
	Mechanisms of redress and accountability
	Procedures or systems to protect and respect patient privacy or confidentiality
	Other (please describe):
47.	Does your country have any of the following barriers to accessing accountability mechanisms present (please select all that apply)?
<b>-</b> ,.	Mechanisms do not function
	Mechanisms are not sensitive to HIV
	Affordability constraints for people from marginalized and affected groups
	Awareness or knowledge of how to use such mechanisms is limited
48.	Does your country have mechanisms in place for accessing affordable legal services (please select all that apply)?
	Yes, legal aid systems applicable to HIV casework
	Yes, pro bono legal services provided by private law firms or individual lawyers
	Yes, legal services provided by (university-based) legal clinics
	Yes, community paralegals
	Yes, other (please describe):
	No

49.	Does your country monitor access to justice among key populations or people living with or affected by HIV?
	Yes (please describe):
	Νο
50.	Do key populations or people living with or affected by HIV face particular barriers in accessing justice in your country?
	No
	Yes—please describe and provide details on the scale (i.e., nationally):

10. Commit to taking AIDS out of isolation through people-centered systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C.

• Reduce tuberculosis-related deaths among people living with HIV by 75% by 2020.

# Annex 1. Selected bibliography

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- Segone M, ed. Country-led monitoring and evaluation systems: better evidence, better policies, better development results. New York: UNICEF; 2009 (http://mics.unicef.org/files?job=W1siZilsljlwMTUvMDEvMzAvMDMvMjUvNTUvNTAwL0NvdW50cnlfbGVkX-01FX3N5c3RlbXMucGRmll1d&sha=cdcc92ec34d8448b).

# Annex 2. The national funding matrix for Indicator 8: total HIV expenditure

The reporting framework of Indicator 8—"Total HIV expenditure"—is organized around a two-dimensional system for recording the HIV expenditure by programme and financing source. The form of reporting therefore has a format of a matrix. The national funding matrix suggested for the Global AIDS Monitoring (GAM) 2019 reporting process contains a complete set of interventions for HIV prevention, treatment and care for the previous reporting cycle (corresponding to the previous Global AIDS Response Progress Reporting Indicator 6.1, which GAM substitutes), presented in a format that reflects the commitments of the new 2016 Political Declaration on Ending AIDS to accelerate the fight against HIV and to end the AIDS epidemic by 2030.

The set of the core sub-indicators comprise: combination prevention, including condoms, pre-exposure prophylaxis (PrEP), voluntary medical male circumcision, harm reduction services, empowering young women and girls and providing essential service packages for key populations; preventing mother-to-child transmission of HIV preventing the mother-to-child transmission of HIV; HIV testing and counselling; HIV-specific laboratory monitoring; antiretroviral therapy; TB/HIV; and social enablers, including reducing stigma and instituting human rights programmes. The programmes that appear as new in the list of interventions were not included in previous guidance and will be further described. The table below provides a complete set of programmes or services that account for the totality of possible use of resources in countries, including core programmes and financing sources for reporting in GAM 2019 cycle. Countries are requested to report on the applicable programmes or services as appropriate (i.e., not all countries should only report on the relevant rows of the matrix, not on each one). The same is true of for the financing sources: they need to be completed as they exist in each country. It is important to note when the expenditure is inexistent nonexistent (i.e., it has a value of "0"), unavailable or when not applicable.

The GAM online reporting tool will provide further guidance on how to complete the reporting forms and submit expenditure indicators to UNAIDS. A more detailed description (scope and boundaries) of each programme included in this matrix and each financing source is available in the indicator registry, which will be updated regularly.

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 sub-set 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 in GAM or elsewhere.

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The National AIDS Spending Assessments (NASA) guidelines are being updated. The expected time for the new guideline to be publicly available is early 2019. There will be a crosswalk on the new AIDS Spending Categories and the GAM funding matrix requested for Indicator 8.1. If a NASA estimation was implemented in the country using the older categories, please follow the correspondence as outlined in the 2017 and 2018 GAM guidelines.

