GLOBAL AIDS RESPONSE PROGRESS REPORTING 2016

Construction of core indicators for monitoring the 2011 United Nations Political Declaration on HIV and AIDS

Includes additional WHO/UNICEF Health Sector Indicators

January 2016, Geneva, Switzerland

Please use the Global AIDS Response Progress Reporting website (aidsreportingtool.unaids.org) to submit your indicator data by 31 March 2016.

Modelled HIV estimates using the updated Spectrum software are due by 15 April 2016.

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Acronyms

AIDS	acquired immunodeficiency syndrome
ANC	antenatal clinic(s)
ART	antiretroviral therapy
ARV	antiretroviral medicine
BSS	Behavioural Surveillance Survey
DHS	Demographic and Health Survey
EID	early infant diagnosis
EIA	enzyme immunoassay
EWI	early warning indicator (of HIV drug resistance)
HIV	human immunodeficiency virus
HBV	hepatitis B virus
HBsAg	hepatitis B surface antigen
HCV	hepatitis C virus
HIVDR	HIV drug resistance
HTS	HIV testing services
IDU	injecting drug user/people who inject drugs (latter is preferred language)
ILO	International Labour Organization
IPV	intimate partner violence
MC	male circumcision
MTCT	mother-to-child transmission
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MNCH	maternal, newborn and child health
MOH	Ministry of Health
MSM	men who have sex with men
M&E	monitoring and evaluation
NA	not applicable
NAC	National AIDS Committee(s)
NAP	National AIDS Programme
NASA	National AIDS Spending Assessment
NGO	nongovernmental organization(s)
NNRTI	non-nucleoside reverse transcriptase inhibitor
NRTI	nucleoside reverse transcriptase inhibitor
NSP	national strategic plan
NSP	needle and syringe programmes
OECD	Organisation for Economic Co-operation and Development
OST	opioid substitution therapy
PHC	primary health care
PITC	provider-initiated testing and counselling
PLHIV	people living with HIV
PMTCT	prevention of mother-to-child transmission
PRSP	poverty reduction strategy paper
PWID	people who inject drugs
SDG	Sustainable Development Goals
STI	sexually transmitted infection(s)
SW	sex worker(s)
TB	tuberculosis
TG	transgender people
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS

UNICEF   United Nations Children's Fund
UNFPA   United Nations Population Fund
UNGASS   United Nations General Assembly Special Session on HIV and AIDS
WHO   World Health Organization

Introduction

Purpose

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

The 2011 UN Political Declaration on HIV and AIDS: Intensifying our Efforts to Eliminate HIV and AIDS (General Assembly resolution 65/277), adopted at the United Nations General Assembly High-Level Meeting on AIDS in June of that year, mandated UNAIDS to support countries to report on the commitments in the declaration.

The Global AIDS Response Progress Reporting (GARPR) indicators, before 2012 known as UNGASS indicators, were until 2012 reported at the global level every second year; from 2013 data have been collected every year.

This reporting round, with 2015 data, is a transition year between the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs), providing the baseline for targets to be set at the High-Level Meeting (HLM) on AIDS in 2016. The future HIV monitoring framework for 2016–2021 will be agreed after the HLM. This year's guidelines are a combination of the core indicators used in previous years, with additional indicators that monitor the treatment cascade. UNAIDS, WHO, UNICEF and partners have collaborated to compile the *Consolidated strategic information guidelines for HIV in the health sector* (WHO, 2015).[1]

In the past reporting rounds, countries have been encouraged to integrate core indicators into ongoing monitoring and evaluation. These indicators are designed to help countries assess the state of their national response and progress in achieving national HIV targets. They will contribute to a better understanding of the global response to the HIV pandemic, including progress towards the global targets set in the 2011 Political Declaration and the SDGs.

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

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[1] http://who.int/hiv/pub/guidelines/strategic-information-guidelines/en/

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. In the section Core indicators for Global AIDS Response Progress Reporting and Universal Access Health Sector Reporting, there are pages devoted 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.

Help is available at every stage of the process. Key points and sources for additional information, including who to contact and how to reach them, are highlighted in this introductory section and indicated with an arrow.

Background

The 2016 Global AIDS Response Progress Reporting is a transition reporting round for AIDS-related targets in the Millennium Development Goals and the Sustainable Development Goals. It is also the last reporting round for the 2011 Political Declaration and provides the baseline for monitoring the UN declaration targets for HIV envisaged to be set in June 2016.

The 2011 Political Declaration was built on two previous political declarations: the 2001 Declaration of Commitment on HIV/AIDS and the 2006 Political Declaration on HIV/AIDS. At the United Nations General Assembly Special Session on HIV/AIDS (UNGASS) in 2001, the declaration was adopted unanimously by Member States. This 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 new HIV infections, expand health-care access and mitigate the epidemic's impact. The 2006 declaration recognized the urgent need to achieve universal access to HIV treatment, prevention, care and support.

While the declarations have been adopted by governments, the vision extends far beyond the governmental 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 2011 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 requires the United Nations Secretary-General to issue annual progress reports. These reports are designed to identify challenges and constraints, and recommend action to accelerate achievement of the targets.

The guidelines in this document have been developed to enhance reporting of key indicators for the AIDS response. The reported data are used to monitor progress against the commitments and targets of the 2011 Political Declaration and the AIDS-related MDGs.

2011 UN Political Declaration on HIV and AIDS – targets and elimination commitments

1. Reduce sexual transmission by 50% by 2015
2. Reduce transmission of HIV among people who inject drugs by 50% by 2015
3. Eliminate new HIV infections among children by 2015 and substantially reduce AIDS-related maternal deaths
4. Reach 15 million people living with HIV with life-saving antiretroviral treatment by 2015
5. Reduce tuberculosis deaths in people living with HIV by 50% by 2015
6. Close the global AIDS resource gap by 2015 and reach annual global investment of US$ 22–24 billion in low- and middle-income countries
7. Eliminate gender inequalities and gender-based abuse and violence and increase the capacity of women and girls to protect themselves from HIV
8. Eliminate stigma and discrimination against people living with and affected by HIV by promoting laws and policies that ensure the full realization of all human rights and fundamental freedoms
9. Eliminate HIV-related restrictions on entry, stay and residence
10. Eliminate parallel systems for HIV-related services to strengthen integration of the AIDS response in global health and development efforts

Reporting history

UNAIDS has collected country progress reports from Member States, in order to monitor the various political declarations, every two years since 2004 and every year since 2013. Response rates increased from 102 (53%) Member States in 2004 to 177 (92%) in 2015 (see graph for regional and global response rates).
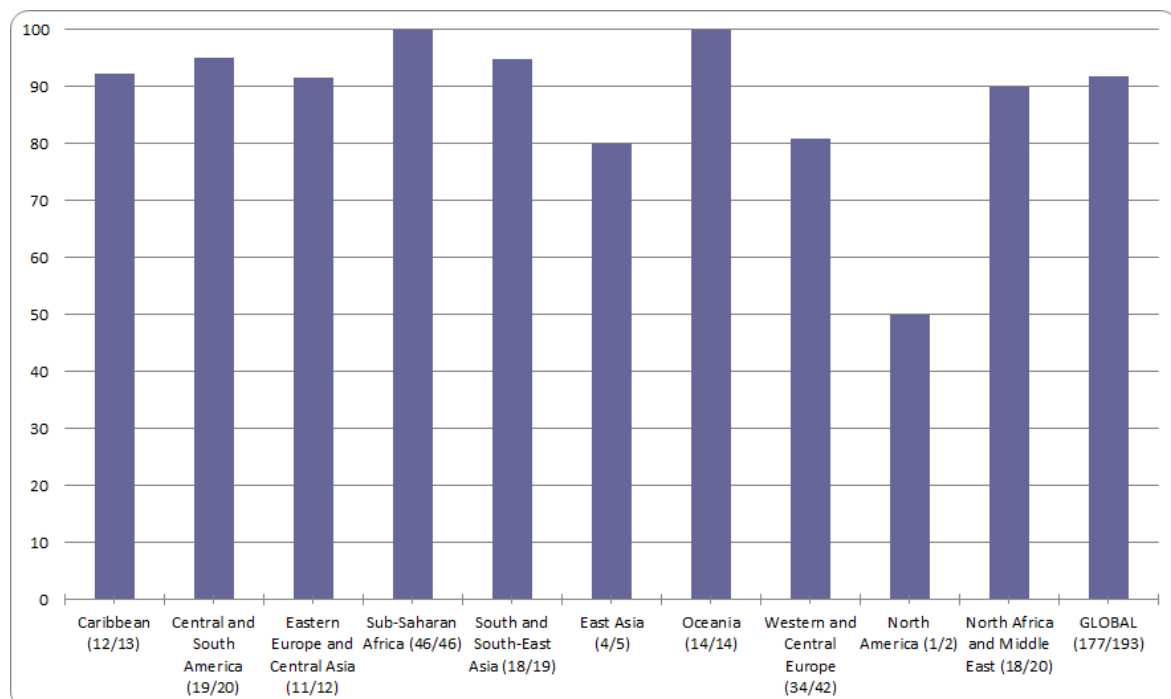
Figure 1: proportion of countries that have participated in the 2015 Global AIDS Response Progress Reporting

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 www.aidsinfoonline.org and can be used to produce charts, maps and tables. Unedited narrative country reports from the 2015 reporting are available at:

http://www.unaids.org/en/dataanalysis/knowyourresponse/countryprogressreports/2015countries

National Commitments and Policy Instrument (NCPI) reports from 2014 (last reported NCPI data) are available at:

http://www.unaids.org/en/dataanalysis/knowyourresponse/ncpi/2014countries

Reporting format

2016 reporting requires submission of the core indicators only. The narrative country progress report is optional. The submission of NCPI is not requested at this time.

When preparing Global AIDS Response Progress Reporting, countries are encouraged to share a recent national country report, if available. For those requiring more detail on the potential format, a Country Progress Report template, with detailed instructions for completion of the different sections can be found in Appendix 1. 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 titled "Implementation of progress reporting at national level" in these guidelines.

The Global AIDS Response Progress Reporting 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 both the country, regional and global levels.

The deadline for report submission using the reporting website is 31 March 2016.

Global AIDS Response Progress Reporting 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 the regional and global analyses of progress. This also provides countries with insights into other national-level responses.

The changes in this round of reporting compared with the 2015 reporting round are summarized on page 21.

Countries should consider the applicability of each indicator to their epidemic. When countries choose not to report on a particular indicator, they should provide their reasons as this enables differentiation between an absence of data and the inapplicability of specific indicators to particular country epidemics.

Most of the national indicators are applicable to all countries. The behaviour indicators for key populations at higher risk are relevant in all countries regardless of national HIV prevalence level. Similarly, countries with a low HIV prevalence are encouraged to collect data on sexual behaviours among young people as a means of tracking trends in behaviours that could influence the national

response in the future. However, a few indicators are applicable to specific HIV epidemic contexts only.

UNAIDS strongly recommends countries use these indicators within their national monitoring and evaluation systems. In accordance with specific needs, and if resources allow, countries may wish to include additional indicators in their national monitoring plans.

