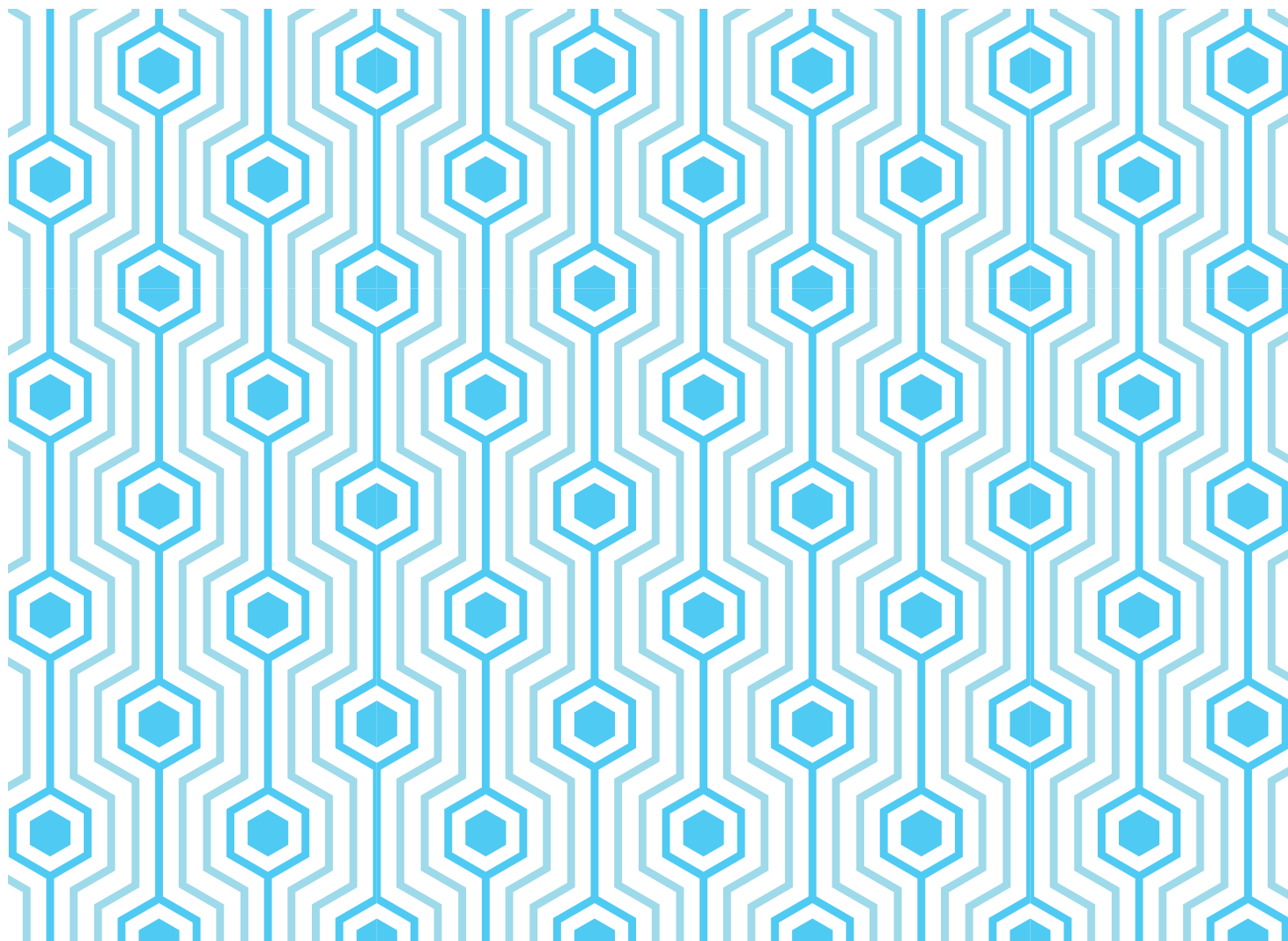


Global AIDS Monitoring 2018

Indicators for monitoring the
2016 United Nations Political Declaration on Ending AIDS



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Modelled HIV estimates using the updated Spectrum software are due by 22 March 2018.

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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

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

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-to-child 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) include:

- ➔ Number of children newly infected with HIV (see HIV incidence)
- ➔ HIV treatment among children: antiretroviral therapy (see 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
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 - 3.6A Condom use among sex workers
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3.6D Condom use among transgender people

- ➔ 3.7 Coverage of HIV prevention programmes among key populations
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 - 3.7D Coverage of HIV prevention programmes among transgender people

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
- ➔ 3.10 Coverage of opioid substitution therapy

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 high-incidence 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 middle-income countries

- ➔ 3.18 Condom use at last high-risk sex
 - Number of condoms distributed (Interim 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 because of stigma and discrimination to sex workers
 - 4.2B Avoidance of health care because of stigma and discrimination to men who have sex with men
 - 4.2C Avoidance of health care because of stigma and discrimination to people who inject drugs

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

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 health-care 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

Interim 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) include:

- ➔ Women 15–24 years old newly infected with HIV (see HIV incidence)
- ➔ Condom use at last high-risk sex among young women 15–24 (see 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 2019

Interim 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 2019

Interim 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 mother-to-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*

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) include:

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 coinfecting with HIV and HBV receiving combined treatment
- ➔ 10.8 Hepatitis C testing
- ➔ 10.9 People coinfecting 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	lamivudine
AIDS	acquired immunodeficiency syndrome
AZT	zidovudine
DTG	Dolutegravir
EFV	efavirenz
FTC	emtricitabine
HIV	human immunodeficiency virus
HBV	hepatitis B virus
HCV	hepatitis C virus
HPV	human papillomavirus
ILO	International Labour Organization
LPV/r	lopinavir with a ritonavir boost
NGO	nongovernmental organization(s)
NASA	National AIDS Spending Assessment
NVP	nevirapine
NNRTI	non-nucleoside reverse- transcriptase inhibitor
NRTI	nucleoside reverse- transcriptase inhibitor
PrEP	pre-exposure prophylaxis
RPR	rapid plasma reagin
TB	tuberculosis
TDF	tenofovir disoproxil fumarate
TPHA	Treponema pallidum haemagglutination assay
TPPA	Treponema pallidum particle agglutination assay
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNODC	United Nations Office on Drugs and Crime
VDRL	Venereal Disease Research Laboratory
WHO	World Health Organization

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 HIV and AIDS: On the Fast-Track to Accelerate the Fight against HIV and to End the AIDS Epidemic by 2030,¹ 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. This Political Declaration 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 at the United Nations General Assembly Special Session on HIV/AIDS in 2001. The 2001 Declaration 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 global, regional and country-level responses to prevent people from becoming newly infected with HIV, expand health-care access and mitigate the impact of the epidemic.

¹ 2016 United Nations Political Declaration on HIV and AIDS: On the Fast-Track to Accelerate the Fight against HIV and to End the AIDS Epidemic by 2030. Geneva: UNAIDS; 2016 (General Assembly Resolution 70/266; <http://www.unaids.org/en/resources/documents/2016/2016-political-declaration-HIV-AIDS>, accessed 15 November 2016).

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 focuses on the next 5 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 declaration, the vision extends far beyond the government sector to private industry and labour groups, faith-based organizations, nongovernmental organizations (NGOs) and other civil society entities, including those representing people living with HIV.

As indicated in the 2016 Political Declaration, 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 require 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 2018 Global AIDS Monitoring is the second year after the transition from the Millennium Development Goals to the Sustainable Development Goals and also the second year of reporting for the HIV monitoring framework for

2016–2020. This year's guidelines reflect a review of the indicator set used for global reporting in previous years. WHO, UNAIDS and partners collaborated to compile the consolidated strategic information guidelines for HIV in the health sector,² which have informed the Global AIDS Monitoring guidelines.

In the 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 progress in achieving national HIV targets. They will contribute to improving understanding of the global response to the HIV epidemic, including progress towards achieving the global targets set in the 2016 Political Declaration and the Sustainable Development Goals.³

These guidelines are designed to improve the quality and consistency of the 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.

² 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 15 November 2016).

³ Fast-Track Commitments to End AIDS by 2030 (http://www.unaids.org/sites/default/files/media_asset/fast-track-commitments_en.pdf).

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.

- **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 response to HIV (previously called Universal Access indicators) and is also aligned with the Sustainable Development Goal indicators, making the 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 indicators⁴ and the 2015 WHO consolidated strategic information guidelines for HIV in the health sector.⁵ 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 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 have improved significantly in the past years, 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 complement each other, providing a more complete view of the AIDS response in a given country context.

⁴ Global reference list of 100 core health indicators. Geneva: World Health Organization; 2015 (<http://www.who.int/healthinfo/indicators/2015/en>, accessed 15 November 2016).

⁵ 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 15 November 2016).

- **Innovative and forward looking.** For flexibility in the coming years, for selected indicators, the option to report using alternative data sources (different types of surveys and programmatic data) is presented. Community-driven data collection in multiple forms, such as through social media or dating applications, could be complementary to indicator data collected and offer further insights into the situation.

Reporting history

UNAIDS has collected country progress reports from Member States, to monitor the various political declarations, 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 174 Member States (90%) reporting in 2017 (Figures 1 and 2).