Fast-Track commitments to end AIDS by 2030	Codes in the GAM national funding matrix	GAM 2017 programme categories: complete set of interventions	GAM 2017 programme categories: core Sub-Indicators
<b>Commitment 1.</b> Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90-90 targets by 2020	-	Treatment, care and support (sub-total)	
	1.1	<ul><li>HIV testing and counselling (HTC):</li><li>HIV tests (commodities).</li><li>Other direct and indirect costs.</li><li>Not disaggregated by type of cost.</li></ul>	Expenditure on HIV testing and counselling (non-targeted)
	1.2	Antiretroviral treatment (sub-total)	Expenditure on antiretroviral therapy, adults and paediatric
		<ol> <li>1.2.1. Adult antiretroviral treatment, including:</li> <li>ARVs.</li> <li>Other direct and indirect costs.</li> <li>Not disaggregated by type of cost.</li> </ol>	Expenditure on antiretroviral therapy, adults and paediatric
		<ol> <li>1.2.2. Paediatric antiretroviral treatment, including:</li> <li>ARVs.</li> <li>Other direct and indirect costs.</li> <li>Not disaggregated by type of cost.</li> </ol>	Expenditure on antiretroviral therapy, adults and paediatric
		1.2.3 Antiretroviral therapy not broken down by either age or line of treatment	
	5. 1.	<ul> <li>Specific HIV-related laboratory monitoring (CD4, viral load), including:</li> <li>CD4 cell count, viral load tests (commodities).</li> <li>Other direct and indirect costs.</li> <li>Not disaggregated by type of cost.</li> </ul>	Expenditure on HIV specific laboratory monitoring (CD4 cell count, viral load)

	1.4	Opportunistic infections (OI) prophylaxis and treatment, excluding treatment and prevention of tuberculosis for people living with HIV		
	1.5	Palliative care		
	1.6	Support and retention	Not <i>i</i>	Not Applicable for retention
<b>Commitment 2.</b> Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018	N	Prevention of vertical transmission of HIV (sub- total)	Expenditure on prevention of vertical transmission of HIV	
	5.7	<ul> <li>HIV testing and counselling (HTC) for pregnant women, including:</li> <li>HIV tests (commodities).</li> <li>Other direct and indirect costs.</li> <li>Not disaggregated by type of cost.</li> </ul>	Expenditure on prevention of vertical transmission of HIV	
	2.2	Early infant diagnosis, including: HIV tests (commodities). Other direct and indirect costs. Not disaggregated by type of cost.	Expenditure on prevention of vertical transmission of HIV	
	2.3	Antiretroviral treatment to reduce vertical transmission of HIV, including: • ARVs. • Other direct and indirect costs. • Not disaggregated by type of cost.	Expenditure on prevention of vertical transmission of HIV	
	2.4	Non-ARV related component of PMTCT	Expenditure on prevention of vertical transmission of HIV	
<b>Commitment 3.</b> Ensure access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circuncision, harm reduction and condoms, to at least 90% of people by 2020, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender persons, sex workers and their clients, persons who inject drugs and prisoners <b>Commitment 8.</b> Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers	m	Prevention (sub-total)		
	3.1	Social and behavior change (SBC) programmes	Non-targeted	

3.2	<ul> <li>Condoms, including:</li> <li>Condoms (commodities).</li> <li>Other direct and indirect costs.</li> <li>Not disaggregated by type of cost.</li> </ul>	Condoms (non-targeted)
3.3	Pre-exposure exposure prophylaxis (PrEP) disaggregated by key populations (sub- total)	Pre-exposure prophylaxis (PrEP) stratified by key population
	3.3.1. PrEP for gay men and other men who have sex with men (MSM)	Pre-exposure prophylaxis (PrEP) stratified by key population
	3.2.2. PrEP for sex workers	Pre-exposure prophylaxis (PrEP) stratified by key population
	3.3.3. PrEP for persons who inject drugs (PWID)	Pre-exposure prophylaxis (PrEP) stratified by key population
	3.3.4. PrEP for transgender persons	Pre-exposure prophylaxis (PrEP) stratified by key population
	3.3.5. PrEP	Pre-exposure prophylaxis (PrEP) stratified by key population
	3.3.6. PrEP for young women and adolescent girls in high-prevalence countries	Pre-exposure prophylaxis (PrEP) stratified by key population
	3.3.7. Pre-exposure prophylaxis for serodiscordant couples	Pre-exposure prophylaxis (PrEP) stratified by key population
3.4	Voluntary medical male circumcision (VMMC) in high prevalence countries	Voluntary medical male circumcision (VMMC)
3.5 .5	<ul> <li>Prevention, promotion of testing and linkage to care programmes for gay men and other men who have sex with men (MSM), including:</li> <li>HIV tests (commodities).</li> <li>Condoms, lubricants, and other commodities.</li> <li>Other direct and indirect costs.</li> <li>Not disaggregated by type of cost.</li> </ul>	Prevention among key populations