Full definitions for all indicators used for the Global AIDS Response Progress Reporting can be found in these guidelines.

National indicators for high-income countries

In adopting the 2011 Political Declaration on HIV and AIDS, high-income countries have committed to reporting on progress made in their national responses to HIV. It is recognized that high-income countries may use relatively complex information systems and a variety of data sources that can make the calculation of 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/European Economic Area (EU/EEA) countries have used innovative ways to link global HIV monitoring systems more closely to regional circumstances.

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

Implementation of progress reporting at national level

Indicator construction

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

- summary of what it measures
- rationale for the indicator
- numerator, denominator and calculation
- 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.

Another source for denominators used in the GARPR reporting is the Spectrum computer package that allows countries to create population-level estimates of people in need of antiretroviral therapy, women in need of antiretroviral medicine (ARV) and HIV-exposed children in need of virological testing.

In 2016 Spectrum files will be completed and GARPR data submitted simultaneously, as they were in 2015, to ensure results are harmonized. Final Spectrum files should be submitted by 15 April 2016, allowing time to compare the values of the indicator submission and Spectrum. Country teams will receive information on the 2016 estimates process in January 2016**.** In 2016, countries will have an option to specify in the GARPR online tool that data for certain indicators can be taken directly from their final Spectrum file, thereby not requiring their entry in the GARPR tool.

Spectrum files are created by a team of national experts trained on how to use the software. It is critical that the team completing the GARPR tool use the most recent estimates developed by the national HIV estimates team.

Civil society organizations are valuable sources of data for many indicators, especially those that relate to interventions where nongovernmental, 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, the bulk of the data required for the core national-level indicators may not be available from existing sources. Gathering such data is likely to require the adaptation of existing monitoring tools or the addition of 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 where other types of population-based surveys are conducted, including those for purposes other than HIV, it is possible to adapt these surveys to collect data for selected core indicators.

Numerators and denominators

For each core indicator, detailed instructions for measuring the national response are provided. Most core 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. If data used for the numerator and denominator are collected at different times, the accuracy and validity of that information will be compromised.

The methods described have been designed to facilitate the construction of global estimates from national-level data. While these methods can be applied at the subnational level, simpler, faster and

more flexible approaches tailored to local conditions may be more appropriate to guide decision-making below the national level.

A number of indicators related to coverage of services require a denominator that is based on the full population; that is, not just those people that are seen at health-care clinics. To calculate population-level indicators it is necessary to estimate the total number of people eligible for the service. For example, to estimate how close a country is to reaching 100% mother-to-child transmission (MTCT) coverage it is necessary to estimate the total number of pregnant women living with HIV. UNAIDS recommends countries use the Spectrum computer package to calculate the denominators needed for GARPR reporting.

Disaggregated data: 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. It is vital that countries collect data in their component parts and not simply in summary form. Without disaggregated data, it is difficult to monitor the breadth and depth of the response to the epidemic at national and global levels. It is equally difficult to monitor access to activities, 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, one of the cornerstones of their monitoring and evaluation efforts. If possible, equity analyses should also be done. Gender dynamics may become evident through sex- and age-disaggregated epidemiological data as well as through the behavioural indicators. Key ministries should review their information systems, surveys and other instruments for collecting data to ensure they capture disaggregated data at 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 the collection, dissemination and analysis of the data a priority in their ongoing operations.

The GARPR 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 entitled 'Numerators and Denominators' for additional information). In general, where appropriate, all data should be disaggregated by sex and age. Where collecting disaggregated data has proved difficult, entry of partial data is possible.

In situations where disaggregated data are not readily available, it may be possible to extract the information needed for core indicators from larger data sets, although the location of the data will vary 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 core 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.

Countries are encouraged to report available complementary data that reflects 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. This additional data will permit a more comprehensive situational analysis of the indicators from a gender perspective.

Subnational data

Many countries are improving the use of data at the subnational level to help all stakeholders better understand the geographic distribution of the epidemic and the response in each community. In 2015 the *UNAIDS World AIDS Day report* gave examples of how countries were focusing on specific populations and locations to fast-track their HIV response. (see http://www.unaids.org/en/resources/documents/2015/FocusLocationPopulation)

Since mid-2014, the online reporting tool has allowed users to submit subnational data for the number of HIV-positive pregnant women receiving ARVs for PMTCT (indicator 3.1), the number of people receiving antiretroviral therapy (indicator 4.1), and key populations-related data (see next paragraph for details).

The current version of the tool also allows users to submit data on priority cities to assess progress in the HIV response in cities, with specific focus on high-burden cities or those identified as fast-track cities and which have committed to ending AIDS by 2030.

Recent and representative survey data

You are requested to report only newly available data. If you have already reported the latest available data in a previous round of reporting, you should not report this again.

When calculating indicators that are based on general population surveys, countries should use the most recently available nationally representative survey.

When calculating indicators based on key population surveys, ensuring 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, it is recognized countries may not be confident that samples used for surveys of 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, quality surveys of key populations, by site, with numerator, denominator and sample size in the GARPR online reporting tool.

One of the challenges in developing burden of disease estimates 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 city/province-specific estimates calculated empirically. More details can be found on page 49. Some countries with empirical national size estimates for key populations are also able to aggregate prevention 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 and Monitoring Division Team at the UNAIDS Secretariat, who can be reached via email at AIDSreporting@unaids.org.

Interpretation and analysis

As each core indicator is discussed later in this manual, so too are their strengths and weaknesses. Countries should carefully review this section before they begin collecting and analysing data as it explains how to interpret 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 core 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 variations may occur from country to country on issues as diverse as the relationship of costs to local income, standards for quality and variations in treatment regimens.

After compiling their data countries are strongly encouraged to continue analysing their findings. This will enable them to better understand their national response and identify opportunities to improve that response. Countries should be looking closely at the linkages 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 mother-to-child transmission of HIV, does it also have sufficiently funded programmes that make prevention of mother-to-child transmission available to pregnant women? If these programmes are in place, are women using them in sufficient numbers to have an impact on the number of HIV-positive infants born in that country?

These linkages exist in every facet of a national response and many of the most important ones are reflected in the core national-level indicators included in this manual. 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. An over-reliance on data of any one type or from any one source is less likely to provide the perspective or insights required to understand such linkages and to identify any existing or emerging trends.

Selection of indicators

Based on knowing the local HIV epidemic, countries should review all of the indicators to determine which ones are applicable in their situation. For example, a country with a concentrated epidemic among sex workers and men who have sex with men may not need to report on the core indicators related to people who inject drugs. However, they should regularly assess the situation to see whether injecting drug use is emerging as an issue that needs attention. They should calculate both the specific indicators for sex workers and men who have sex with men as well as broader indicators (for example, young people's knowledge of HIV, higher-risk sex in women and men, and condom use during higher-risk sex), which are relevant in tracking the spread of HIV into the general population.

Similarly, countries with a generalized epidemic should include data on as many indicators as possible for key populations at higher risk. 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.

For each indicator, countries are requested to state its relevance in the online reporting tool, depending on the epidemic situation in the country and if data are available. If it is felt the area is relevant to the epidemic and response, but that the indicator itself is not relevant or appropriate for monitoring this issue, this should be stated in the online reporting tool comment boxes.

If a country is using an alternative indicator to effectively monitor the issue in question, the comment boxes may be used to describe it (including a full definition and method of measurement), along with any available data for the indicator.

Geo-coding surveillance and monitoring and evaluation information

Through GARPR, countries are asked to submit nationally representative data. However at the national level identifying geographic areas where localized HIV epidemics or specific populations most affected by the epidemic are not being reached by services is a key opportunity to strengthen the efficiency and effectiveness of national HIV responses. This is possible by attaching geographic information to indicator data. Geo-coding links surveillance and programmatic data from various sources to produce more detailed understandings of the HIV epidemic, facilitating implementation of focused and adapted interventions where they are most needed. To implement this approach, data collection must shift to sub-national levels that are programmatically relevant. Data collection is already expanding in many countries to lower geographical levels and among key populations. Confidentiality and ethical considerations must always be maintained in data collection, analysis and dissemination, to ensure geo-coded data are used to bring HIV-related services closer to the people who need them and not expose people to harm.

Since the 2014 mid-year reporting, countries have been asked to report any available subnational data for the number of pregnant women receiving antiretroviral medicines for prevention of mother-to-child transmission (indicator 3.1), the number of people receiving antiretroviral therapy (indicator 4.1) and for selected key population indicators.

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. National AIDS councils/commissions, committees or their equivalents should seek input from the full spectrum of civil society, including nongovernmental organizations, networks of people living with HIV, faith-based organizations, women, young people, trade unions and community-based organizations, for their reports on the core national-level indicators underlying the 2011 UN Political Declaration on HIV and AIDS. The importance of securing input from the full spectrum of civil society, including people living with HIV, cannot be overstated. Civil society speaks with many voices

and represents many different perspectives, all of which can be valuable in monitoring and evaluating a country's AIDS response.

National AIDS Committees or their equivalents should provide civil society organizations with easy access to their plans for data collection and denominator data. 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 data before it is finalized and submitted. The report that is submitted to UNAIDS should be widely disseminated to ensure that civil society has ready access to it.

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

- brief civil society organizations on the indicators and the reporting process;
- provide technical assistance on gathering, analysing and reporting data, including focused support to people living with HIV;
- ensure the dissemination of reports including, whenever possible, reports in national languages.

Shadow reports by civil society will be accepted by UNAIDS as they were in previous rounds. It must be noted that shadow reports are not intended as a parallel reporting process for civil society. Wherever possible UNAIDS encourages civil society integration into national reporting processes, as described above. Shadow reports are intended to provide an alternative perspective where it is strongly felt civil society was not adequately included in the national reporting process, where governments do not submit a report, or where data provided by government differs considerably from data collected by civil society monitoring government progress in service delivery.

Report contents

In 2015, countries are expected to submit data on all of the national indicators that are applicable 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 is drawn for the different indicators. These reports can be submitted through the online reporting tool. This will facilitate interpretation of the data, including trend analyses and comparisons between countries.

As discussed previously, and as required by the 2011 UN Political Declaration on HIV and AIDS, civil society, including people living with HIV, should be involved in the reporting process. The private sector at large should have a similar opportunity to participate in the reporting process. UNAIDS strongly recommends that national governments organize a workshop or forum to openly present and discuss the data before they are submitted. Joint United Nations Teams on AIDS are available in many countries to facilitate this discussion process.

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

If there are any questions, countries are advised to consult with UNAIDS locally or in Geneva at AIDSreporting@unaids.org.

Updated information on GARPR is available on the UNAIDS web site at: http://www.unaids.org/en/dataanalysis/knowyourresponse/globalaidsprogressreporting.

Guidance on submission

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 country. The Strategic Information and Monitoring Division at the UNAIDS Secretariat is also available to provide support and can be reached via email at AIDSreporting@unaids.org.

To facilitate contact with UNAIDS headquarters in Geneva during the reporting process and follow-up, countries are requested to provide the name and contact details of the individual responsible for submitting the data as early as possible to AIDSreporting@unaids.org.

Reporting tool and data submission

The indicator data should be submitted online by 31 March 2016.