Figure 1

Trend in response rates, 2004–2017

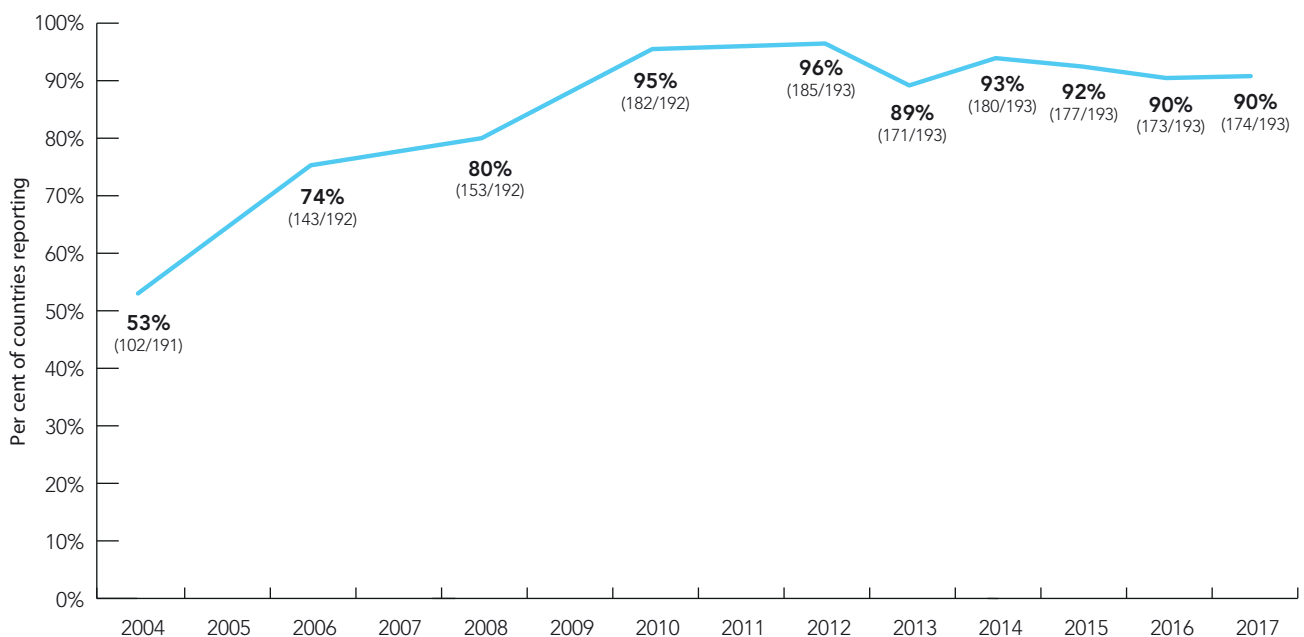
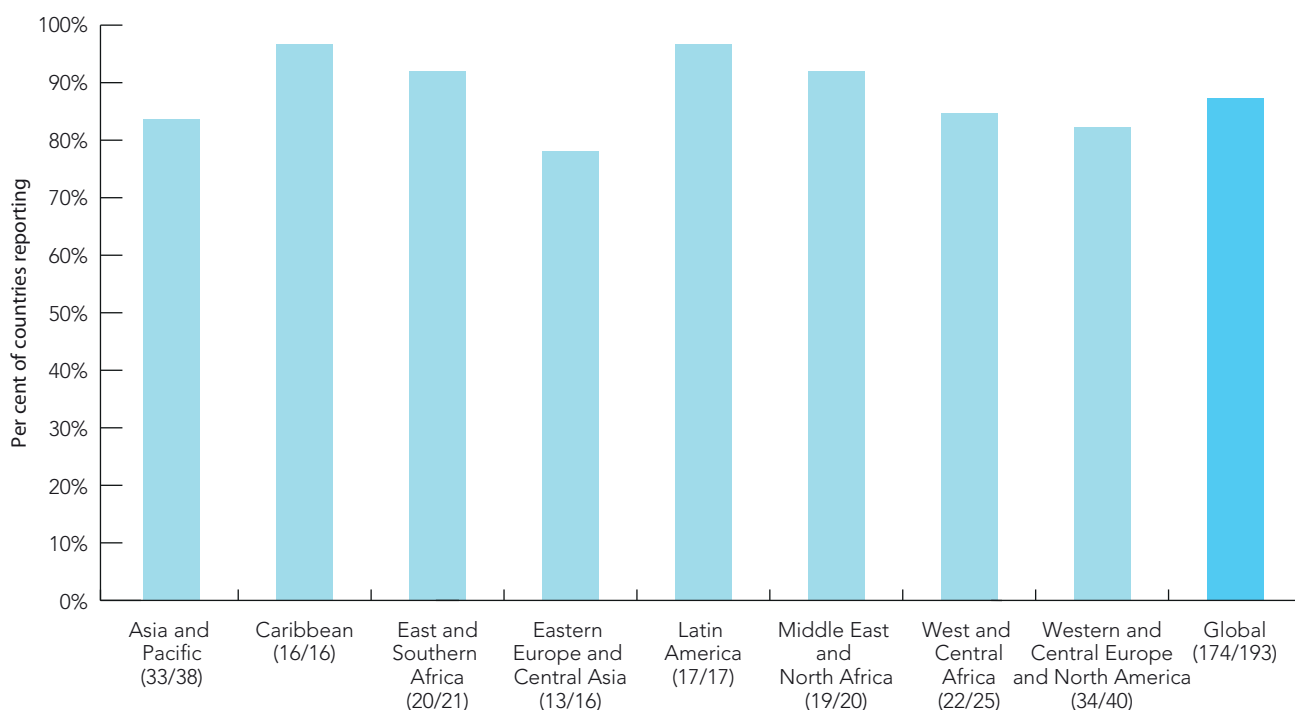


Figure 2

Proportion of countries that submitted reports in the 2017 cycle of Global AIDS Monitoring



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 2016 reporting round are available at:

<http://www.unaids.org/en/dataanalysis/knowyourresponse/countryprogressreports/2016countries>

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 2018 reporting requires submission of the indicators and the Interim NCPI⁶. When submitting Global AIDS Monitoring data, countries are encouraged to also 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.

The 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 29 March 2018.

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 other countries' national-level responses.

The changes in this round of reporting compared with the 2017 reporting round are summarized on pages 29-31.

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 is 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 specific 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 be valuable to also 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

⁶ The Interim NCPI includes a sub-set of questions from the NCPI Part A which relate to policy elements that may change more frequently.

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 effectively monitor the issue in question, 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 HIV and 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 that 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 Political Declaration on HIV and 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.

In 2018, UNAIDS and ECDC have agreed to strengthen their collaboration and to reduce reporting burden for countries. EU/EEA countries will be reporting to ECDC which will share the data with UNAIDS.

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:

- 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:

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

Existing data sources, including records and programme reviews from health facilities and schools as well as 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 Spectrum⁷ computer package that 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.

In 2018, Spectrum files will be completed shortly before the Global AIDS Monitoring data are submitted, to ensure that the results

are harmonized. Final Spectrum files should be submitted by 22 March 2018, allowing time to compare the values of the indicator submission and Spectrum. Country teams will receive information on the 2018 estimates process in January 2018. Countries have the option to import the 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.

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

Civil society organizations are valuable actors in the AIDS response and may contribute data for

Uncertainty bounds around UNAIDS estimates⁸

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 AIDS-related causes lie within the reported ranges. Over time, more and better data from countries will steadily reduce uncertainty.

⁷ Spectrum/EPP [website]. Geneva: UNAIDS; 2017 (<http://www.unaids.org/en/dataanalysis/datatools/spectrum-epp>).

⁸ Ending AIDS. Geneva: UNAIDS; 2017 (http://www.unaids.org/sites/default/files/media_asset/Global_AIDS_update_2017_en.pdf).

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, population-based 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, these 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 the 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, more rapid 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 that is 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 the 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 such 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. 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.⁹ Sex- and age-disaggregated epidemiological data and the 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 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 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 accurately report 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 has proved 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 the UNAIDS, WHO and UNICEF country offices) 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 reflects 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.

⁹ WHO, UNAIDS. A practical tool for strengthening the gender sensitivity of national sexual and reproductive health and HIV monitoring and evaluation systems. Geneva: World Health Organization; forthcoming.

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 report¹⁰ gave examples of how countries focus on specific populations and locations to Fast-Track their HIV response.

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 (see next paragraph for details).

The current version of 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 try to achieve representative sampling of these populations: for example, 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 79 for more details. Some countries with empirical national size estimates for key populations can also aggregate prevention

¹⁰ 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 15 November 2016).

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

Countries needing additional information on implementation should seek technical assistance from their UNAIDS strategic information advisers, UNICEF or WHO offices and 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 this response. 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 effectively analyse these linkages, 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. 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 in monitoring government progress in delivering services. Shadow reports can be submitted through aidsreporting@unaids.org.

Content of the report

In 2018, 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, 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 openly 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 the 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 National Commitments and Policy Instrument and narrative summaries of the data for each commitment or available national narrative reports should be submitted online by 29 March 2018.

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 to 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 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 the current year data, countries may

request to modify their data for past years if necessary. 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. 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 GAM as that submitted for 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 to 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:

1. 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 2018**.
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 the Interim NCPI.
4. Develop and disseminate a plan for collecting data for Global AIDS Monitoring indicators and the National Commitments and Policy Instrument, including timelines and the roles of the national AIDS committee or equivalent, other government agencies, civil society and other relevant partners.
5. 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.
6. 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 the Interim 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 National Commitments and Policy Instrument 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 (Interim NCPI), jointly in coordination 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 **22 March 2018**.
13. Submit all indicator data, Interim NCPI responses and narrative summaries by commitment on or before **29 March 2018**.
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 the 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 2018

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 2018 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 to 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 Response Progress Reporting. 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 the logistics data match the service delivery statistics regarding the delivery of antiretroviral therapy.
- Discuss the difference between these statistics. In the absence of unique identifiers for people receiving antiretroviral therapy, the reasons for discrepancies between the two statistics could include unrecorded deaths, people being lost to follow-up and migration between countries or between facilities.

Summary of the changes to the indicator set for 2018 reporting

The 2018 reporting requires submitting data on indicators and the Interim NCPI . The narrative report is optional.

Some indicators have been modified based on the recommendations from the review of GAM by the global Monitoring Technical Advisory Group which met in November 2017, and some indicators have been added.

The changes for the 2018 reporting round are summarized below.

- Two indicators have been introduced to report on the progress towards eliminating mother-to-child transmission of HIV and eliminating stigma and discrimination in health-care settings by 2020:
 - 2.6 HIV testing among pregnant women
 - 4.4 Experience of HIV-related stigma and discrimination in health-care settings
- Fourteen indicators have been modified for this year's reporting
 - 2.3 Preventing the mother-to-child transmission of HIV.
 - Common examples of ARV regimens for Options B+ and B were updated.
 - 3.4 HIV testing among key populations (A-D).
 - These indicators were renamed to avoid confusion with Indicator 1.1 (People living with HIV who know their HIV status), which measures progress towards the first 90.