		Prevention, promotion of testing and linkage to care programmes for sex workers and their clients, including:	
	3.6	<ul> <li>HIV tests (commodities).</li> <li>Condoms, lubricants, and other commodities.</li> </ul>	Prevention among key populations
		<ul> <li>Other direct and indirect costs.</li> <li>Not disaggregated by type of cost.</li> </ul>	
	3.7	Prevention, promotion of testing and linkage to care programmes for persons who inject drugs (sub-total)	Prevention among key populations
		3.7.1. Needle and syringe exchange, and prevention, promotion of testing and linkage to care prevention programmes for people who inject drugs, including:	
		<ul> <li>Injecting equipment.</li> <li>HIV tests (commodities).</li> <li>Condoms, lubricants, and other commodities.</li> </ul>	Prevention among key populations
		<ul> <li>Vuter unext and indirect costs.</li> <li>Not disaggregated by type of cost.</li> </ul>	
		3.7.2. Substitution therapy, including:	
		<ul> <li>Replacement drug, such as methadone or buprenorphine (commodities).</li> </ul>	Prevention among key populations
		<ul> <li>Other direct and indirect costs.</li> <li>Not disaggregated by type of cost.</li> </ul>	
	3.8	Prevention, promotion of testing and linkage to care programmes for transgender persons	Prevention among key populations
	3.9	Prevention, promotion of testing and linkage to care programmes for prisoners	Prevention among key populations
	3.10	Prevention, promotion of testing and linkage to care programmes targeting young women and adolescent girls (high-prevalence countries)	Prevention among key populations
	3.11	Cash transfers to girls (high-prevalence countries), including: • From HIV earmarked budgets.	Expenditures on cash transfers for young women and girls (10–24 years, high- prevalence countries)
Not applicable	3.12	Prevention programmes for vulnerable and accessible populations	

Not applicable	3.13	Post-exposure prophylaxis (PEP)
Not applicable	3.14	Workplace
Not applicable	3.15	Synergies with health sector
	3.16	Prevention of HIV transmission aimed at PLHIV not broken down by type
<b>Commitment 4.</b> Eliminate gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020	4	Gender programmes
<b>Commitment 5.</b> Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year	ъ	Programmes for children and adolescents
<b>Commitment 6.</b> Ensure that 75% of people living with, at risk of and affected by HIV benefit from HIV-sensitive social protection by 2020	Q	Social protection
<b>Commitment 7</b> . Ensure that at least 30% of all service delivery is community-led by 2020	7	Community mobilization
<b>Commitment 8.</b> Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers	ω	Governance and sustainability (sub-total)
	8.1	Strategic information
	8.2	Programme management
	8.3	Procurement and logistics
	8.4	Health systems strengthening
Not applicable	8.5	Education

Not applicable	8.6	HIV and AIDS related research	HIV workforce	rkforce
<b>Commitment 9.</b> Empower people living with, at risk of and affected by HIV to know their rights and to access justice and legal services to prevent and challenge violations of human rights	6	Critical enablers (sub-total)		
	9.1	Policy dialogue	Expenditures on social enablers	
	9.2	Key human rights programmes	Expenditures on social enablers	
	9.3	AIDS-specific institutional development	Expenditures on social enablers	
<b>Commitment 10.</b> Commit to taking AIDS out of isolation through people-centred systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C	6	TB/HIV co-infection, diagnosis and treatment (sub-total)	Expenditure on TB/HIV	
	10.1	TB screening and diagnosis in PLHIV	Expenditure on TB/HIV	
	10.2	TB prevention and treatment for PLHIV	Expenditure on TB/HIV	
Not applicable		Other essential programmes outside the suggested framework of core HIV and AIDS programmes (please list below and specify)		
		Total	Total HIV Expenditure	