Such data should be entered online and the narrative report uploaded using the global reporting website, https://aidsreportingtool.unaids.org. This will aid data processing and minimize errors. Each country has an assigned national focal point responsible for accessing this tool and entering information. Countries may add or assign multiple rapporteurs in the event data is 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 their username 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 he or she wishes to do so. Editors are able to add and make changes to the information to be submitted. As in previous years, the country rapporteur can also enable other people to view the data, allowing for broader country consultation. Viewers are able to see the information that will be submitted, yet make no changes to it. More details on this are provided in the E-tutorials on how to use the reporting tool in the Global AIDS Response Progress Reporting page (http://www.unaids.org/en/dataanalysis/knowyourresponse/globalaidsprogressreporting).

As mentioned above, where countries do not submit data on an indicator, they should indicate whether this was due to an absence of appropriate data or because the indicator was 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 past year's data if necessary. This will also be done through the online tool.

The data entry process is completed by clicking the submit button. This closes the country's session in the online global reporting tool. The country will no longer be able to edit or add to its submission using this tool. UNAIDS will review the data and ask for clarifications if necessary. If there are queries about the data, the site will be opened again for countries to edit their responses.

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

The national-level reporting process: necessary actions

Complete reporting on the core indicators is essential if the reporting is to contribute to the global response to the epidemic. Countries are strongly encouraged to establish timetables and milestones for completing the necessary tasks. Listed below are necessary actions 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 his/her name and contact details to UNAIDS Geneva through AIDSreporting@unaids.org before **1 February 2016**;

2.   Identify data needs in line with the national strategic plan requirements and these Global AIDS Response Progress Reporting guidelines; develop and disseminate a plan for data collection, including timelines and the roles of the National AIDS Committee or equivalent, other government agencies and civil society;

3.   Identify relevant tools for data collection, including meeting with national HIV estimates team;

4.   Secure required funding for the entire process of collecting, analysing and reporting the data;

5.   Collect and collate data in coordination with partner organizations from government, civil society and the international community;

6.   Analyse data in coordination with partner organizations from government, civil society and the international community;

7.   Work on draft Spectrum files to finalize denominator data;

8.   Allow stakeholders, including government agencies and civil society, to comment on the draft data;

9.   Enter the data into the GARPR online reporting website (https://AIDSreportingtool.unaids.org); submit all indicator data on or before **31 March 2016**;

10.   Upload the final Spectrum file to the designated national estimates folder on or before **15 April 2016**;

11.   Respond in a timely manner to queries on the submissions from UNAIDS, WHO or UNICEF.

It is important reported data are validated and reconciled between all partners in country. This process is supported in the online reporting tool through the ability to share the viewer credentials with national stakeholders. Several countries have reported this feature enabled civil society and other partners to view and provide inputs during the reporting process, allowing faster and wider stakeholder consultation and validation.

A summary checklist that may be used when preparing and submitting the Country Progress Report is included as Appendix 3.

Summary of changes for 2016 Global AIDS Response Progress Reporting

The 2016 reporting requires only core indicators be submitted. The narrative country progress report is optional and the National Commitments and Policy Instrument (NCPI) is not required.

Changes from the 2015 reporting round are summarized below:

- In anticipation of future reporting requirements aligned with the 2016–2020 UNAIDS Strategy, the following indicators have been introduced:

  — people living with HIV who know their status (including case-based reporting)
  — HIV prevalence from antenatal care clinics, by age group
  — HIV incidence rate
  — HIV prevalence in inmates/detainees
  — HIV prevalence in transgender people
  — HIV care coverage
  — viral load suppression
  — AIDS-related deaths.

- Data from 17 indicators will not be collected during this transition year. These indicators are:

  — sex workers: prevention programmes (GARPR 1.7)
  — men who have sex with men: prevention programmes (GARPR 1.11)
  — number of health facilities that provide HIV testing services (UA 1.15)
  — HIV testing services to women and men (UA 1.16)
  — rapid HIV test kits stock-outs (UA 1.16.1)
  — needle and syringe programmes and opioid substitution therapy sites (UA 2.7)
  — prevention of mother-to-child transmission during breastfeeding (GARPR 3.1a)
  — percentage of HIV-positive pregnant women assessed for antiretroviral therapy eligibility through either clinical staging or CD4 testing (UA 3.6)
  — number of pregnant women attending antenatal clinics at least once during the reporting period (UA 3.11)
  — health facilities that offer antiretroviral therapy (UA 4.3)
  — antenatal clinics and early infant diagnosis facilities (UA 3.12)

—   percentage of adults and children enrolled in HIV care who had tuberculosis (TB) status assessed and recorded during their most recent visit (UA 5.4)

—   orphans' school attendance (GARPR 10.1)

—   percentage of sex workers with active syphilis (UA 1.17.4)

—   percentage of men who have sex with men with active syphilis (UA 1.17.5)

—   number of adults reported with syphilis (primary/secondary and latent/unknown) in the past 12 months (UA 1.17.6)

—   number of men reported with gonorrhoea in the past 12 months (UA 1.17.8)

▪   Indicators have been regrouped into topics to align with the 2016–2021 UNAIDS Strategy. All key population indicators are under one topic. The topic 'HIV and other diseases' includes indicators on other diseases related to HIV, such as the TB/HIV indicators previously under Target 5, sexually transmitted infections previously under Target 1 and HIV/hepatitis indicators reported on by WHO EURO and PAHO countries.

▪   Transgender as a possible disaggregation, which was introduced in the 2014 reporting round for sex worker indicators, has been added also for other key population indicators, such as people who inject drugs and prisoners.

▪   Countries will have the option to specify in the GARPR online tool that data for selected indicators will be taken from their final Spectrum file and, therefore, will not need to be entered in the GARPR online tool.

▪   Indicator 6.1 AIDS spending describes a summary matrix to collect HIV expenditure indicators by source/funding scheme and major service categories. This slightly updated version captures the key considerations of currently applied methodologies and tools by major international partners and countries producing or using HIV resource-tracking indicators. It also provides a summary of key principles and lessons learned from more than a decade of experience in HIV resource-tracking and attempts to align with various other classification systems, such as the latest update of the System of Health Accounts (SHA2011) and the United States President's Emergency Plan for AIDS Relief (PEPFAR) expenditure analysis. It also provides insights into the forthcoming framework on performance-oriented resource tracking investment assessments (PORTIA) in light of post-2015 reporting focusing on monitoring efficiencies of the HIV response.

Submission of data on priority cities

Cities have a critical role to play in the HIV response because of their large and increasing populations of people living with HIV and the increased vulnerability to HIV 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 2015, more than 150 cities had signed the Paris Declaration on Fast-track cities: ending the AIDS epidemic, having committed 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.

To assess progress in the HIV response and in reaching the fast-track targets in cities, city-level data on key HIV-related indicators are required. The GARPR 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 required include: 1.5, 1.6, 1.20, 1.22, 1.23, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.10, 2.11, 2.12, 2.13, 3.1, 3.4, 4.1, 4.2, 4.6, 4.7, 11.1

- It is highly recommended that relevant city counterparts be consulted when gathering city-level data for submission.

The future of Global AIDS Response Progress Reporting

The year 2015 was the target year for the 2011 Political Declaration and the MDGs. There has been global agreement on the SDGs, including a new goal to end the AIDS epidemic. The sustainable development indicators will include one indicator on HIV incidence, in line with other diseases, and a critical measure for the HIV response. Additional indicators will be included in the HIV monitoring framework based on the High-Level Meeting in June 2016.

To ensure data remains relevant and useful, the global HIV monitoring framework will be revised in 2016 based on a review of the utility of HIV reporting. This review considered the harmonization of reporting on the health-sector response, coordinated by the World Health Organization (WHO). It will inform decisions on monitoring mechanisms for 2016 and beyond.

Core indicators for Global AIDS Response Progress Reporting and Health Sector Reporting

Individual indicators may be used to track more than one topic. Those marked with an asterisk (*) are new GARPR indicators.

HIV prevention among general population

1.1 Young people: knowledge about HIV prevention
Percentage of young women and men aged 15–24 who correctly identify both ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission

1.2 Young people: sex before the age of 15
Percentage of young women and men aged 15–24 who have had sexual intercourse before the age of 15

1.3 Multiple sexual partnerships
Percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the past 12 months

1.4 Condom use at last sex among people with multiple sexual partnerships
Percentage of women and men aged 15–49 who had more than one partner in the past 12 months who used a condom during their last sexual intercourse

1.5 People living with HIV who know their status*
Percentage of people living with HIV who know their status (including data from case-based reporting)

1.6 HIV prevalence from antenatal clinics, by age group*
HIV prevalence among women attending antenatal clinics in the general population

1.20 HIV incidence rate*
Number of new HIV infections in the reporting period per 1000 uninfected population

Male circumcision indicators[2]

1.22 Male circumcision, prevalence
Percentage of men 15–49 that are circumcised

1.23 Annual number of men voluntarily circumcised
Number of male circumcisions performed according to national standards during the past 12 months

Key populations

2.1 Size estimations for key populations

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[2] These two indicators are required only from 16 countries with high HIV prevalence, low levels of male circumcision and generalized heterosexual epidemics.

Sex workers

2.2   Sex workers: condom use
Percentage of sex workers reporting the use of a condom with their most recent client

2.3   HIV testing in sex workers
Percentage of sex workers who received an HIV test in the past 12 months and know their results

2.4   HIV prevalence in sex workers
Percentage of sex workers who are living with HIV

Men who have sex with men

2.5   Men who have sex with men: condom use
Percentage of men reporting the use of a condom the last time they had anal sex with a male partner

2.6   HIV testing in men who have sex with men
Percentage of men who have sex with men who received an HIV test in the past 12 months and know their results

2.7   HIV prevalence in men who have sex with men
Percentage of men who have sex with men who are living with HIV

People who inject drugs

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

2.9   People who inject drugs: condom use
Percentage of people who inject drugs reporting the use of a condom the last time they had sexual intercourse

2.10   People who inject drugs: safe injecting practices
Percentage of people who inject drugs reporting the use of sterile injecting equipment the last time they injected

2.11   HIV testing in people who inject drugs
Percentage of people who inject drugs who received an HIV test in the past 12 months and know their results

2.12   HIV prevalence in people who inject drugs
Percentage of people who inject drugs who are living with HIV

2.13   Opioid substitution therapy coverage
Percentage of people who inject drugs receiving opioid substitution therapy (OST)

Prisoners

2.14   HIV prevalence in inmates/detainees*
        Percentage of inmates/detainees who are living with HIV

Transgender people

2.15   HIV prevalence in transgender people*
        Percentage of transgender people who are living with HIV

Prevention of mother-to-child transmission (PMTCT)

3.1   Prevention of mother-to-child transmission
       Percentage of HIV-positive pregnant women who received antiretroviral medicine (ARV) to reduce the risk of mother-to-child transmission

3.2   Early infant diagnosis
       Percentage of infants born to HIV-positive women receiving a virological test for HIV within two months of birth

3.3   Mother-to-child transmission of HIV
       Estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months

3.3a   Programme-level mother-to-child transmission of HIV
       Registered percentage of child HIV infections from HIV-positive women delivering in the past 12 months