- 3.14 Viral hepatitis among key populations.
 - Viral hepatitis among prisoners was removed because this will be captured as a subitem of Indicator 3.13 (HIV prevention programmes in prisons).
- 3.15 People who received PrEP.
 - Instead of collecting data of people who received pre-exposure prophylaxis (PrEP) for the first time, data will be collected for people receiving PrEP at least once during the reporting period.
 - A disaggregation will be added for people receiving PrEP for the first time during the reporting period.
- 4.2 Avoidance of health care among key populations because of stigma and discrimination (A-D).
 - The definition of this Indicator was broadened from avoidance of HIV services to avoidance of any health-care services.
- 8.1 Total HIV expenditure.
 - As in previous reporting rounds, the HIV expenditures disaggregated by programme category and financing sources are reported in the National Funding Matrix template. There are no changes to the Matrix, since the classification of HIV programme categories continue to be aligned with the commitments of the 2016 Political Declaration on HIV and AIDS. The definition of the core subindicators and associated metadata are provided in the guide; Annex 2 provides a full range of HIV programme categories and a cross walk with the existing NASA's AIDS Spending Categories (ASC).
- The cover page of the funding matrix has now been expanded to capture information on budgets and identification of the resource tracking exercises conducted in the country.
 - In addition, a new matrix has been included to capture the volumes and unit prices of antiretroviral commodities (Annex 3).
- 10.3 People living with HIV who started TB preventive therapy.
 - Countries that cannot report on the number of people living with HIV newly enrolled in HIV care who started Tuberculosis (TB) preventive therapy, can provide the number of people living with HIV currently enrolled in HIV care who started TB preventive therapy.
- 10.10 Cervical cancer screening among women living with HIV.
 - Countries will be given the opportunity to report on HIV testing among women screened for cervical cancer if data on cervical cancer screening among women living with HIV are not available.

- Countries can also provide the number of positive HIV test results among screened for cervical cancer.

UNAIDS is working with key organizations in the framework of the Monitoring Technical Advisory Group (MTAG) 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 2017, 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 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.
- Indicators: the indicators for which city-level data are requested include: 1.1, 1.2, 1.4, 2.3, 2.6, 3.1–3.5, 3.6A–D, 3.8–3.10, 3.15–3.17 and 10.1–10.3.
- It is highly recommended that relevant city counterparts be consulted when city-level data are gathered for submission.

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 court. He or she may also be held for other legal reasons, like on remand until bail is posted, or for a parole violation. Other populations, for example 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 2018 reporting

For 2018 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 also will be included in the online tool that will facilitate writing the narrative report.

Importing Spectrum data into GAM

Every year, countries produce national Spectrum estimates and respond to the GAM reporting system. Both efforts compile coverage of antiretroviral therapy and prevention of mother to child transmission. 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 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 has been introduced to the GAM online reporting tool that allows the respective national estimates teams to export their Spectrum results into a CSV file that the GAM focal point can import into the GAM online reporting tool. This step will reduce both the data entry required and the chance for errors, and it will improve the consistency of data between the two systems.

A simple tool to export the Spectrum estimates required for GAM, which can then be imported into the GAM online reporting tool has been developed. Importing the Spectrum estimates can be done at

any point and multiple times during the data entry into the GAM 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 GAM, reverting to the country if there are any discrepancies. Importing the estimates into GAM tool requires communication between the national estimates teams and the GAM focal point (if they are separate individuals) to ensure the final file is used.

Overall notes on process:

- Before the import process, the GAM 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 GAM focal point should review the data entry pages for Indicator 1.2 (People living with HIV on antiretroviral therapy) 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**.

Dates*	Activity	Responsible party
December–March	Develop Spectrum file and have it reviewed by UNAIDS	National estimates team
15 March	Send final Spectrum file to UNAIDS	National estimates team
15–28 March	Send Spectrum export CSV file to GAM focal point	National estimates team
22 March	Summary of estimates results sent to national AIDS coordinator for sign off	Global estimates team
22 March	Import Spectrum estimates into GAM for initial review	GAM focal point (national rapporteur)
22–28 March	Review output from Spectrum and send clearance to UNAIDS	National estimates team
22–28 March	Send Updated Spectrum estimate CSV file to GAM focal point with any updates	National estimates team
22–29 March	Import final Spectrum estimates into GAM for final review of GAM	GAM focal point
3–10 April	Compare final Spectrum file with final GAM submission and revert to country if there are discrepancies	Global estimates team

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

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.
7. Email the CSV file to your GAM focal point or follow the next set of instructions if you are the GAM focal point.

Steps for the GAM focal point/national rapporteur when importing the Spectrum extract into GAM:

1. Log into the GAM 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:

- 1.2 People living with HIV on antiretroviral therapy (for 2011–2017).
- By age and sex.
- 1.7 AIDS mortality per 100 000 (for 2011–2017).
 - All, <5, 5–14, 15+ by sex.
- 2.2 Mother-to-child transmission rate (for 2011–2017).
- 2.3 Preventing mother to child transmission of HIV (for 2011–2017).
 - Regimens and coverage.
- 3.1 HIV incidence per 1000 uninfected population (for 2011–2017).
 - 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 GAM, but 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 2011–2017).
 - For all key populations available.
- 3.3 Key populations HIV prevalence (for countries using EPP concentrated epidemics and for comparison purposes only)(for 2011–2017).
 - For all key populations available.

GAM analytical output: measure of reporting of gender-disaggregated data

There will be an output in the online reporting tool of the proportion of indicators for which gender-disaggregated data were reported of all indicators for which countries reported data and gender-disaggregation is 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 gender-disaggregation is recommended*

Calculation: Numerator/Denominator

Source: Analytical output in GAM 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 GAM 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 GAM reporting tool

Starting this year, a new feature in the online reporting tool will facilitate data quality checks and production of the narrative report. For every indicator, a figure will display 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

Method of measurement

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

1. HIV case reports or notifications from a routine surveillance system

For the numerator. In countries with well-functioning HIV case surveillance systems, the minimum 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 the cumulative number of people diagnosed with HIV and the cumulative number these people dying can be reported. Countries should ensure that reporting delays of case notification are less than three months or that reporting delays are adjusted for at the end of the reporting period.

Please indicate the year when national HIV case surveillance began.

2. National population-based survey with HIV testing and a direct question about knowledge of serostatus

For the numerator. The numerator is constructed as follows:

$$PLHIV_N \times \left(\frac{E_s}{PLHIV_s} \right)$$

$PLHIV_N$: Number of people living with HIV at the national level

E_s : Number of survey participants who report that they were diagnosed with HIV at their last HIV test and who also tested HIV-positive in the survey

$PLHIV_s$: Number of people with HIV-positive test results in the survey

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.

3. National population-based survey with HIV biomarkers, with an indirect question about knowledge of serostatus plus programme data on the proportion of people in HIV treatment

For the numerator. This measure is constructed for the current year as the number of people living with HIV at the national level multiplied by the midpoint of the following:

- The percentage of people who tested positive for HIV in the survey who report ever having been tested and receiving the last test result. For older surveys (maximum <5 years prior to reporting year), this percentage is projected forward using information from the percentage point difference in ART coverage between the survey year and the current reporting year.
- The percentage of people living with HIV on antiretroviral treatment as reported in Indicator 1.2 for the current year and depending on the region to which the country belongs (typically between 50 and 100%).

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 survey methods. UNAIDS can provide technical assistance, if requested.

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 (the number of children on treatment, as reported in indicator 1.2, among the estimated total number of children). This percentage among children is the most conservative measure. 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.

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.
- 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 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

Case-based reporting method

Case-based surveillance provides reasonable measures of knowledge of HIV status when:

- 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 over or underestimate knowledge of HIV status if:

- 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).

Survey-based methods

Surveys can provide a reasonable estimate of knowledge of HIV status and the effectiveness of targeted testing services in countries in which:

- Surveys are sufficiently powered to estimate the proportion of people who know their HIV status at the national level, or among key populations, where these surveys are conducted.
- Data are recent (within the last five years).
- Disclosure of HIV status or testing behaviour is accurate.

Survey-based measures can underestimate knowledge of HIV status if:

- For the direct survey question, evidence indicates that some people do not disclose their HIV status.
- For an indirect measure, people with a positive HIV test result who report never having been tested at the time of the survey subsequently get tested and learn their status.

Knowledge of HIV status versus diagnosed

The phrase “people living with HIV who have been diagnosed” has sometimes been used to describe the first 90 (90% of the people with HIV know their HIV status). UNAIDS prefers the phrase “know their HIV status”, since it also captures people who have self-tested HIV positive and know their HIV status but have not received a medical diagnosis of their positive status.

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 the second 90 of the UNAIDS 90–90–90 target: that 90% of the people who know their HIV-positive status will be on 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

Calculation

Numerator/denominator

Note: Starting in 2018, countries have the option of constructing this Indicator by broad age- and sex-disaggregated groups using Spectrum, importing data into the reporting tool once the national file is finalized

Method of measurement

For the numerator. The numerator can be generated by counting the number of adults and children who are on antiretroviral therapy at the end of the reporting period. The count should not include people who have stopped treatment, died or emigrated to another country or who are otherwise lost to follow-up 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.

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 numerator should include people on antiretroviral therapy in the private sector and public sector if these data are available.

This indicator does not include antiretroviral medicines taken only for preventing mother-to-child transmission and post-exposure prophylaxis. This indicator includes pregnant women living with HIV who are receiving lifelong antiretroviral therapy.

Countries should triangulate the numerator from programme data with national procurement and drug monitoring systems and adjust reported numbers as appropriate. Estimates of coverage of antiretroviral therapy from surveys can also be used to inform or validate the numerator. Note that surveys that only capture self-reported data on treatment uptake should not be used, since self-reported data has been shown to be of limited quality.