# commodities procured and distributed Annex 3. Volumes and unit prices of

As part of Indicator 8.1, it is mandatory to complete the information on volumes and unit prices of commodities 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]	60 mg + 30 mg					
Tenofovir + Lamivudine [TDF + 3TC]	300 mg + 300 mg					
Darunavir [DRV]	300 mg					
Dolutegravir [DTG]	50 mg					
Others (please specify):						

Volumes and unit prices commodities by funding source in local currency units

The number of packs procured needs to be provided for each batch of procurement of a regimen/formulation.

The data on the number of packages picked up by beneficiaries correspond to the regimen/formulations without need to disaggregate by procurement process.

By choosing the option "Other," 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 as shown in Annex 3.

# Annex 4. Expected levels of earmarked domestic budget for HIV

As part of Indicator 8.1, it is mandatory to complete the information on earmarked budgets for HIV. The form for submitting earmarked budgets is illustrated in the example below.

It would be beneficial for the expenditure data to be captured along with the budget data. These two pieces of data collected concurrently would also allow for some analysis of spending per input.

To fill in the form:

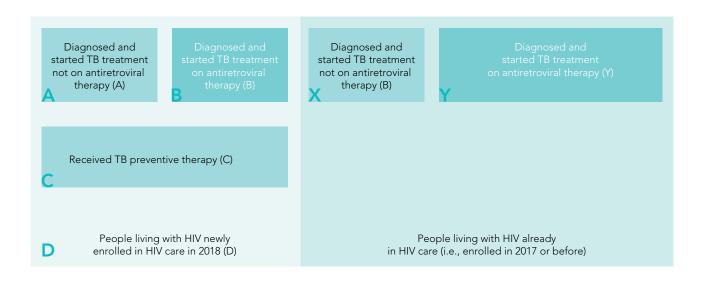
Select the fiscal year (FY) January-December

- Indication of a fiscal year is required. A fiscal year may or may not align with the calendar year (use the fiscal year which starts on the calendar year specified in the field).
- Choose the reporting currency, which could be filled in local currency or converted into U.S. dollars.

- 3. It is required to express the amounts in currency units, thousand or million.
- 4. Fill the approved and executed budget in the corresponding fiscal year. The approved budget includes the domestic budget which is approved by the government and international budgets which are signed in the respective agreements for the same fiscal year. The executed budget is the spending of the approved budget. So, 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 since some expenditures incurred were not funded by HIV-specific earmarked budgets.
- 5. Indicate the perception about possible budget increase or decrease level for the next fiscal year.

hoose the reporting currency			
mounts expressed in			
Provide the earmar	ked budget for HIV		
	Approved (beginning of F	d (ended FY)	
Fiscal year starting 2018	Approved (beginning of F		
Fiscal year starting 2018 Fiscal year starting 2019	Approved (beginning of F		
	Approved (beginning of F		

# Annex 5: Additional guidance on constructing Global AIDS Monitoring indicators on HIV and tuberculosis (GAM indicators 10.1–10.3)



Indicator 10.1: Percentage of estimated HIV-positive incident tuberculosis (TB) cases that received treatment for both TB and HIV = (B+Y)/estimated number

**Note:** Numerator for Indicator 10.1 should be equal to the number of HIV-positive new and relapse TB patients who started antiretroviral therapy as reported by the national TB programme. Please reconcile data with the National Tuberculosis Programme.

**Indicator 10.2:** Percentage of people living with HIV with active TB disease among people living with HIV newly enrolled in HIV care = (A+B)/D **Note:** Numerator for Indicator 10.1 will be greater than for Indicator 10.2.

Indicator 10.3: Percentage of people living with HIV newly enrolled in HIV care started on TB preventive therapy = C/D

\*(A+B+X+Y) represents the total number of HIV-positive TB cases reported by national TB programmes to WHO. Source: Adapted from: A guide to monitoring and evaluation for collaborative TB/HIV activities. Geneva: WHO; 2015.

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