3.4   PMTCT testing coverage
       Percentage of pregnant women with known HIV status

3.5   Testing coverage of pregnant women's partners
       Percentage of pregnant women attending antenatal clinics whose male partners were tested for HIV during pregnancy

3.7   Coverage of infant ARV prophylaxis
       Percentage of HIV-exposed infants who initiated ARV prophylaxis

3.9   Co-trimoxazole (CTX) prophylaxis coverage
       Percentage of HIV-exposed infants started on CTX prophylaxis within two months of birth

Treatment

4.1   HIV treatment: antiretroviral therapy
       Percentage of adults and children currently receiving antiretroviral therapy among all adults and children living with HIV

4.2   Twelve-month retention on antiretroviral therapy
       Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy

4.2a   Twenty-four-month retention on antiretroviral therapy
Percentage of adults and children with HIV known to be on treatment 24 months after initiation of antiretroviral therapy in 2013

4.2b   Sixty-month retention on antiretroviral therapy
Percentage of adults and children with HIV known to be on treatment 60 months after initiation of antiretroviral therapy in 2010

4.3   HIV care coverage*
Percentage of people currently receiving HIV care

4.4   Antiretroviral medicines (ARV) stock-outs
Percentage of facilities with stock-outs of antiretroviral medicines

4.5   Late HIV diagnoses
Percentage of HIV-positive persons with first CD4 cell count < 200 cells/µL in 2015

4.6   Viral load suppression*
Percentage of adults and children receiving antiretroviral therapy who were virally suppressed in the reporting period (2015)

4.7   AIDS-related deaths*
Total number who have died of AIDS-related illness in 2015

AIDS Spending
6.1   AIDS Spending
Domestic and international AIDS spending by categories and financing sources

Gender
7.1   Prevalence of recent intimate partner violence
Proportion of ever-married or partnered women aged 15–49 who experienced physical or sexual violence from a male intimate partner in the past 12 months

Stigma and discrimination
8.1   Discriminatory attitudes towards people living with HIV
Percentage of women and men aged 15–49 who report discriminatory attitudes towards people living with HIV

Travel restrictions
Travel restriction data are collected directly by the Human Rights and Law Division at UNAIDS headquarters and, therefore, no reporting is needed.

Health systems integration
10.2   External economic support to the poorest households
Proportion of the poorest households who received external economic support in the past three months

HIV and other diseases

Tuberculosis

11.1 Co-management of tuberculosis and HIV treatment
Percentage of estimated HIV-positive incident tuberculosis (TB) cases that received treatment for both TB and HIV

11.2 Proportion of people living with HIV newly enrolled in HIV care with active tuberculosis (TB) disease
Total number of people living with HIV having 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

11.3 Proportion of people living with HIV newly enrolled in HIV care started on tuberculosis (TB) preventive therapy
Number of patients started on treatment for latent TB infection, expressed as a percentage of the total number newly enrolled in HIV care during the reporting period

Hepatitis

11.4 Hepatitis B testing
Proportion of persons in HIV care who were tested for hepatitis B virus (HBV)

11.5 Proportion of HIV-HBV coinfected persons currently on combined treatment

11.6 Hepatitis C testing
Proportion of people in HIV care who were tested for hepatitis C virus (HCV)

11.7 Proportion of persons diagnosed with HIV-HCV infection started on HCV treatment during a specified time frame (e.g. 12 months)

Sexually transmitted infections

11.8 Syphilis testing in pregnant women
Percentage of pregnant women accessing antenatal care services who were tested for syphilis

11.9 Syphilis rates among antenatal care attendees
Percentage of antenatal care attendees who were positive for syphilis

11.10 Syphilis treatment coverage among syphilis-positive antenatal care attendees
Percentage of antenatal care attendees positive for syphilis who received treatment

11.11 Congenital syphilis rate (live births and stillbirth)
Percentage of reported congenital syphilis cases (live births and stillbirths)

11.12 Men with urethral discharge
Number of men reporting urethral discharge in the past 12 months

11.13 Genital ulcer disease in adults
Number of adults reported with genital ulcer disease in the past 12 months

1.1 Knowledge about HIV prevention among young people

Percentage of young women and men aged 15–24 who correctly identify both ways of preventing the sexual transmission of HIV and who 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 sexual transmission of infection to successive generations of young people. Sound knowledge about HIV and AIDS is an essential prerequisite (albeit, often an insufficient condition) for adopting behaviours that reduce the risk of HIV transmission.
Numerator	Number of respondents aged 15–24 who gave the correct answer to all five questions
Denominator	Number of all respondents aged 15–24
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	▪ sex ▪ age (15–19 and 20–24)

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

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

Further information

Demographic and Health Survey/AIDS Indicator Survey methodology and survey instruments
http://dhsprogram.com/What-We-Do/Survey-Types/AIS.cfm

1.2 Sex before the age of 15

Percentage of young women and men aged 15–24 who have had sexual intercourse before the age of 15

What it measures	Progress in increasing the age at which young women and men aged 15–24 first have sex
Rationale	A major goal in many countries is to delay the age at which young people first have sex and discourage premarital sexual activity because it reduces their potential exposure to HIV. There is also evidence to suggest that first having sex at a later age reduces susceptibility to infection per act of sex, at least for women.
Numerator	Number of respondents (aged 15–24 years) who report the age at which they first had sexual intercourse as under 15
Denominator	Number of all respondents aged 15–24
Calculation	Numerator/denominator
Method of measurement	Population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey) Respondents are asked whether or not they have ever had sexual intercourse and, if yes, they are asked: How old were you when you first had sexual intercourse for the first time?
Measurement frequency	Every 3–5 years
Disaggregation	▪ sex ▪ age (15–19 and 20–24)

Strengths and weaknesses

Countries where few young people have sex before the age of 15 might opt to use an alternative indicator: percentage of young women and men aged 20–24 who report their age at sexual initiation as under 18. The advantage of using the reported age at which young people first have sexual intercourse (as opposed to the median age) is that the calculation is simple and allows easy comparison over time. The denominator is easily defined because all members of the survey sample contribute to this measure.

It is difficult to monitor change in this indicator over a short period because only individuals entering the group (i.e. those aged under 15) at the beginning of the period for which the trends are to be assessed, can influence the numerator. If the indicator is assessed every two to three years, it may

be better to focus on changes in the levels for the 15–17 age group; and if it is assessed every five years, the 15–19 age group.

In countries where HIV-prevention programmes encourage virginity or delaying first sex, young people's responses to survey questions may be biased, including a deliberate misreporting of age at which they first had sex.

Further information
Demographic and Health Survey/AIDS Indicator Survey methodology and survey instruments

http://dhsprogram.com/What-We-Do/Survey-Types/AIS.cfm

1.3 Multiple sexual partnerships

Percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the past 12 months

What it measures	Progress in reducing the percentage of people who have multiple sexual partnerships
Rationale	The spread of HIV depends largely upon unprotected sex among people with a high number of partnerships. Individuals who have multiple partners have a higher risk of HIV transmission than individuals that do not link into a wider sexual network.
Numerator	Number of respondents aged 15–49 who have had sexual intercourse with more than one partner in the past 12 months
Denominator	Number of all respondents aged 15–49
Calculation	Numerator/denominator
Method of measurement	Population-based surveys (Demographic and 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 has had more than one partner in the preceding 12-month period
Measurement frequency	Every 3–5 years
Disaggregation	• sex • age (15–19, 20–24 and 25–49)

Strengths and weaknesses

This indicator gives a picture of levels of higher-risk sex. If people have only one sexual partner, the change will be captured by changes in this indicator. However, if people simply decrease the number of sexual partners they have, the indicator will not reflect a change, even though potentially this may have a significant impact on the epidemic spread of HIV and may be counted a programme success. Additional indicators may need to be selected to capture the reduction in multiple sexual partners in general.

Further information

Demographic and Health Survey/AIDS Indicator Survey methodology and survey instruments

http://dhsprogram.com/What-We-Do/Survey-Types/AIS.cfm

1.4 Condom use at last sex among people with multiple sexual partnerships

Percentage of women and men aged 15–49 who had more than one partner in the past 12 months who used a condom during their last sexual intercourse

What it measures	Progress towards preventing exposure to HIV through unprotected sexual intercourse among people with multiple sexual partners
Rationale	Condom use is an important measure of protection against HIV, especially among people with multiple sexual partners.
Numerator	Number of respondents (aged 15–49) who reported having had more than one sexual partner in the past 12 months who also reported that a condom was used the last time they had sex
Denominator	Number of respondents (15–49) who reported having had more than one sexual partner in the past 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 has had more than one partner in the preceding 12-month period, and if so whether a condom was used the last time the respondent had sexual intercourse.
Measurement frequency	3-5 years
Disaggregation	▪ sex ▪ age 15–19, 20–24 and 25–49 years

Strengths and weaknesses

This indicator shows the extent to which condoms are used by people who are likely to have higher-risk sex (i.e. change partners regularly). However, the broader significance of any given indicator value will depend upon the extent to which people engage in such relationships. Levels and trends should be interpreted carefully using the data obtained on the percentages of people who have had more than one sexual partner within the past year.

The maximum protective effect of condoms is achieved when their use is consistent rather than occasional. The current indicator does not provide the level of consistent condom use. However, the alternative method of asking whether condoms were always/sometimes/never used in sexual

encounters with non-regular partners in a specified period is subject to recall bias. Furthermore, the trend in condom use during the most recent sex act will generally reflect the trend in consistent condom use.

Further information
Demographic and Health Survey/AIDS Indicator Survey methodology and survey instruments

http://dhsprogram.com/What-We-Do/Survey-Types/AIS.cfm

1.5 People living with HIV who know their status*

Percentage of people living with HIV who know their status, including data from case-based reporting

What it measures   Progress in reaching people living with HIV with HIV testing services.

Rationale   To ensure people living with HIV receive the care and treatment required to live healthy, productive lives, and to reduce the chance of transmitting HIV, it is critical that they know their status. In many countries, targeting testing and counselling at locations and populations with the highest HIV burden will be the most efficient way to reach people living with HIV and ensure they are aware of their status. This indicator captures the efficacy of HIV testing interventions targeted at populations at increased risk of HIV infection.

Numerator   Among people living with HIV, the number who know their HIV status results

Denominator   Number of people living with HIV

Calculation   Numerator/denominator

Method of measurement

1. Case-based reporting

In countries with well-functioning HIV reporting systems, the number of people diagnosed can be estimated from national case-based data. The minimum number of years for which HIV case data are available should be stated.

The number of AIDS-related deaths must be subtracted from the cumulative number diagnosed to calculate the number of people living with HIV who know their status.

The number of people who are alive and know their status is divided by the estimated number of people living with HIV. The estimated number of people living with HIV is available from internationally consistent models.

Countries without case-based reporting systems will need to rely on other sources to estimate this indicator. At a minimum, the number of people registered in HIV care or receiving ART know their status.