Important: Countries that have undertaken data quality assessments or reviews that monitor the extent to which facilities are able to report the number of people on treatment accurately 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.

These adjustments should be described in the "Additional information box" and the year the data quality review was done should be provided in the available box.

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.

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 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. 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.
- Public or private sector
- 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

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.

Please provide subnational data disaggregated by administrative areas as well as city-specific data for this Indicator. Provide information for the capital city and 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).

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 2016

Denominator

Total number of adults and children initiating antiretroviral therapy in 2016, 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 2017, countries will calculate this indicator by using everyone who started antiretroviral therapy any time between 1 January and 31 December 2016.

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

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.

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 2016: if at any point between May 2016 and May 2017 they die, are lost to follow-up (and do not return) or stop treatment (and do not restart), then at month 12 (May 2017) they are not on antiretroviral therapy and not included. However, a person who started antiretroviral therapy in May 2016 and who missed an appointment in June 2016 but is recorded as on antiretroviral therapy in May 2017 (at month 12) should be included in the numerator. What is important is that the person who started antiretroviral therapy in May 2016 is recorded as being alive and receiving antiretroviral therapy after 12 months, regardless of what happens from May 2016 to May 2017.

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 2017 will include everyone who started antiretroviral therapy during the 12-month period from 1 January to 31 December 2016. 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 in will be counted in both 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 denominator may underestimate true survival, since some of the people lost to follow-up are 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

Number and percentage of people 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

Calculation

Numerator/denominator

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 adjustment is required. The testing threshold value should be reported for levels other than <1000 copies/mL in the **Additional Information Box** of the reporting tool.

Viral load suppression may be measured using two different data sources: (1) clinical and programme data or (2) nationally representative surveys. Countries should report data from whichever source is most recent and nationally representative.

Starting in 2018, countries monitoring Indicator 1.4 are encouraged to use Spectrum to calculate this value. Otherwise, please contact UNAIDS if you require technical assistance to estimate the numbers of people who have suppressed viral loads.

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 *On reporting the actual or estimated number of people nationally who have a suppressed viral load from clinical and programme data for more information*).

Viral load testing 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. If models other than Spectrum are used, documentation of the estimation method and uncertainty bounds should be provided.

On reporting the actual or estimated number of people nationally who have a suppressed viral load from clinical and programme data. For countries that report in Table 1 of the GAM reporting tool that viral load testing is fully accessible to all people on treatment, the actual number of people with suppressed viral loads among those on treatment and living with HIV should be reported. UNAIDS defined "fully accessible" as a situation where all people on antiretroviral treatment have access to viral load testing who are eligible for testing (typically people who have been on treatment for 6 months or more). The number of people reported to be tested among those on treatment typically should be above 90%.

In instances where countries report that viral load testing is partially accessible but nationally representative of the untested population, the numerator must be estimated. To derive a national estimate, viral load testing coverage among those on treatment typically should be between 50% and 90%. To construct the estimated national value, the proportion of people suppressed among those tested is multiplied by the number of people receiving antiretroviral therapy. Countries using data where viral load testing coverage is less than 50% should provide additional details on their representativeness.

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 data to be nationally representative. 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].

For countries that report that viral load suppression testing is either (a) partially accessible and not representative of the untested population or (b) not routinely available, only the number of routine viral load tests should be reported. It is not 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.

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. These adjustments should be described in the “Additional information box” and the year the data quality review was done should be provided in the available box.

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. If models other than Spectrum are used, documentation of the estimation method and uncertainty bounds should be provided.

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. If models other than Spectrum are used, documentation of the estimation method and uncertainty bounds should be provided.

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
 - Cities and other administrative area of importance
-

Additional information requested

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

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 setting, estimates of viral load suppression 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

Percentages of people living with HIV with the initial CD4 cell count <200 cells/mm³ and <350 cells/mm³ during the reporting period

What it measures

Proportions of people with a CD4 cell count <200 cells/mm³ and <350 cells/mm³ of those who had an initial CD4 count during the reporting period

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.

Numerator

1. Numbers of people living with HIV with an initial CD4 cell count <200 cells/mm³
 2. Numbers of people living with HIV with an initial CD4 cell count <350 cells/mm³ during the reporting period
-

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.

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 in the reporting period.

Strengths and weaknesses

The initial CD4 count is not necessarily calculated at the time of diagnosis or in a timely manner. The available data may not correspond to all individuals diagnosed in the reporting year.

This indicator does not distinguish between people given a late diagnosis and those who sought treatment late. Differentiating them requires examining 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. A difference of less than one month suggests a late diagnosis. In addition, late diagnosis and late linkage to care may coincide in the same person.

The available data may not include all individuals diagnosed in the reporting period.

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 stock-out—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 in 2015

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, 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.

Measurement frequency

Annual

Disaggregation

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

Additional information requested

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

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

Strengths and weaknesses

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

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

Further information

Consolidated 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>).

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.

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 NGOs that are providing HIV testing for HIV-exposed infants.

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

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

Progress in 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 children delivered by women living with HIV who delivered in the previous 12 months

Calculation

Numerator/denominator

Method of measurement

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 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 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 the model. 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.

To ensure comparability, the Spectrum output will be used for calculating this indicator for global analysis.

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

To ensure comparability, the Spectrum output will be used for calculating this indicator for global analysis.

If programme data are used, report the data based on equal birth cohorts for numerator and denominator and not by the year of diagnosis.

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.

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 three challenges.

1. Following up mother–child pairs is difficult, especially at the national level, because of the lag in reporting and the multiple health facility sites that mother–child pairs can visit for the wide range of services for preventing 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 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.

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 the 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, 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 the 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.

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 six general 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 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.

Explanation of the numerator

The numerator should be disaggregated by the six categories below (WHO recommends the first three regimens) for pregnant women living with HIV for preventing mother-to-child transmission. Each woman should only be counted once in one of the six cells:

1. Newly initiated on antiretroviral therapy during the current pregnancy.
 2. Already receiving antiretroviral therapy before the current pregnancy.
 3. Maternal triple antiretroviral medicine prophylaxis (prophylaxis component of WHO option B).
 4. Maternal AZT (prophylaxis component during pregnancy and delivery of WHO option A).
 5. Single-dose nevirapine (with or without tail) only.
 6. Other (please comment: for example, specify regimen, uncategorized, etc.).
-

Disaggregation of regimen definitions

Categories	Further clarification	Common examples
<p>The first two options include women receiving lifelong antiretroviral therapy (including option B+)</p> <ol style="list-style-type: none"> Newly initiating treatment during the current pregnancy. Already receiving treatment before the pregnancy 	<p>A three-drug regimen intended to provide antiretroviral therapy for life:</p> <ol style="list-style-type: none"> Number of pregnant women living with HIV identified in the reporting period newly initiating lifelong antiretroviral therapy. Number of pregnant women living with HIV identified in the reporting period who were already receiving antiretroviral therapy at their first antenatal clinic visit. <p>If a woman initiates lifelong antiretroviral therapy during labour, she would be counted in category 1.</p> <p>If the number of women receiving antiretroviral therapy is not available by the timing of when they started, the number can be included in the cell entitled total number of pregnant women receiving lifelong antiretroviral therapy.</p>	<p>Standard national treatment regimen, for example:</p> <ul style="list-style-type: none"> TDF + 3TC + EFV TDF + 3TC + DTG
<ol style="list-style-type: none"> Maternal triple antiretroviral medicine prophylaxis (prophylaxis component of WHO option B during pregnancy and delivery) 	<p>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).</p> <p>If a woman is receiving triple antiretroviral medicines for the first time at labour or delivery, then she should still be counted in this category if the facility is implementing option B.</p>	<ul style="list-style-type: none"> TDF + 3TC + DTG TDF + 3TC + EFV AZT + 3TC + EFV AZT + 3TC + LPV/r
<ol style="list-style-type: none"> Maternal AZT (prophylaxis component of WHO option A during pregnancy and delivery) 	<p>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.</p> <p>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.</p>	<ul style="list-style-type: none"> AZT at any point before labour + intrapartum NVP AZT at any point before labour + intrapartum NVP + 7-day postpartum tail of AZT + 3TC
<ol style="list-style-type: none"> Single-dose nevirapine to the mother during pregnancy or delivery 	<ul style="list-style-type: none"> Count this if nevirapine is the only regimen provided to a pregnant woman living with HIV during pregnancy, labour or delivery <p>Do not count as single-dose nevirapine if:</p> <ul style="list-style-type: none"> Nevirapine is provided as part of option A during pregnancy. <p>or</p> <ul style="list-style-type: none"> A pregnant woman living with HIV initiates option A, B or B+ at labour and delivery 	<ul style="list-style-type: none"> Single-dose nevirapine for mother only at onset of labour Single-dose nevirapine + 7-day AZT + 3TC tail only Single-dose nevirapine for mother at onset of labour and single-dose nevirapine for baby only

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 ART 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
3. Maternal triple antiretroviral medicine prophylaxis (prophylaxis component of WHO option B during pregnancy and delivery)	Option B: triple prophylaxis from 14 weeks

4. Maternal AZT (prophylaxis component of WHO option A during pregnancy and delivery)	Option A: maternal AZT
5. Single-dose nevirapine to the mother during pregnancy or delivery	Single-dose nevirapine
6. Other (usually limited to countries still providing maternal AZT started late in the pregnancy)	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 ART 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 (ARVs) – either as lifelong therapy or as prophylaxis – for the mother during pregnancy and delivery, with antiretroviral prophylaxis for the infant and ARVs 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: to track progress towards global and national goals to eliminate MTCT; inform policy and strategic planning; for advocacy; and 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 (ANC) and/or had a facility-based delivery and 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 ANC or had a facility-based delivery in the past 12 months

Calculation

Numerator/denominator

Method of measurement

Numerator: programme records; for example, ANC registers, 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; for example, ANC registers, 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 ANC during current pregnancy
- tested HIV negative at ANC during current pregnancy
- 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 is available on % of ANC attendees who know their status including those with previously confirmed HIV status and those tested and % of labour & 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 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 enables a country to monitor trends in HIV testing among pregnant women. The points at which drop outs 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 (WHO 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 Asian 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 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. 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 be submitted for the relevant areas explicitly.

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. 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 among 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 in which 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.

Denominator

Number of people in key populations who answered 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

United States Centers for Disease Control and Prevention, WHO, UNAIDS, FHI 360. Biobehavioural survey guidelines for populations at risk for HIV. Atlanta: United States Centers for Disease Control and Prevention; forthcoming.

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)

A-E: 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)
 - 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)
 - 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)
 - 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 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-people-who-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)
 - 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

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)
 - 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-people-who-inject-drugs>

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

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.
- 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 estimation exercises

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)
 - 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

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

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
or

Number of people in a key population who test positive for hepatitis B surface antigen

and

Number of people in a key population who also test positive for HIV together with one of the above

Denominator

Number of respondents tested for both HIV and one or both of hepatitis B and C

Calculation

Numerator/denominator

Method of measurement

Integrated Biological and Behavioural Surveillance Survey

Measurement frequency

Every two years

Disaggregation

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

Additional information requested

If the testing algorithm is available for hepatitis C screening, please include this information, especially if complementary or PCR testing is conducted.

Strengths and weaknesses

Probability-based estimates of coinfection with HIV and hepatitis C virus or HIV and hepatitis B virus among key populations are generally unavailable, although several biobehavioural surveys have conducted hepatitis antibody testing. Improving knowledge about coinfection will help to improve treatment programmes and help to maximize the survival of the affected populations. The numbers of people coinfecting are likely to be small, with the possible exception of people who inject drugs, so the confidence intervals will be large.

Further information

United States Centers for Disease Control and Prevention, WHO, UNAIDS, FHI 360. Biobehavioural survey guidelines for populations at risk for HIV. Atlanta: United States Centers for Disease Control and Prevention; forthcoming.

3.15 People who received PrEP

Number of people who received oral 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 pre-exposure prophylaxis 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 of different PrEP regimens and by population (age, gender and key population).

The use of antiretroviral medicine before being exposed to HIV by people who are HIV negative 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 disoproxil fumarate (TDF) 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, demand as well as individual assessment and consideration of the local environment related to people living with HIV and key populations 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)
 - 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, Central African

Republic, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Swaziland, 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

Numerator/denominator

Method of measurement

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

Measurement frequency

Every 3–5 years

Disaggregation

- Age (15–19, 20–24 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

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)
 - 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 task-shifting 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, non-cohabiting partner in the past 12 months and, if so, whether the respondent used a condom the last time the respondent had sexual intercourse with such a partner.

Measurement frequency

3–5 years

Disaggregation

- 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 because of stigma and discrimination to sex workers
- B. Avoidance of health care because of stigma and discrimination to men who have sex with men
- C. Avoidance of health care because of stigma and discrimination to people who inject drugs
- D. Avoidance of health care because of stigma and discrimination to transgender people

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* / (iv) HIV treatment* in the last 12 months due to

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 respondents' HIV status

Denominator

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 (<25 and 25+ years)
 - **A and C:** 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>).

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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>).

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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 health-care settings

What it measures

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

Rationale

Discrimination is a human rights violation and is prohibited by international human rights law and most national constitutions. In the context of HIV, discrimination refers to unfair or unjust treatment of an individual (either through actions or by failure to act) based on his or her real or perceived HIV status. Discrimination exacerbates risks and deprives people of their rights and entitlements, thus 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.¹¹

Denominator

Number of all respondents

Calculation

Numerator/denominator

Method of measurement

People Living with HIV Stigma Index¹²

Respondents of the survey are asked if they experienced any of the following 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).
-

¹¹ The minimum age range currently captured by most DHS surveys is 15–49 years old, but this range is not prescriptive.

¹² The People Living with HIV Stigma Index can be found at <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 and non-HIV care (whereas the original survey only asked about stigma experienced when seeking health services in general). When reporting on this indicator with data from People Living with HIV Stigma Index surveys conducted prior to 2017, it will not be possible to disaggregate by the type of health service sought.

Strengths and weaknesses

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

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

In addition, people seeking HIV services at specialty HIV clinics may report fewer experiences of discrimination than people seeking HIV services that are integrated within general health-care services. Thus, capturing the type of clinic is recommended where possible. It also would be advisable to compare the findings from this indicator with Indicators 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

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=RceOuljWkY&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%5B12June2012%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\$ 19.1 billion in low- and middle-income countries by the end of 2016. 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 sub-indicators 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 antiretroviral (ARV) therapy (adults and pediatric; specific commodities separately)	Funding source, adults and children (younger than 15 years old)	Persons living with HIV	Antiretroviral therapy. Direct expenditures in the purchase of antiretrovirals separately from other from other costs as available). Unit prices and volumes of commodities procured/ distributed.
C. Expenditure on HIV-specific laboratory monitoring (specific commodities separately)	Funding source	Persons living with HIV on Antiretroviral Therapy	Diagnostic services related to HIV clinical monitoring. Direct expenditures in the purchase of 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)	Funding source, five pillars of combination prevention: <ul style="list-style-type: none"> ▪ Prevention for young women and adolescent girls (10-24 years, exclusively high prevalence countries) ▪ Voluntary medical male circumcision (exclusively high prevalence countries) ▪ Pre-exposure prophylaxis (PrEP) stratified by key population (gay men and other MSM; sex workers; PWIDs; transgender people; prisoners; young women and adolescent girls; serodiscordant couples). ▪ Condoms (non-targeted) ▪ Prevention among key populations (gay men and other MSM; sex workers and their clients; PWIDs; transgender people; prisoners). 	General population, key populations	This subset of prevention services is labelled and defined as combination prevention. The rest of the HIV prevention services are to be specified within the categories of the national funding matrix as part of broader prevention services. This subset includes prevention services specifically designed and delivered for each of the key populations, including prevention services for young women and adolescent girls (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. Intensified TB case-finding and access to quality diagnosis and treatment of TB in accordance with international/national guidelines are essential to improve the quality and quantity of life for people living with HIV. A measure of the percentage of HIV-positive TB patients that access appropriate treatment for their TB and HIV is 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

WHO calculates annual estimates of the number of incident TB cases in people living with HIV. The 2015 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 2016 are available at: <http://www.who.int/tb/country/data/download/en>.

Calculation

Numerator/denominator

Method of measurement

Facility antiretroviral therapy registers and reports; programme monitoring tools

Programme data and estimates of incident TB cases in people living with HIV

Measurement frequency

Data should be collected continuously at the facility level, 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)
 - 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

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 2017. Geneva: World Health Organization; 2017 (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 in 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 who have active TB disease during the reporting period of those newly enrolled in HIV care

Denominator

Total number of people newly enrolled in HIV care: that is, 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.

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 WHO and 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

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 are not available, enter data for those who start 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, registered for pre-ART or ART during the reporting period.

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

Measurement frequency

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

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)
 - 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 coinfecting 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 coinfecting with HIV and HBV receiving combined treatment

Proportion of people coinfecting with HIV and HBV receiving combined treatment

What it measures

Proportion of people coinfecting 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 coinfecting 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 coinfecting people.

Numerator

Number of people coinfecting 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
 - Age (<15 and 15+ years)
 - 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 coinfecting 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 coinfecting with HIV and HCV starting HCV treatment

Proportion of people coinfecting with HIV and HCV starting HCV treatment

What it measures

Initiation of HCV treatment for people coinfecting with HIV and HCV among people enrolled in HIV care

Rationale

The prevalence of HCV coinfection is especially high among people living with HIV in the WHO European Region because of injecting drug use. Treating people living with HIV for hepatitis C influences quality of life, life expectancy and mortality.

Numerator

Number of people diagnosed with HIV and HCV coinfection starting treatment for HCV during a specified time frame (such as 12 months)

Denominator

Number of people diagnosed with HIV and HCV coinfection enrolled in HIV care during a specified time period (such as 12 months)

Calculation

Numerator/denominator

Method of measurement

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

Measurement frequency

Annual

Disaggregation

People who inject drugs

Strengths and weaknesses

This indicator monitors access to hepatitis C treatment for people living with HIV coinfecting with HCV. The weakness is that it reflects only one year of activity. Describing the cumulated effect of people coinfecting 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 2018 interim NCPI

Introduction

Policy monitoring has been a component of global AIDS reporting since 2003 and has been implemented every two years, most recently in 2017 through the NCPI. The NCPI is an integral component of GAM that aims to measure progress in developing and implementing policies, strategies and laws related to the HIV response, by:

- 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 Global AIDS Monitoring 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 2018 based on the experience of 2017 reporting.

NCPI structure

The NCPI has two parts. Part A is to be completed by national authorities; Part B is to be completed by civil society and other nongovernmental partners involved in the national AIDS response. For interim reporting years, only a subset of questions from Part A are included in the Interim NCPI.

The questions in the Interim NCPI are structured around the 10 Fast-Track commitments and expanded targets to end AIDS by 2030.¹³

Proposed steps for gathering and validating data for the Interim NCPI

The process described below for completing the NCPI should be integrated into each country's plan and time frame for the overall GAM process.

While questions from NCPI Part B, which are to be completed by civil society and other non-governmental partners engaged in the response, are not included in the Interim NCPI,

countries are encouraged to engage civil society in the broader GAM process.

1. Establish a working group to accompany NCPI reporting. This could be an existing multisectoral monitoring and evaluation technical working group.
2. Identify a focal point to coordinate the completion of the questionnaire.
3. A working group conducts a stakeholder mapping exercise to systematically select contributors.

Such mapping can ensure that the most updated and accurate data can be collected through the Interim 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 policy questionnaire 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:

¹³ 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 21 November 2017).

- 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.
- 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 Interim NCPI reporting process::

- Name.
- Contact details.
- Organization affiliated with.
- 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 policy reporting.

4. Collect responses to 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 the questionnaire, 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 policy 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 questionnaire reporting coordinator 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 PDF version of the questionnaire is available on the UNAIDS website and can also be

downloaded through the Interim NCPI header in the indicator list in the Global AIDS Monitoring online reporting tool (<https://AIDSreportingtool.unaids.org>).