2. Survey-based reporting

Two additional methods to estimate this indicator are described below for countries that have conducted household surveys on HIV serostatus.

a) In a population-based survey collecting HIV serostatus, respondents are directly asked whether they have been tested for HIV and, if so, what were the results from their most recent test. For example, population-based HIV impact assessments (PHIA). The indicator is calculated as the proportion who

said they were diagnosed as HIV positive among those respondents with a positive serostatus.

b) If the household survey collects HIV serostatus but does not directly ask whether the person is HIV positive, another calculation can be used to estimate the range of people living with HIV who know their status; for example, in Demographic and Health Surveys (DHS) or AIDS Indicator Surveys (AIS). Survey respondents are asked whether they have been tested for HIV, the timing of the most recent test and whether they have received the results. Among the respondents with a positive serostatus, the proportion who have never been tested are assumed to not know their status. From this information, the upper bound of the range can be obtained (Available from http://www.betastatcompiler.com as "Previously tested for HIV and received last test results"). The lower bound can be calculated from the higher value of the following, based on data availability:

▪ the percentage of all people living with HIV on care, or on antiretroviral therapy
▪ the percentage of people living with HIV in the survey who have been tested in the past 12 months and received the results (there will be a small proportion equal to the annual incidence rate – less than 2% in most cases – of people who might have converted in the 12 months after being tested). This can be calculated from the DHS data sets.
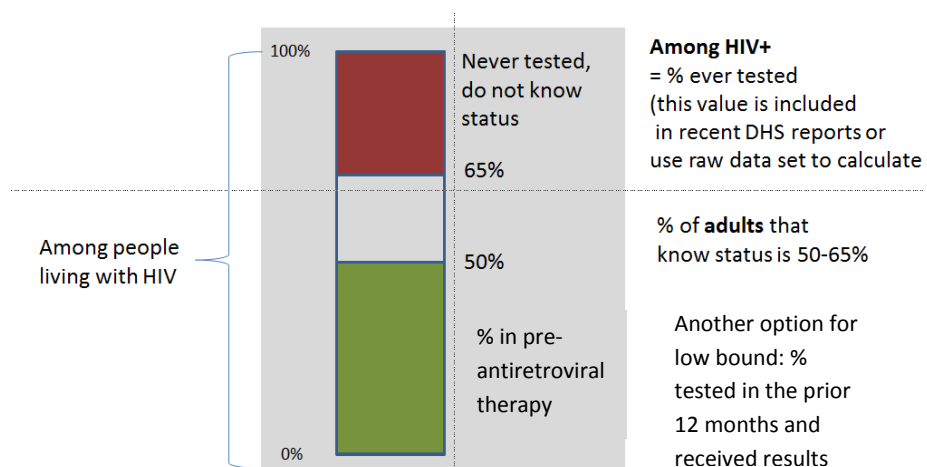
Figure: using a household survey to estimate the range of people living with HIV who know their status.

Notes on combining survey and programme data for the estimated range

a) Timeliness: all values should be taken from the most recent survey (ever tested, tested in past 12 months and received their results) and programme data (on care or on antiretroviral therapy). Because the latest available household surveys can date back years (cut-off point five years prior to reporting round), programme data for the lower bound might exceed the

upper bound from surveys. In this event, the lower bound will serve as the most conservative estimate for people living with HIV who know their status.

b) Age range: household surveys are often restricted to respondents of reproductive age (15–49), so it is essential the age range matches the age range for the programme data. As testing patterns can vary by age, it is advisable to consider age-group specific analyses.

c) Minimum sample size for the denominator from surveys: it is recommended there be at least 50 unweighted seropositive respondents in the denominator to ensure a robust measure (Staveteig S et al. DHS comparative reports 30. 2013).

Measurement frequency	Annually
Disaggregation	- sex - age (0–14, 15–49, 50+) - key populations (for example, from integrated biological and behavioural surveillance) - other target populations

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

Case-based reporting

Ideally this indicator will be compiled from case-based reporting systems. Case-based surveillance is integrated into other disease surveillance, reducing the cost and enabling real-time notification when there are rapid changes in the number of people found to be HIV positive.

However, it takes time to build case-based surveillance systems. Countries with weak systems are likely to have significant under-reporting or will be unable to remove individuals who have been reported multiple times. Therefore, measuring this indicator through case-based reporting is suitable only for countries with strong such systems. Do not use case-based surveillance for this indicator if:

- deduplication, based on a unique identification system, has not occurred.
- HIV is highly stigmatized, resulting in under-reporting of HIV-related deaths.
- there is high underlying mortality due to other causes, such as conflict or natural emergencies. People living with HIV who die from other causes will not be subtracted from the cumulative diagnoses overestimating the people living with HIV.

In some instances, an HIV case has been notified despite the person not being alerted to their seropositive status. If this is a common phenomenon due to delays in test results being returned to facilities, these individuals should not be counted as knowing their status.

A number of countries are rolling out strategies for self-testing or community-based testing outside of health-care facilities. A positive test at such an alternative site requires the test to be repeated in a facility setting, at which point the case would be reported through the case-based reporting system.

Survey-based reporting

The two survey-based approaches can be used to produce an alternative estimate or to triangulate against other estimates of the proportion of people living with HIV who know their status, as it is relatively easy to calculate.

When using the survey approach in which HIV status has not been directly asked, the two options for the lower bound (on care or on antiretroviral therapy, tested in past 12 months and know their results) need to be carefully evaluated and chosen based on data quality. For example, if reported numbers on care are unrealistic compared with antiretroviral therapy numbers, an alternative lower bound should be taken into consideration.

The timeliness of the survey is an important consideration. If the case-based reporting system is relatively new and the count of people diagnosed with HIV and AIDS-related deaths are available only for recent years, it is possible to update the survey range estimates with the case-based data. Calculate the estimated number of people who know their status based on those tested in the past 12 months from the survey. (Note that this will be a considerable undercount since people who already know their status are not likely to be tested in the prior year.) Add the number of persons reported as newly diagnosed through the case-based reporting system, subtracting the AIDS-related deaths, since the year of the survey. This calculation, while not precise, is another data point against which to compare the lower bound of the range.

Among key populations, the survey-based approach (2b) can also be considered for surveys such as the integrated biological and behavioural surveillance.

Knowledge of HIV status versus diagnosed

The phrase people living with HIV who have been diagnosed has also been used to describe the first 90 (diagnosing 90% of people with HIV who do know their HIV status). UNAIDS prefers the phrase 'knowledge of status' as 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 (Connecticut, USA), Avenir Health.
http://www.avenirhealth.org/software-spectrum.php

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

Staveteig S et al. *Demographic patterns of HIV testing uptake in sub-Saharan Africa*. *DHS comparative reports 30*. xi, 81 pages. Calverton (Maryland, USA), ICF Macro, April 2013. Publication produced for review by the United States Agency for International Development (USAID).

1.6 HIV prevalence from antenatal clinics by age group

HIV prevalence among women attending antenatal clinics in the general population

What it measures	Prevalence among pregnant women in the general population
Rationale	HIV prevalence data from antenatal clinics can reveal trends among pregnant women for the country. Once disaggregated by age and region, the results indicate where services for pregnant women are needed and can be used to understand trends in the HIV epidemic.
Numerator	Number of pregnant women who tested HIV positive (including those who already know their HIV positive status) who attended antenatal clinics
Denominator	Number of women tested for HIV at antenatal clinics (including those who already know their HIV positive status).
Calculation	Numerator/denominator
Method of measurement	Antenatal clinics in most countries provide routine HIV testing for pregnant women. Results should be aggregated through the health information system.
	This indicator can be captured by collating the routine testing results of pregnant women attending antenatal clinics. It is important to disaggregate the results by five-year age groups to understand in which age groups increases and decreases are taking place. Given the large numbers of women tested through antenatal clinics it will be possible to consider also subnational trends.
Measurement frequency	Annual
Disaggregation	Age (15–19, 20–24, 25–29, 30–34, 35–39, 40–44, 45–49)

Additional information requested

Please provide subnational data disaggregated by administrative areas, as well as city-specific data for this indicator.

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.

The data entry screen has separate space for these data. You may submit also the digital version of related reports using the upload tool.

Explanation of numerator

The numerator for this indicator should be the summation of the number of women tested and found positive for HIV during antenatal services and the number of women with a known HIV-positive status when they enrolled in antenatal services. Ideally, these data would be the national total for all antenatal clinics.

Strengths and weaknesses

In previous surveillance guidance a sentinel survey was recommended from a selection of antenatal clinics. As HIV becomes more integrated into health systems, UNAIDS and WHO recommend data on HIV prevalence be obtained from routine testing, avoiding the need for anonymous testing (see guidelines below).

In many countries, women will have the option to not be tested for HIV. If a high proportion of women attending antenatal clinics choose not to be tested, the results will be less representative of the country. The proportion who opt not to be tested should be considered when analyzing the results.

If previously known HIV positive pregnant women do not attend routine antenatal clinics but use specialized services, the prevalence at antenatal clinics may underestimate the true prevalence among pregnant women. In such cases, the known HIV positive pregnant women could be added to the numerator as described above.

HIV prevalence data is useful for models of the HIV epidemic, such as Spectrum. When representative of all antenatal sites in the country and coverage is relatively high, this data helps identify important trends about pregnant women in the country. However, trends among pregnant women are not necessarily representative of all women in the country (Eaton et al, STI 2014). Prevalence among pregnant women might be higher or lower than the general female population.

Increases in prevalence should be considered in conjunction with antiretroviral therapy scale-up.

Further information

Guidelines for conducting HIV surveillance based on routine programme data. Geneva, UNAIDS/World Health Organization, 2015.
http://www.unaids.org/en/resources/documents/2015/SurveillanceRoutineProgrammeData

1.20 HIV incidence rate

Number of new HIV infections 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 new infections to less than 200 000 in 2030. Monitoring the rate of new infections over time provides a measure of progress towards this goal. This indicator is one of the 10 global indicators in the WHO *Consolidated strategic information guidelines.*

Numerator   Number of new infections during the reporting period multiplied by 1000

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

Calculation   Numerator/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 often can be difficult to obtain. As a result, most if not all countries will rely on indirect measures or a triangulation of 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 recency of infection also raises cost and complexity challenges as 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 (AEM). These models may incorporate geographic and population-specific HIV survey, surveillance, case-reporting, mortality, programme and clinical data, and in some instances, assumptions around risk behaviours and HIV transmission. In some instances, countries may wish to triangulate these data with other sources of estimates of new infections, 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 HIV infections should not be used as a direct source of estimating the number

of new HIV infections in the reporting year. Due to reporting delays and underdiagnosis, newly reported cases may not reflect the actual rate of new infections. This information may be useful, however, for triangulation or validation purposes, especially when combined with tests for recency of HIV infection.