5. The national Global AIDS Monitoring focal point enters responses in the online reporting tool.
6. Stakeholders view and provide comments on the draft responses. The draft completed questionnaire can be shared with stakeholders by giving them viewing rights to the Global AIDS Monitoring online reporting tool or by sharing the 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 responses for selected questions.
 - To analyse policy 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.

8. Update the Interim NCPI responses entered in the Global AIDS Monitoring 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 Interim NCPI responses with other Global AIDS Monitoring components on or before 29 March 2018.
10. Respond to queries posted through the online reporting tool during the data validation process.

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

Loading policy data previously reported through GAM

Questions included in the 2018 interim NCPI are a sub-set of questions included in the 2017 NCPI. Countries that submitted responses to these questions through the 2017 NCPI can choose to load those responses into the Interim NCPI in the GAM online reporting tool. Responses can then be updated or resubmitted where there has been no change.

Operationalizing and using policy data

Data collected through the NCPI will complement indicator and expenditure data also collected and reported through the Global AIDS Monitoring

process. Countries are encouraged to use policy data in analysing the status of the national epidemic and response and in national strategic planning efforts.

Globally, Interim 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 Global AIDS Monitoring indicators and to inform global strategies and reports. The responses from each country to Interim NCPI questions will be aggregated to generate regional and global values. The Interim NCPI data by country will also be available through AIDSInfo.

Interim 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	<i>Treponema pallidum</i> haemagglutination assay
TPPA	<i>Treponema pallidum</i> particle agglutination assay
TRIPS	
Agreement	Agreement on Trade-Related Aspects of Intellectual Property Rights
VDRL	Venereal Disease Research Laboratory
WHO	World Health Organization

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.

* The guidelines for the National Commitments and Policy Instrument define the terms marked with an asterisk (*).

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
- Other index case based testing (e.g. family, social network contacts)

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
- No

3.2 If no, does it have plans to include self-testing in its national policy in the future?

- Yes
- No

3.2a If yes, please indicate the year in which self-testing is planned to be included:

- No planned year
 - 2017
 - 2018
 - 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, please indicate the year in which assisted HIV partner notification is planned to be included?

- No planned year
- 2017
- 2018
- 2019
- 2020
- 2021

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 solely performed based on voluntary and informed consent

- Yes
- No

b) Is mandatory before marriage

- Yes
- No

c) Is mandatory to obtain a work or residence permit

- Yes
- No

d) Is mandatory for certain groups

- Yes
- No

d.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, 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 _____
-

Antiretroviral therapy

8. Has your country adapted the recommendations from the 2016 WHO Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection in a national process?

- Yes, completed
- Ongoing
- No
- Other: please comment: _____

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 the CD4 threshold selected above?

- Implemented in few (<50%) treatment sites
- Implemented in many (>50%) treatment sites
- Implemented countrywide
- 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 Consolidated guidelines on the use of 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
 - 2017
 - 2018
 - 2019
 - 2020
 - 2021
-

10. Does your country have a national policy promoting community delivery (such as outside health facilities) of antiretroviral therapy?

- Yes
- No

10.1 If yes, please specify what approaches are used to support community delivery of antiretroviral therapy _____

11. Is antiretroviral therapy provided in community settings (such as outside health-facilities) for people who are stable on antiretroviral therapy in your country?

- Yes
- No

11.1 If yes, is it implemented:

- Nationally
 - Regionally
 - At pilot sites
 - Other (please specify) _____
-

12. Does your country have a national policy on how frequently people who are stable on antiretroviral therapy should pick-up antiretroviral medicine?

- Yes
 No

12.1 If yes, please specify the frequency of ARV pick-up included in the national policy:

- Once a month
 Every 3 months
 Every 6 months
 Every 12 months

13. 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

14. Are TDF/3TC or (FTC)/EFV the preferred first-line ARV combinations for treatment initiation in national guidelines, among:

a) Adults and adolescents

- Yes
 No

b) Pregnant women

- Yes
 No
 Other: please specify _____

15. Is dolutegravir (DTG) being introduced as the first-line ARV regimen in your country?

- Yes, introduction of DTG in national guidelines is planned for 2018
 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

16. 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 _____

17. Is AZT/3TC (or FTC)/ATV/r (or LPV/r) the preferred second-line ARV combination for adults and adolescents with HIV in the national guidelines?

- Yes
 No
 Other: please specify _____
-

Viral load

18. 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
-

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

18.1 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 _____
-

19. 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 _____

19.1 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: ____%

20. Excluding passive pharmacovigilance approaches, does your country make an ongoing systematic effort to monitor the toxicity of antiretroviral medicines in the country?

- Yes
- No

20.1 If yes, what approaches are used (please select all that apply):

- Routine toxicity monitoring as part of the national M&E system
 - Active surveillance within cohorts
 - Pregnancy registry and surveillance of birth defects
-

21. Have toxicity monitoring approaches been introduced to monitor adverse drug reactions to dolutegravir use?

- Yes
- No

21.1 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 at sentinel sites
 - Pregnancy registry and surveillance of birth defects
-

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

Prevention of mother-to-child transmission of HIV

22. 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:

- Treat All pregnant women / breastfeeding women for life
- HAART during pregnancy and breastfeeding only
- Other: please specify regimen _____

22.1 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%) of MCH sites
- Implemented countrywide
- Not implemented in practice
- Other

Community engagement in the prevention of mother-to-child transmission of HIV

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

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

24. Are there targeted interventions to ensure that any of the following human rights considerations are addressed 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

25. Has a meeting been held at the national level to review PMTCT progress in the past 12 months?

- Yes
- No

25.1 If yes:

a) Were community and civil society represented at the national review meeting?

- Yes
- No

b) Was the opportunity provided for community and civil society to provide comments?

- Yes
 - No
-

¹⁴ In countries where breastfeeding is not recommended for women living with HIV please click this response if it only applies to pregnant women.

c) Was analysis by community and civil society provided in a systematic manner?

- Yes
- No

d) Was analysis provided by community and civil society documented and disseminated following the meeting?

- Yes
- No

e) Do women living with HIV in your country participate* in developing policies, guidelines and strategies relating to PMTCT?

- Yes
 - No
-

Child ART

26. Do the national guidelines recommend treating all infants and children living with HIV irrespective of symptoms?

- Yes, with an age cut-off to treat all of <1 years
- Yes, with an age cut-off to treat all of <2 years
- Yes, with an age cut-off to treat all of <5 years
- Yes, with an age cut-off to treat all of <10 years
- Treat All
- Other (please specify) _____

26.1 What is the status of implementing the age cut-off policy adopted in your country?

- Implemented in a few (<50%) treatment sites
 - Implemented in many (>50%) treatment sites
 - Implemented countrywide
 - 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

Pre-exposure prophylaxis (PrEP)

27. 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

27.1 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

27.1a If yes, please indicate the year when adoption of the PrEP recommendations is planned:

- No planned year
- 2017
- 2018
- 2019
- 2020
- 2021
- Other: please specify _____

27.2 If national PrEP guidelines have been developed, please specify for which populations PrEP is provided as per the guidelines and the eligibility criteria applied for offering PrEP:

- Gay men and other men who have sex with men
Please specify eligibility criteria: _____
- Sex workers
Please specify eligibility criteria: _____
- People who inject drugs
Please specify eligibility criteria: _____
- Transgender people
Please specify eligibility criteria: _____
- Serodiscordant couples
Please specify eligibility criteria: _____
- Young women (aged 15–24 years)
Please specify eligibility criteria: _____
- Other: please specify: _____
- Please specify eligibility criteria: _____

27.3 If national PrEP guidelines have been developed, is a training programme on PrEP provided to health-care personnel?

- Yes
 - No
-

27.4 If national PrEP guidelines have not been developed, select the applicable reasons (please select all that apply):

- There is no identified 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 _____

28. Has a tenofovir-containing regimen for PrEP received regulatory approval in your country (please select all that apply)?

- Yes, an originator product
- Yes, a generic product
- No

29. 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 _____

Condoms

30. Have there been condom stock-outs* in the past 12 months?

a) National stock outs:

- Yes
- No

b) Local stock outs

- Yes
- No

31. 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 _____
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.
-

32. Does your country have laws requiring parental consent for adolescents to access sexual and reproductive health services?

- Yes, for adolescents younger than 18 years
 - Yes, for adolescents younger than 16 years
 - Yes, for adolescents younger than 14 years
 - No
-

33. Does your country have laws requiring parental consent for adolescents to access HIV testing?

- Yes, for adolescents younger than 18 years
 - Yes, for adolescents younger than 16 years
 - Yes, for adolescents younger than 14 years
 - No
-

34. Does your country have laws requiring parental consent for adolescents to access HIV treatment?

- Yes, for adolescents younger than 18 years
 - Yes, for adolescents younger than 16 years
 - Yes, for adolescents younger than 14 years
 - No
-

35. Does your country have laws requiring spousal consent for married women to access sexual and reproductive health services?

- Yes
 - No
-

36. Does your country have laws requiring spousal consent for married women to access HIV testing?

- Yes
 - No
-

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

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

37. 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

37.1 If yes:

a) Does it refer to HIV?

- Yes
- No

b) Does it recognize people living with HIV as key beneficiaries?

- Yes
- No

c) Does it recognize key populations (sex workers, gay men and other men who have sex with men, people who inject drugs, transgender people, prisoners) as key beneficiaries?

- Yes
- No

d) Does it recognize adolescent girls and young women as key beneficiaries?

- Yes
- No

e) Does it recognize people affected by HIV (children and families) as key beneficiaries?

- Yes
- No

f) Does it address the issue of unpaid care work in the context of HIV?

- Yes
- No

38. 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

39. Are any cash transfer programmes* for young women aged 15-24 years being implemented in the country?

- Yes
 - No
-

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

40. Are there any of the following safeguards in laws, regulations and policies that provide for the operation of CSOs/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
-

41. 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
 - From international donors
 - Other: please specify _____
-

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

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.