Measurement frequency	Estimates should be produced on an annual basis.
Disaggregation	▪ sex ▪ age groups (0–14, 15–24, 15-49 years) ▪ geographic area

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, a new HIV infection is a relatively rare event. Therefore, the accuracy of estimates of incidence and changes in this rate over time can be uncertain. Such uncertainty should be reported when using HIV incidence rates to monitor programme impact, especially when disaggregated by sex, age, and for key populations or in specific geographic 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 (Connecticut, USA), Avenir Health.
http://www.avenirhealth.org/software-spectrum.php

Male circumcision indicators

These two indicators are required only from 16 countries with high HIV prevalence, low levels of male circumcision and generalized heterosexual epidemics i.e. Botswana, Ethiopia, Central African Republic, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Swaziland, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

1.22 Male circumcision, prevalence

Percentage of men 15–49 that are circumcised

What it measures	Progress towards increased coverage of male circumcision
Rationale	There is compelling evidence that male circumcision reduces the risk of heterosexually acquired HIV infection in men 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 and low male circumcision prevalence.
Numerator	Number of male respondents aged 15–49 who report they are circumcised.
Denominator	Number of all male respondents aged 15–49 years
Calculation	Numerator/denominator
Method of measurement	Population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Surveys or other representative survey)
Measurement frequency	Every 3–5 years
Disaggregation	▪ age (15–19, 20–24, 25–49) ▪ source/practitioner of circumcision procedure: formal health-care system or traditional

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

Changing rates of male circumcision may or may not be the result of a programme. For example, changing societal norms not due to a programme may be leading to changing rates of male circumcision. This indicator measures total change in the population, whatever the reason(s).

Existing population-based surveys (such as DHS) may not accurately measure true male circumcision status because of a lack of knowledge of what male circumcision is, confusion about circumcision status, or perceived social desirability of circumcision status. Other approaches to determining circumcision status might be used; for example, using pictures or drawings (drawings may be more culturally appropriate), prompts or even direct examination. Modelling the potential impact of changing rates of male circumcision on 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/UNAIDS, 2009.

http://whqlibdoc.who.int/publications/2009/9789241598262_eng.pdf

1.23 Annual number of men 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	There is compelling evidence that male circumcision reduces the risk of heterosexually acquired HIV infection in men 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 and low male circumcision prevalence.
Numerator	Number of males circumcised during the past 12 months according to national standards
Denominator	NA
Calculation	NA
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, 50+)

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 male circumcisions carried out 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 disaggregations are recommended at country level:

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

When the number of male circumcisions is disaggregated by HIV status and age, it will be possible to determine the impact of male circumcision programmes on HIV incidence using models. If a country has prioritized particular age groups this disaggregation will help determine whether age-specific communication strategies are creating demand. If the data are available by 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 if task-shifting efforts are succeeding and determine resource allocation.

Some programmes will work closely with voluntary HIV testing services to provide HIV testing. A patient desiring male circumcision may have been recently tested, in which event an on-site HIV test may be unnecessary. In these cases, a written 'verified result' may be requested at the facility 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 HIV-positive men who, if they choose to be circumcised, are likely to be at higher risk of surgical complications (i.e. men who are chronically infected 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/UNAIDS, 2009.
http://whqlibdoc.who.int/publications/2009/9789241598262_eng.pdf

2.1 Size estimations for key populations

What it measures	Number of people engaging in the specific behaviours that put the given population at risk for HIV transmission
Rationale	Programme planning for key populations can be more efficient if there are accurate estimates of the size of these populations. The figures enable national AIDS programmes, ministries of health, donors and non-profit and multilateral organizations to efficiently allocate resources to adequately meet the prevention needs of specific at-risk populations. Size estimates are also important for modelling the HIV epidemic.
Numerator	NA
Denominator	NA
Calculation	NA
Method of measurement	The following questions are asked:

- Have you estimated the size of key populations?
- If yes, when (year) was the latest estimation?
- If yes, what was the estimation?

Measurement frequency	Populations should be estimated every five years. However, any time an integrated biobehavioral survey (IBBS) 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, inmates/detainees).
	It is generally impractical to estimate population sizes by age or gender. However, if a survey measures women who inject drugs or male sex workers, for example, a size estimate should be included.

Additional information requested

To get a better understanding of the size estimates submitted, we request the following additional information be included in the comment box:

- definition used of the population
- 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.

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.

Submit the digital version of any available size estimation reports using the upload tool.

Strengths and weaknesses

The quality of population size estimates will vary 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

Guidelines on estimating the size of populations most at risk to HIV. Geneva, World Health Organization/UNAIDS, 2010.
http://www.who.int/hiv/pub/surveillance/final_estimating_populations_en.pdf

2.2   Sex workers: condom use

Percentage of sex workers reporting the use of 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, through consistent and correct condom use. Note: countries with generalized epidemics may also have a concentrated subepidemic among sex workers. If so, it would be valuable for them to calculate and report on this indicator for this population.
Numerator	Number of sex workers who reported that a condom was used 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? Whenever possible, data for sex workers should be collected through civil society organizations that have worked closely with this population in the field. Access to sex workers as well as the data collected from them must remain confidential.
Measurement frequency	Every two years
Disaggregation	▪ sex (female, male, transgender) ▪ age (<25, 25+)

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

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

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

Surveying sex workers can be challenging. Consequently, 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, these concerns should be reflected in the interpretation of the survey data. Where different sources of data exist, the best available estimate should be used. Information on the sample size, the quality and reliability of the data, and any related issues should be included in the report submitted with this indicator.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

Several countries have in previous reporting rounds reported HIV prevalence among subpopulations of transgender women through the additional comments field in the GARPR 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 the calculation of this indicator be used for the calculation of 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, North Carolina, MEASURE Evaluation, 2011. www.cpc.unc.edu/measure/publications/ms-11-49a

2.3 HIV testing in sex workers

Percentage of sex workers who received an HIV test in the past 12 months and know their results

What it measures	Progress in implementing HIV testing services among sex workers
Rationale	In order to protect themselves and to prevent infecting others, it is important for sex workers to know their HIV status. Knowledge of one's status is also a critical factor in the decision to seek treatment. Note: countries with generalized epidemics may also have a concentrated subepidemic among one or more key populations at higher risk. If so, they should calculate and report this indicator for those populations.
Numerator	Number of sex workers who have been tested for HIV during the past 12 months and who know their results
Denominator	Number of sex workers included in the sample
Calculation	Numerator/denominator
Method of measurement	Behavioural surveillance or other special surveys Respondents are asked the following questions: 1. Have you been tested for HIV in the past 12 months? If yes: 2. I do not want to know the results but did you receive the results of that test? Whenever possible, data for sex workers should be collected through civil society organizations that have worked closely with this population in the field. Access to sex workers as well as the data collected from them must remain confidential.
Measurement frequency	Every two years
Disaggregation	▪ sex (female, male, transgender) ▪ age (<25, 25+)

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 data obtained may not be based on a representative national sample of the sex workers being surveyed. If there are concerns that the data are not based on a representative sample, these concerns should be reflected in the interpretation of the survey data. Where different sources of data exist, the best available estimate should be used. Information on the sample size, the quality and reliability of the data, and any related issues should be included in the report submitted with this indicator.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

Tracking sex workers over time to measure progress may be difficult due to mobility and the hard-to-reach nature of these populations, with many groups being hidden populations. Information about the nature of the sample should, therefore, be reported in the narrative to facilitate interpretation and analysis over time.

Several countries have in previous reporting rounds reported HIV prevalence among subpopulations of transgender women through the additional comments field in the GARPR online reporting tool. This demonstrates 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.

This indicator is most meaningful in settings where testing scale-up is relatively recent. People who tested more than 12 months ago and know they are positive will be considered 'uncovered' by this indicator construction. Ideally, surveys should ask why respondents did not test in the past 12 months. If they report they know their HIV status to be positive, they should not be included in the denominator. This indicator will be formally changed post-2015; we ask countries where possible to report against this indicator while omitting known HIV-positive persons from the denominator and state they have done this in the comment field.

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, North Carolina, MEASURE Evaluation, 2011.
www.cpc.unc.edu/measure/publications/ms-11-49a

2.4 HIV prevalence in sex workers

Percentage of sex workers living with HIV

What it measures	Progress on reducing HIV prevalence among sex workers
Rationale	Sex workers typically have higher HIV prevalence than the general population in both concentrated and generalized epidemics. In many cases, prevalence among these populations can be more than double the prevalence among the general population. Reducing prevalence among sex workers is a critical measure of a national-level response to HIV.
	Countries with generalized epidemics may also have a concentrated subepidemic among sex workers. If so, it is valuable to calculate and report on this indicator for this population.
Numerator	Number of sex workers who test positive for HIV
Denominator	Number of sex workers tested for HIV
Calculation	Numerator/denominator
Method of measurement	UNAIDS and WHO Working Group on Global HIV/AIDS and STI Surveillance: *Guidelines among populations most at risk for HIV*. Geneva, World Health Organization/UNAIDS, 2011
	This indicator is calculated using data from HIV tests conducted among respondents in the primary sentinel site or sites.
	The sentinel surveillance sites used for the calculation of this indicator should remain constant to allow for the tracking of changes over time.
Measurement frequency	Annual
Disaggregation	▪ sex (female, male, transgender) ▪ age (<25, 25+)

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

In theory, assessing progress in reducing the occurrence of new infections is best done through monitoring changes in incidence over time. In practice, however, prevalence data rather than incidence data are available. In analysing prevalence data of sex workers for assessing prevention

programme impact, it is desirable not to restrict analysis to young people but to report on those persons who are newly initiated to behaviours that put them at risk of infection (e.g. by restricting the analysis to people who have or participated in sex work for less than one 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, 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.

Due to difficulties in accessing sex workers, biases in serosurveillance data are likely to be far more significant than in data from a more general population, such as women attending antenatal clinics. If there are concerns about the data, these concerns should be reflected in the interpretation.

An understanding of how the sampled population(s) relate to any larger population(s) sharing similar risk behaviours 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 age. Therefore, it is desirable not to restrict analysis to young people but to report on other age groups as well.

Trends in HIV prevalence among sex workers in the capital city will provide a useful indication of HIV prevention programme performance in that city. However, it will not be representative of the situation in the country as a whole.

The addition of new sentinel sites will increase the sample's representativeness and, therefore, give a more robust point estimate of HIV prevalence. However, the addition of new sentinel sites reduces the comparability of values. As such, it is important to use consistent sites when undertaking trend analyses.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

Several countries have in previous reporting rounds reported HIV prevalence among subpopulations of transgender women through the additional comments field in the GARPR online reporting tool. This demonstrates that the data are feasible to obtain in different settings.

Further information
UNAIDS epidemiology publications

http://www.unaids.org/en/dataanalysis/knowyourepidemic/epidemiologypublications

Revised guidelines on HIV surveillance for key populations at higher risk: WHO/UNAIDS Working Group on Global HIV/AIDS and STI Surveillance. *Guidelines on surveillance among populations most at risk for HIV*. Geneva, UNAIDS, 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, North Carolina, MEASURE Evaluation, 2011. www.cpc.unc.edu/measure/publications/ms-11-49a

2.5 Men who have sex with men: condom use

Percentage of men reporting use of 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 the sexual transmission of HIV. Consequently, consistent and correct condom use is 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 their 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, it would be valuable for them to calculate and report on this indicator for this population.
Numerator	Number of men who have sex with men who reported that a condom was used 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 preceding six months, about anal sex within those partnerships and about condom use when they last had anal sex.
	Whenever possible, data for men who have sex with men should be collected through civil society organizations that have worked closely with this population in the field.
	Access to men who have sex with men as well as the data collected from them must remain confidential.
Measurement frequency	Every two years
Disaggregation	▪ age (<25, 25+)

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

For men who have sex with men, condom use at last anal sex with any partner gives a good indication of overall levels and trends of 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 where 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 female and male partners.