National HIV strategy and monitoring and evaluation

Strategy

42. 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 _____

42.1 If yes, has the national HIV strategy or policy been reviewed in the past two years?

- Yes
- No

42.2 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

42.3 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

42.4 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

42.4a If yes, does the national strategy or policy guiding the AIDS response include a dedicated budget for implementing gender-transformative interventions*?

- Yes
 - No
-

Monitoring and evaluation

Health Information Systems

43. 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

43.1 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 ART): _____

Routine ANC prevalence

44. Is the country using data from antenatal clinic attendees on the number of women who testing positive for HIV and the number of women already known to be HIV-positive in order to understand trends in HIV prevalence?

- Yes
- No

44.1 If "yes", has there been a data quality review of these data in the past two years to ensure they are comparable over time?

- Yes
- No

44.2 If "yes" to 43 and 47, are these data captured in your health information system (DHIS2 or others)?

- Yes
- No

Treatment cascade

45. If "yes" to 43, are patient level viral load testing results routinely available within the health information system?

- Yes, fully
- Yes, partially
- No

46. Are treatment cascade data available and analysed:

	Testing	Treatment	Viral load
At the district level?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
For key populations?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

47. Are treatment cascade data routinely included in the health information system (DHIS2 or others) with a dashboard at the district level?

- Yes, fully
- Yes, partially
- No

Patient monitoring systems

48. Has the country updated the patient monitoring system indicators and tools using the 2017 WHO person-centred HIV patient monitoring and case surveillance guidelines?

- Yes, fully
 - Yes, partially
 - No
 - Don't know
-

Unique identification codes for patients

49. 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 treatment and testing services

- Yes
- No

c) for HIV prevention services

- Yes
- No

d) for laboratory services

- Yes
 - No
-

50. If "yes" to 49 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 an 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, eyescan)

- Yes
- No

e) Other methods to link patient information: please specify _____

Case reporting

51. Is HIV a nationally notifiable condition by law?

- Yes
 - No
-

51.1 If yes to 51, does a standard HIV case report form exist for use in reporting newly diagnosed cases?

- Yes
 - No
-

51.2 If yes to 51, does the country mandate that subsequent sentinel events for diagnosed HIV cases—such as date and result of first CD4 cell count, date of ART initiation, and dates and results of first and follow-up viral load tests—be reported?

- Yes
 - No
-

51.3 If “yes” to 43 and 51, is case based surveillance included in the Health Information system?

- Yes
 - No
-

Mortality

52. 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
-

52.1 If “yes”, how complete is reporting of death to the civil registration and vital statistics system?

- <25% complete
 - 25–50% complete
 - 51–75% complete
 - >75% complete
-

52.2 If “yes” to 51 and 52, 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
-

Annex 1.

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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 by financing source. The form of reporting therefore has a format of a matrix. The national funding matrix suggested for the Global AIDS Monitoring 2017 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 HIV and AIDS: On the Fast-Track 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, PrEP, voluntary medical male circumcision, harm reduction services, empowering young women and girls and providing essential service packages for key populations; 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 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 the Global AIDS Monitoring 2017 cycle. Countries are requested to report on the applicable programmes or services as appropriate, i.e. not all countries need to report on each single row of the matrix but just on the relevant ones according to each country reality; the same 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 (i.e. value “0”), when not available or when not applicable.

The Global AIDS Monitoring 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 which correspond 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.

List of HIV programmes in the national funding matrix cross-walked to National AIDS Spending Assessment AIDS Spending Categories

Fast-track commitments to end AIDS by 2030	Codes in the GAM national funding matrix	Global AIDS Monitoring 2017 programme categories: complete set of interventions	Global AIDS Monitoring 2017 programme categories: Core Sub-Indicators	AIDS spending categories (per National AIDS Spending Assessment)
Commitment 1. Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90–90 targets by 2020	1	Treatment, care and support (sub-total)		
	1.1	HIV testing and counselling (HTC): <ul style="list-style-type: none"> ▪ HIV tests (commodities) ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost 	Expenditure on HIV testing and counselling (non-targeted)	1.03. Voluntary counselling and testing (VCT) 2.01.01. Provider-initiated testing and counselling (PITC) 4.11. Mandatory HIV testing (not VCT)
				Note: this programme is targeting general population, whereas HTC targeting specific population groups must be reported as a part of prevention programmes for related specific population groups Procurement spending has to be reported under ASC 8.3 “Procurement and logistics” of the national funding matrix (excluding expenditure on commodities). Costs attributed to strategic information and information systems must be reported under Strategic information and 8.3 Health systems strengthening respectively.
	1.2	Antiretroviral treatment (sub-total)	Expenditure on antiretroviral therapy, adults and paediatric	2.01.03. Antiretroviral therapy or 2.01.03.98. Antiretroviral therapy not broken down either by age or line of treatment
		1.2.1. Adult antiretroviral treatment, including: <ul style="list-style-type: none"> ▪ ARVs ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost 	Expenditure on antiretroviral therapy, adults and paediatric	2.01.03.01. Adult antiretroviral therapy Costs attributed to procurement (excluding expenditure on commodities) must be reported under ASC 8.3 “Procurement and logistics” of the national funding matrix. Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.

<p>1.2.2. Paediatric antiretroviral treatment, including:</p> <ul style="list-style-type: none"> ▪ ARVs ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost <p>Expenditure on antiretroviral therapy, adults and paediatric</p>	<p>2.01.03.02. Paediatric antiretroviral therapy</p> <p>Costs attributed to procurement (excluding expenditure on commodities) must be reported under ASC 8.3 "Procurement and logistics" of the national funding matrix.</p> <p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>
<p>1.3</p> <p>Specific HIV-related laboratory monitoring (CD4, viral load), including:</p> <ul style="list-style-type: none"> ▪ CD4 cell count, viral load tests (commodities) ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost <p>Expenditure on HIV specific laboratory monitoring (CD4 cell count, viral load)</p>	<p>2.01.05. Specific HIV-related laboratory monitoring</p> <p>Costs attributed to procurement (excluding expenditure on commodities) must be reported under ASC 8.3 "Procurement and logistics" of the national funding matrix.</p> <p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>
<p>1.4</p> <p>Opportunistic infections (OI) prophylaxis and treatment, excluding Treatment and prevention of tuberculosis for people living with HIV</p>	<p>2.01.02 Opportunistic infection (OI) outpatient prophylaxis and treatment</p> <p>2.02.01 Inpatient treatment of opportunistic infections (OI)</p>
<p>1.5</p> <p>Palliative care</p>	<p>2.01.08. Outpatient palliative care</p> <p>2.01.09. Home-based care</p> <p>2.02.02. Inpatient palliative care</p>
<p>1.6</p> <p>Support and retention</p>	<p>2.01.04. Nutritional support associated with antiretroviral therapy</p> <p>2.01.07. Psychological treatment and support services</p>
<p>2</p> <p>Commitment 2. Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018</p>	<p>Not Applicable for retention</p> <p>1.17. Prevention of mother-to-child transmission (PMTCT)</p>
<p>Prevention of vertical transmission of HIV (sub-total)</p>	<p>Expenditure on prevention of vertical transmission of HIV</p>

1.17. 01. Pregnant women counselling and testing in PMTCT programmes	<p>HIV testing and counselling (HTC) for pregnant women, including:</p> <ul style="list-style-type: none"> ▪ HIV tests (commodities) ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost 	Expenditure on prevention of vertical transmission of HIV	<p>Costs attributed to procurement (excluding expenditure on commodities) must be reported under ASC 8.3 "Procurement and logistics" of the national funding matrix.</p> <p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>
Not applicable			Not applicable
2.1	<p>Early infant diagnosis, including:</p> <ul style="list-style-type: none"> ▪ HIV tests (commodities) ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost 	Expenditure on prevention of vertical transmission of HIV	<p>Costs attributed to procurement (excluding expenditure on commodities) must be reported under ASC 8.3 "Procurement and logistics" of the national funding matrix.</p> <p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>
2.2	<p>Antiretroviral treatment to reduce vertical transmission of HIV, including:</p> <ul style="list-style-type: none"> ▪ ARVs ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost 	Expenditure on prevention of vertical transmission of HIV	<p>1.17. 02. Antiretroviral prophylaxis for HIV-positive pregnant women and neonates</p> <p>Costs attributed to procurement (excluding expenditure on commodities) must be reported under ASC 8.3 "Procurement and logistics" of the national funding matrix.</p> <p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>
2.3	<p>Non-ARV related component of PMTCT</p>	Expenditure on prevention of vertical transmission of HIV	<p>1.17. 03. Safe infant feeding practices (including substitution of breast milk)</p> <p>1.17. 04. Delivery practices as part of PMTCT programmes</p> <p>1.17. 05. Condom social marketing and male and female condom provision as part of PMTCT programmes</p> <p>ASC-01.17.99. PMTCT activities n.e.c.</p>
2.4			

<p>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 persons, sex workers and their clients, persons who inject drugs and prisoners</p> <p>and</p> <p>Commitment 8. Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers</p>	<p>3</p> <p>Prevention (sub-total)</p>	<p>Not applicable</p>	
<p>3.1</p>	<p>Social and behavior change (SBC) programmes</p>	<p>Non-targeted</p>	<p>1.01. Communication for social and behaviour change.</p> <p>Note: Communication for social and behaviour change targeting key populations must be reported as a part of prevention programmes for key populations</p>
<p>3.2</p>	<p>Condoms, including:</p> <ul style="list-style-type: none"> ▪ Condoms (commodities) ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost 	<p>Condoms (non-targeted)</p>	<p>1.12. Condom social marketing</p> <p>1.13. Public and commercial sector male condom provision</p> <p>1.14. Public and commercial sector female condom provision</p> <p>Note: these programmes are targeting general population, whereas the same programmes targeting specific population groups must be reported as a part of prevention programmes for those specific population groups</p> <p>Costs attributed to procurement (excluding expenditure on commodities) must be reported under ASC 8.3 "Procurement and logistics" of the national funding matrix.</p> <p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>