This indicator asks about male-to-male sex in the past six months. If you have data available on another time period, such as the past three or 12 months, please include this additional data 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, these concerns should be reflected in the interpretation of the survey data. Where different sources of data exist, the best available estimate should be used. Information on the sample size, the quality and reliability of the data, and any related issues, should be included in the report submitted with this indicator.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

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, North Carolina, MEASURE Evaluation, 2011. www.cpc.unc.edu/measure/publications/ms-11-49a

2.6 HIV testing in men who have sex with men

Percentage of men who have sex with men who received an HIV test in the past 12 months and know their results

What it measures	Progress in implementing HIV testing services among men who have sex with men
Rationale	To protect themselves and prevent infecting others, it is important for men who have sex with men to know their HIV status. Knowing one's status is also a critical factor in the decision to seek treatment.
	Note: countries with generalized epidemics may also have a concentrated subepidemic among one or more key population at higher risk. If so, they should calculate and report this indicator for those populations.
Numerator	Number of men who have sex with men who have been tested for HIV during the past 12 months and who know their results
Denominator	Number of men who have sex with men included in the sample
Calculation	Numerator/denominator
Method of measurement	Behavioural surveillance or other special surveys

Respondents are asked the following questions:

1. Have you been tested for HIV in the past 12 months?
    If yes:

2. I do not want to know the results but did you receive the results of that test?

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

Access to men who have sex with men as well as the data collected from them must remain confidential.

Measurement frequency	Every two years
Disaggregation	▪ age (<25, 25+)

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 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, these concerns should be reflected in the interpretation of the survey data. Where different sources of data exist, the best available estimate should be used. Information on the sample size, the quality and reliability of the data, and any related issues should be included in the report submitted with this indicator.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

Tracking men who have sex with men over time to measure progress may be difficult due to mobility and the often hard-to-reach nature of these populations. Therefore, information about the nature of the sample should be reported in the narrative to facilitate interpretation and analysis over time.

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

This indicator is most meaningful in settings where testing scale-up is relatively recent. People who tested more than 12 months ago and know they are positive will be considered 'uncovered' by this indicator construction. Ideally, surveys should ask why respondents did not test in the past 12 months. If they report that they know their HIV status to be positive, they should not be included in the denominator. This indicator will be formally changed post-2015; we will ask countries where possible to report against this indicator while omitting known HIV-positive persons from the denominator and state that they have done this in the comment field.

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, North Carolina, MEASURE Evaluation, 2011. www.cpc.unc.edu/measure/publications/ms-11-49a

2.7 HIV prevalence in men who have sex with men

Percentage of men who have sex with men who are living with HIV

What it measures	Progress in reducing HIV prevalence among men who have sex with men
Rationale	Men who have sex with men typically have the highest HIV prevalence in countries with either concentrated or generalized epidemics. In many cases, prevalence among these populations can be more than double the prevalence among the general population. Reducing prevalence among men who have sex with men is a critical measure of a national-level response to HIV.
	Note: countries with generalized epidemics may also have a concentrated subepidemic among one or more key populations at higher risk. If so, it would be valuable for them to calculate and report on this indicator for those populations.
Numerator	Number of men who have sex with men who test positive for HIV
Denominator	Number of men who have sex with men tested for HIV
Calculation	Numerator/denominator
Method of measurement	UNAIDS and WHO Working Group on Global HIV/AIDS and STI Surveillance: *Guidelines among populations most at risk for HIV*. Geneva, World Health Organization/UNAIDS, 2011
	This indicator is calculated using data from HIV tests conducted among respondents in the primary sentinel site or sites.
	The sentinel surveillance sites used for calculating this indicator should remain constant to allow for the tracking of changes over time.
Measurement frequency	Annual
Disaggregation	▪ age (<25, 25+)

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

In theory, assessing progress in reducing the occurrence of new infections is best done through monitoring changes in incidence over time. In practice, however, prevalence data rather than incidence data are available.

In analysing prevalence data of men who have sex with men for the assessing prevention programme impact, it is desirable not to restrict analysis to young people but to report on those persons who are newly initiated to behaviours that put them at risk of infection (e.g. by restricting the analysis to people who first had sex with another man 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 of sexual activity with other men, 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.

Due to difficulties in accessing men who have sex with men, biases in serosurveillance data are likely to be far more significant than in data from a more general population, such as women attending antenatal clinics. If there are concerns about the data, these concerns should be reflected in the interpretation.

An understanding of how the sampled population(s) relate to any larger population(s) sharing similar risk behaviours 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 age. Therefore, it is desirable not to restrict analysis to young people but to report on other age groups as well.

Trends in HIV prevalence among men who have sex with men in the capital city will provide a useful indication of HIV-prevention programme performance in that city. However, it will not be representative of the situation in the country as a whole.

The addition of new sentinel sites will make the samples more representative and give a more robust point estimate of HIV prevalence. However, the addition of new sentinel sites reduces the comparability of values. As such, it is important to use consistent sites when undertaking trend analyses.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

Further information

UNAIDS epidemiology guidance
http://www.unaids.org/en/dataanalysis/knowyourepidemic/epidemiologypublications

Revised guidelines on HIV surveillance for key populations at higher risk: WHO/UNAIDS Working Group on Global HIV/AIDS and STI Surveillance. *Guidelines on surveillance among populations most at risk for HIV*. Geneva, UNAIDS, 2011.

http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2011/20110518_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, North Carolina, MEASURE Evaluation, 2011. www.cpc.unc.edu/measure/publications/ms-11-49a

2.8 Needles and syringes per person who inject 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 coverage of an essential HIV prevention service for people who inject drugs
Rationale	Injecting drug use is the main route of transmission for approximately 10% of HIV infections globally and 30% of infections outside of sub-Saharan Africa. Preventing HIV transmission through injecting drug use is one of the key challenges to reducing the burden of HIV.
	Needle and syringe programmes (NSPs) 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 there is a wealth of scientific evidence supporting its efficacy in preventing the spread of HIV (see http://www.who.int/hiv/topics/idu/needles/en/index.html).
Numerator	Number of needles and syringes distributed in the past 12 months by NSPs
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)
	Size estimation of the number of people who inject drugs in the country (denominator)
Measurement frequency	Every two years
Disaggregation	▪ none

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

Some difficulties in counting needles and syringes are reported. Some commonly used syringes are 1ml or 2ml needle and syringe units while others are syringes to which needles need to be fitted. In

most cases, only data on the number of syringes distributed via NSPs but not pharmacy sales will be available.

Estimating the size at country level of populations of people who inject drugs (PWID) is not without its challenges. Many definitions of PWID exist in the literature and there are ranges of estimates. UNODC publishes size estimates of PWID in the World Drug Report. These estimates may be used. If there is a reason not to use them, please provide rationale in the comment box.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

Countries can monitor this indicator against the following coverage levels:

- low: <100 syringes per PWID per year
- medium: >100–<200 syringes per PWID per year
- high: >200 syringes per PWID per year

These levels are based upon studies in developed country settings investigating the levels of syringe distribution and impact on HIV transmission. Note that the levels required for the prevention of hepatitis C are likely to be much higher than those presented here.

Further information

A full description of this indicator can be found in: *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.

Effectiveness of sterile needle and syringe programming in reducing HIV/AIDS among IDUs. 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 et al. Estimating the prevalence of problematic drug use: a review of methods and their application. *Bulletin on Narcotics*, 2002, 54:15–32.

Most at risk populations sampling strategies and design tool. Atlanta, United States Department of Health and Human Services, Centers for Disease Control and Prevention, GAP Surveillance Team, 2009.
http://www.igh.org/surveillance

For details on the IDU Reference Group and to access reported country-level and global-level estimates of injecting drug use and HIV among injectors, please visit:
http://www.idurefgroup.unsw.edu.au/IDURGWeb.nsf/page/publications

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/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, UNAIDS, 2011. http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2011/20110518_Surveillance_among_most_at_risk.pdf

2.9 People who inject drugs: condom use

Percentage of people who inject drugs reporting the use of 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 where 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 (e.g. 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, it would be valuable for them to calculate and report on this indicator for this population.
Numerator	Number of people who inject drugs who reported that a condom was used 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?
	3. If yes in answer to both 1 and 2, did you use a condom when you last had sexual intercourse?
	Whenever possible, data for people who inject drugs should be collected through civil society organizations that have worked closely with this population in the field.
	Access to survey respondents as well as the data collected from them must remain confidential.
Measurement frequency	Every two years
Disaggregation	▪ sex (female, male, transgender)
	▪ age (<25, 25+)

Strengths and weaknesses

Surveying people who inject drugs can be challenging. Consequently, 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, these concerns should be reflected in the interpretation of the survey data. Where different sources of data exist, the best available estimate should be used. Information on the sample size, the quality and reliability of the data, and any related issues should be included in the report submitted with this indicator.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

The extent of injecting drug use-associated HIV transmission within a country depends on four factors: (i) the size, stage and pattern of dissemination of the national AIDS epidemic; (ii) the extent of injecting drug use; (iii) the degree to which people who inject drugs use contaminated injecting equipment; and (iv) 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

2.10 People who inject drugs: safe injecting practices

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

What it measures	Progress in preventing injecting drug use-associated HIV transmission
Rationale	Safer injecting and sexual practices among people who inject drugs are essential, even in countries where 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 (e.g., 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, it would be valuable for them to calculate and report on this indicator for this population.
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 last month?
	2. If yes, 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 through civil society organizations that have worked closely with this population in the field.
	Access to people who inject drugs as well as the data collected from them must remain confidential.
Measurement frequency	Every two years
Disaggregation	■ sex (female, male, transgender) ■ age (<25, 25+)

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

Surveying people who inject drugs can be challenging. Consequently, 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, these concerns should be reflected in the interpretation of the survey data. Where different sources of data exist, the best available estimate should be used. Information on the sample size, the quality and reliability of the data, and any related issues should be included in the report submitted with this indicator.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

The extent of injecting drug use-associated HIV transmission within a country depends on four factors: (i) the size, stage and pattern of dissemination of the national AIDS epidemic; (ii) the extent of injecting drug use; (iii) the degree to which people who inject drugs use contaminated injecting equipment; and (iv) 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

2.11 HIV testing in people who inject drugs

Percentage of people who inject drugs who received an HIV test in the past 12 months and know their results

What it measures	Progress in implementing HIV testing services among people who inject drugs
Rationale	To protect themselves and to prevent infecting others, it is important people who inject drugs know their HIV status. Knowledge of one's status is also a critical factor in the decision to seek treatment.
	Note: countries with generalized epidemics may also have a concentrated subepidemic among one or more key populations at higher risk. If so, they should calculate and report this indicator for those populations.
Numerator	Number of people who inject drugs respondents who have been tested for HIV during the past 12 months and who know their results
Denominator	Number of people who inject drugs included in the sample
Calculation	Numerator/denominator
Method of measurement	Behavioural surveillance or other special surveys
	Respondents are asked the following questions:
	1. Have you been tested for HIV in the last 12 months?
	If yes:
	2. I do not want to know the results but did you receive the results of that test?
	Whenever possible, data for people who inject drugs should be collected through civil society organizations that have worked closely with this population in the field.
	Access to people who inject drugs as well as the data collected from them must remain confidential.
Measurement frequency	Every two years
Disaggregation	▪ sex (female, male, transgender)
	▪ age (<25, 25+)

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 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, these concerns should be reflected in the interpretation of the survey data. Where different sources of data exist, the best available estimate should be used. Information on the sample size, the quality and reliability of the data, and any related issues should be included in the report submitted with this indicator.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

Tracking people who inject drugs over time to measure progress may be difficult due to mobility and the hard-to-reach nature of these populations, with many groups being hidden populations. Therefore, information about the nature of the sample should be reported in the narrative to facilitate interpretation and analysis over time.