Not applicable	Pre-Exposure Prophylaxis (PrEP) disaggregated by key populations (sub-total)	Pre-exposure prophylaxis (PrEP) stratified by key population	Note: If applicable expenditure on PrEP must be reported under this category, whereas excluded from related prevention programmes for the key populations to avoid double-counting
Not applicable	3.3.1. PrEP for gay men and other men who have sex with men (MSM)	Pre-exposure prophylaxis (PrEP) stratified by key population	Note: If applicable expenditure on PrEP for MSM must be reported under this category, whereas excluded from related prevention programmes for MSM to avoid double-counting
Not applicable	3.3.2. PrEP for sex workers	Pre-exposure prophylaxis (PrEP) stratified by key population	Note: If applicable expenditure on PrEP for SWs must be reported under this category, whereas excluded from related prevention programmes for SWs to avoid double-counting
Not applicable	3.3.3. PrEP for persons who inject drugs (PWID)	Pre-exposure prophylaxis (PrEP) stratified by key population	Note: If applicable expenditure on PrEP for PWIDs must be reported under this category, whereas excluded from related prevention programmes for PWIDs to avoid double-counting
Not applicable	3.3.4. PrEP for transgender persons	Pre-exposure prophylaxis (PrEP) stratified by key population	Note: If applicable expenditure on PrEP for PWIDs must be reported under this category, whereas excluded from related prevention programmes for transgender to avoid double-counting
Not applicable	3.3.5. PrEP for prisoners	Pre-exposure prophylaxis (PrEP) stratified by key population	Note: If applicable expenditure on PrEP for prisoners must be reported under this category, whereas excluded from related prevention programmes for prisoners to avoid double-counting

<p>3.3.6. PrEP for young women and adolescent girls in high-prevalence countries</p>	<p>Pre-exposure prophylaxis (PrEP) stratified by key population</p>	<p>Not applicable</p> <p>Note: If applicable expenditure on PrEP for young women and adolescent girls in high-prevalence countries has to be reported under this category, whereas excluded from related prevention programmes for young women and adolescent girls to avoid double-counting</p>
<p>3.3.7. Pre-exposure prophylaxis for serodiscordant couples</p>	<p>Pre-exposure prophylaxis (PrEP) stratified by key population</p>	<p>Not applicable</p> <p>Note: If applicable expenditure on PrEP for serodiscordant couples must be reported under this category, whereas excluded from related prevention programmes aimed at PLHIV to avoid double-counting</p>
<p>3.4</p> <p>Voluntary medical male circumcision (VMMC) in high prevalence countries</p> <p>Prevention, promotion of testing and linkage to care programmes for gay men and other men who have sex with men (MSM), including:</p> <ul style="list-style-type: none"> ▪ HIV tests (commodities) ▪ Condoms, lubricants, and other commodities ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost 	<p>Voluntary medical male circumcision (VMMC)</p>	<p>1.18. Male circumcision</p> <p>1.09. Programmes for men who have sex with men (MSM)</p> <p>Note:</p> <p>Costs attributed to procurement (excluding expenditure on commodities) must be reported under ASC 8.3 "Procurement and logistics" of the national funding matrix.</p> <p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>
<p>3.5</p> <p>Prevention, promotion of testing and linkage to care programmes for sex workers and their clients, including:</p> <ul style="list-style-type: none"> ▪ HIV tests (commodities) ▪ Condoms, lubricants, and other commodities ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost 	<p>Prevention among key populations</p>	<p>1.08. Prevention programmes for sex workers and their clients</p>
<p>3.6</p> <p>Prevention, promotion of testing and linkage to care programmes for sex workers and their clients, including:</p> <ul style="list-style-type: none"> ▪ HIV tests (commodities) ▪ Condoms, lubricants, and other commodities ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost 	<p>Prevention among key populations</p>	<p>1.08. Prevention programmes for sex workers and their clients</p>

<p>1.10. Harm-reduction programmes for injecting drug users (IDUs)</p> <p>Note: Costs attributed to procurement (excluding expenditure on commodities) must be reported under ASC 8.3</p> <p>“Procurement and logistics” of the national funding matrix.</p> <p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>		<p>1.10.05. Sterile syringe and needle exchange as part of programmes for IDUs</p> <p>1.10.01. VCT as part of programmes for IDUs</p> <p>1.10.02. Condom social marketing and male and female condom provision as part of programmes for IDUs</p> <p>1.10.03. STI prevention and treatment as part of programmes for IDUs</p> <p>1.10.04. Behaviour change communication (BCC) as part of programmes for IDUs</p> <p>1.10.99. Other programmatic interventions for IDUs, n.e.c.</p> <p>Note: Costs attributed to procurement (excluding expenditure on commodities) has to be reported under ASC 8.3</p> <p>“Procurement and logistics” of the national funding matrix.</p> <p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>
<p>3.7</p> <p>Prevention, promotion of testing and linkage to care programmes for persons who inject drugs (sub-total)</p> <p>Prevention among key populations</p>	<p>3.7.1. Needle and syringe exchange, and prevention, promotion of testing and linkage to care prevention programmes for people who inject drugs, including:</p> <ul style="list-style-type: none"> ▪ Injecting equipment ▪ HIV tests (commodities) ▪ Condoms, lubricants, and other commodities ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost <p>Prevention among key populations</p>	<p>1.10.06. Drug substitution treatment as part of programmes for IDUs</p> <p>Note: Costs attributed to procurement (excluding expenditure on commodities) must be reported under ASC 8.3</p> <p>“Procurement and logistics” of the national funding matrix.</p> <p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>
<p>3.7.2. Substitution therapy, including:</p> <ul style="list-style-type: none"> ▪ Replacement drug, such as methadone or buprenorphine (commodities) ▪ Other direct and indirect costs ▪ Not disaggregated by type of cost <p>Prevention among key populations</p>		<p>Costs attributed to strategic information and information systems must be reported under 8.1 Strategic information and 8.3 Health systems strengthening respectively.</p>

				Not applicable
3.8	Prevention, promotion of testing and linkage to care programmes for transgender persons	Prevention among key populations		Note: If applicable, can be reported under a broader programme category 1.04. Risk-reduction for vulnerable and accessible populations
3.9	Prevention, promotion of testing and linkage to care programmes for prisoners	Prevention among key populations		Not applicable
3.10	Prevention, promotion of testing and linkage to care programmes targeting young women and adolescent girls (high-prevalence countries)	Prevention among key populations		Note: If applicable expenditure on prevention programmes targeting young women and adolescent girls has to be reported under this category, whereas excluded from related broader programme category 1.04. Risk-reduction for vulnerable and accessible populations 1.05. Prevention – youth in school 1.06. Prevention – youth out-of-school
3.11	Cash transfers to girls (high-prevalence countries), including: <ul style="list-style-type: none"> 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			1.04. Risk-reduction for vulnerable and accessible populations Note: if any specific components were reported above (e.g. prisoners, transgender, etc.), they must be excluded from this category to avoid double-counting
3.13	Post-exposure prophylaxis (PEP)			1.22. Post-exposure prophylaxis (PEP)
3.14	Workplace			1.11. Prevention programmes in the workplace
Not applicable				
Not applicable				

Not applicable	3.15	Synergies with health sector	1.16. Prevention, diagnosis, and treatment of sexually transmitted infections (STI) 1.19. Blood safety 1.20. Safe medical injections 1.21. Universal precautions 2.01.06. Dental programmes for PLHIV 2.03. Patient transport and emergency rescue
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	Gender programmes	7.04. AIDS-specific programmes focused on women 7.05. programmes to reduce Gender Based Violence
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	Programmes for children and adolescents	1.05. Prevention – youth in school 1.06. Prevention – youth out-of-school Note: This category excludes specific prevention programmes targeting young women and adolescent girls
Commitment 6. Ensure that 75% of people living with , at risk of and affected by HIV benefit from HIV-sensitive social protection by 2020	6	Social protection	3. Orphans and vulnerable children (OVC), including all sub-categories 6. Social protection and social services, including all sub-categories
Commitment 7. Ensure that at least 30% of all service delivery is community-led by 2020	7	Community mobilization	1.02. Community mobilization
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	Governance and sustainability (sub-total)	Not applicable

			4.03. Monitoring and evaluation 4.05. Serological-surveillance (serosurveillance) 4.06. HIV drug-resistance surveillance 4.09. Patient tracking 8.03. Epidemiological research 8.04. Social science research
8.1	Strategic information		
8.2	Planning and coordination		4.01. Planning, coordination, and programme management
8.3	Procurement and logistics		4.02. Administration and transaction costs associated with managing and disbursing funds 4.07. Drug supply systems
8.4	Health systems strengthening		4.08. Information technology 4.10. Upgrading and construction of infrastructure 5.03. Training
8.5	Education		5.02. Formative education to build-up an HIV workforce
8.6	HIV and AIDS related research		8.01. Biomedical research 8.02. Clinical research 8.05. Vaccine-related research 4.04. Operations research
		9	Not applicable
		9	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
			7.01. Advocacy 7.02. Human rights programmes 7.03. AIDS-specific institutional development

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

<p>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</p>	<p>10</p>	<p>TB / HIV co-infection, diagnosis and treatment (sub-total)</p>	<p>Expenditure on TB/HIV</p>	<p>Not applicable</p>	<p>Note: if applicable, can be reported under a broader programme category 2.01.02 Opportunistic infection (OI) outpatient prophylaxis and treatment, or 2.02.01 Inpatient treatment of opportunistic infections (OI)</p>				
						<p>10.1</p>	<p>TB screening and diagnosis in PLHIV</p>	<p>Expenditure on TB/HIV</p>	<p>Not applicable</p>
						<p>10.2</p>	<p>TB prevention and treatment for PLHIV</p>	<p>Expenditure on TB/HIV</p>	<p>Not applicable</p>
<p>Not applicable</p>		<p>Other essential programmes outside the suggested framework of core HIV and AIDS programmes (please list below and specify)</p>		<p>Not applicable</p>					
		<p>Total</p>	<p>Total HIV Expenditure</p>	<p>Not applicable</p>					

Annex 3.

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 FYw
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 each procurement process.

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