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.

This indicator is most meaningful in settings where testing scale-up is relatively recent. People who tested more than 12 months ago and know they are positive will be considered 'uncovered' by this indicator construction. Ideally, surveys should ask why respondents did not test in the past 12 months. If they report that they know their HIV status to be positive, they should not be included in the denominator. This indicator will be formally changed post-2015; we will ask countries where possible to report against this indicator while omitting known HIV-positive persons from the denominator and state that they have done this in the comment field.

Further information

WHO/UNAIDS Working Group on Global HIV/AIDS and STI Surveillance. *Guidelines on surveillance among populations most at risk for HIV*. Geneva, UNAIDS, 2011.
http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2011/2011_Estimating_Populations_en.pdf

Guidelines for using HIV testing technologies in surveillance: selection, evaluation and implementation. Geneva, World Health Organization, 2010.
http://www.who.int/hiv/pub/surveillance/hiv_testing_technologies_surveillance_.pdf

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

2.12 HIV prevalence in people who inject drugs

Percentage of people who inject drugs who are living with HIV

What it measures	Progress on reducing HIV prevalence among people who inject drugs
Rationale	People who inject drugs typically have the highest HIV prevalence in countries with either concentrated or generalized epidemics. In many cases, prevalence among these populations can be more than double the prevalence among the general population. Reducing prevalence among people who inject drugs is a critical measure of a national-level response to HIV.
	Note: countries with generalized epidemics may also have a concentrated subepidemic among people who inject drugs. If so, it is valuable for them to calculate and report on this indicator for those populations.
Numerator	Number of people who inject drugs who test positive for HIV
Denominator	Number of people who inject drugs tested for HIV
Calculation	Numerator/denominator
Method of measurement	UNAIDS and WHO Working Group on Global HIV/AIDS and STI Surveillance: *Guidelines among populations most at risk for HIV*. Geneva, World Health Organization/UNAIDS, 2011.
	This indicator is calculated using data from HIV tests conducted among respondents in the primary sentinel site or sites or in the context of a surveillance survey.
	The sentinel surveillance sites used to calculate this indicator should remain constant to allow for the tracking of changes over time.
Measurement frequency	Annual
Disaggregation	▪ sex (female, male, transgender) ▪ age (<25, 25+)

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

In theory, assessing progress in reducing the occurrence of new infections is best done through monitoring changes in incidence over time. In practice, however, prevalence data rather than incidence data are available.

In analysing prevalence data of people who inject drugs for assessing prevention programme impact, it is desirable not to restrict analysis to young people but to report on those persons who are newly initiated to behaviours that put them at risk of infection (e.g. by restricting the analysis to people who have initiated 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 of injecting drugs, countries are strongly encouraged to report this disaggregation in their Country Progress Report, and to use the comments field for this indicator in the reporting tool to present disaggregated estimates.

Due to difficulties in accessing people who inject drugs, biases in serosurveillance data are likely to be far more significant than in data from a more general population, such as women attending antenatal clinics. If there are concerns about the data, these concerns should be reflected in the interpretation.

An understanding of how the sampled population(s) relate to any larger population(s) sharing similar risk behaviours is critical to the interpretation of this indicator. The period during which people belong to a key population is more closely associated with the risk of acquiring HIV than age. Therefore, it is desirable not to restrict analysis to young people but to report on other age groups as well.

Trends in HIV prevalence among people who inject drugs in the capital city will provide a useful indication of HIV-prevention programme performance in that city. However, it will not be representative of the situation in the country as a whole.

The addition of new sentinel sites will increase the sample's representativeness and will, therefore, give a more robust point estimate of HIV prevalence. However, the addition of new sentinel sites reduces the comparability of values. As such, it is important to use consistent sites when undertaking trend analyses.

If the data are subnational, please provide the disaggregation by administrative area in the comment field. Submit the digital version of any available survey reports using the upload tool.

Further information

UNAIDS epidemiology guidance

http://www.unaids.org/en/dataanalysis/knowyourepidemic/epidemiologypublications

Revised guidelines on HIV surveillance for key populations at higher risk: WHO/UNAIDS Working Group on Global HIV/AIDS and STI Surveillance. *Guidelines on surveillance among populations most at risk for HIV*. Geneva, UNAIDS, 2011.

http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2011/20110518_Surveillance_among_most_at_risk.pdf

2.13 Opioid substitution therapy coverage

Percentage of people who inject drugs receiving opioid substitution therapy (OST)

What it measures	Programme's ability to deliver OST among people who inject drugs as a method of directly reducing injecting frequency. The target is 40%.
Rationale	OST represents a commitment to treat opioid dependence and reduce the frequency of injecting, preferably to zero. It is the most effective public health tool for reducing use among those who inject opioids. OST provides crucial support for treating other health conditions, including HIV, tuberculosis and viral hepatitis.
Numerator	Number of people who inject drugs and are on OST 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, OST registers For the denominator: size estimation exercises
Measurement frequency	Annual
Disaggregation	▪ sex ▪ age (<25, 25+)

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

Further information

Please refer to the *WHO, UNODC, 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.unaids.org/sites/default/files/sub_landing/files/idu_target_setting_guide_en.pdf

For a proposed complete set of globally agreed indicators for people who inject drugs, see:
http://www.who.int/hiv/topics/idu/en/index.html

2.14 HIV prevalence in inmates/detainees

Percentage of inmates/detainees who are living with HIV

What it measures	Progress in reducing HIV prevalence among inmates/detainees
Rationale	In many cases, HIV prevalence among inmates/detainees is greater than the prevalence among the general population. Reducing prevalence among inmates/detainees is an important measure of the national response.
Numerator	Number of inmates/detainees who test positive for HIV
Denominator	Number of inmates/detainees who tested for HIV
Calculation	Numerator/denominator
Method of measurement	This indicator is calculated using data from HIV tests conducted by prisons and other closed settings. HIV testing programme data is acceptable. Conducting surveys can be challenging and, therefore, should not be relied on. Testing should be conducted only with the consent of the inmates/detainees. This indicator is calculated using data from HIV tests conducted by prisons and other closed settings.
Measurement frequency	Annual
Disaggregation	■ sex (female, male, transgender) ■ age (<25, 25+)

Strengths and weaknesses

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

In settings where risk behaviours for HIV transmission are criminalized, there is the potential for high HIV prevalence and to overinterpret the results. A full understanding of the incarcerated/detained population is helpful during the analysis, in particular, the reasons for detention.

2.15 HIV prevalence in transgender people

Percentage of transgender people who are living with HIV

What it measures	Progress on reducing HIV prevalence among transgender people
Rationale	Transgender communities have been found to have higher HIV prevalence than the general population in many settings. In many cases, prevalence is more than double that of the general population. Reducing prevalence among transgender people is an important measure for monitoring the national HIV response. Note: countries with generalized epidemics may also have a subepidemic among transgender people. If so, it is valuable to engage transgender people, measure prevalence and report on this indicator.
Numerator	Number of transgender people who test positive for HIV
Denominator	Number of transgender people tested for HIV
Calculation	Numerator/denominator
Method of measurement	UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance. *Guidelines on surveillance among populations most at risk for HIV*. Geneva, UNAIDS/World Health Organization, 2011. This indicator is calculated using data from HIV tests conducted among respondents in the primary sentinel site or sites. The surveillance sites used for calculating this indicator should remain constant to allow for the tracking of changes over time.
Measurement frequency	Annual
Disaggregation	▪ sex (transman, transwoman, other) ▪ age (<25, 25+)

Strengths and weaknesses

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, however, placing transgender women at particularly high risk of becoming HIV positive and transmitting the infection. Examples from several Latin America countries demonstrate successful surveys can be conducted in transgender communities.

Due to difficulties in accessing transgender people, biases in serosurveillance data may be significant. Any concerns about the data should be reflected in the interpretation and shared in the comment field.

An understanding of how the sampled population(s) relate to any larger population(s) sharing similar risk behaviours is critical to the interpretation of this indicator.

If the data are subnational, provide the disaggregation by administrative area in the comment field. Submit the digital version of available survey reports using the upload tool.

Further information
Revised guidelines on HIV surveillance for key populations at higher risk: UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance. *Guidelines on surveillance among populations most at risk for HIV*. Geneva, UNAIDS/World Health Organization, 2011.
http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2011/20110518_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, North Carolina (USA), MEASURE Evaluation, 2012.
www.cpc.unc.edu/measure/publications/ms-11-49a

3.1 Prevention of mother-to-child transmission

Percentage of HIV-positive pregnant women who received antiretroviral medicine (ARV) to reduce the risk of mother-to-child transmission

What it measures	Progress in preventing mother-to-child transmission of HIV during pregnancy and delivery through the provision of antiretroviral medicine
	This indicator allows countries to monitor the coverage of ARVs to HIV-positive pregnant women to reduce the risk for transmission of 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. As the indicator usually measures ARVs dispensed and not those consumed, it is not possible to determine adherence to the regimen in most cases.
Rationale	The risk of mother-to-child transmission can be significantly reduced by providing ARVs (as lifelong therapy or as prophylaxis) for the mother during pregnancy and delivery, with antiretroviral prophylaxis for the infant, and antiretroviral medicines to the mother or child if breastfeeding, and the use of 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 accelerated scale-up. It will help measure trends in coverage of antiretroviral prophylaxis and treatment, and when disaggregated by regimen type, will also assess progress in implementing more effective antiretroviral therapy regimens.
Numerator	Number of HIV-positive pregnant women who delivered and received ARVs during the past 12 months to reduce the risk of mother-to-child transmission during pregnancy and delivery. Global reports summarizing coverage of ARV for prevention of mother-to-child transmission will exclude women who received single dose nevirapine as it is considered a suboptimal regimen. However, this should be reported by the country.
Denominator	Estimated number of HIV-positive women 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 registers and summary reporting forms
	For the denominator: estimation models such as Spectrum, or antenatal clinic (ANC) surveillance surveys combined with demographic data and

appropriate adjustments related to coverage of ANC surveys

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

Disaggregation   The numerator should be disaggregated by 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 numerator

The numerator should be disaggregated by the six categories below (the first three regimens are recommended by WHO) for HIV-positive pregnant women for the prevention of mother-to-child transmission:

1. Newly initiated on antiretroviral therapy during the current pregnancy

2. Already on antiretroviral therapy before the current pregnancy

3. Maternal triple ARV prophylaxis (prophylaxis component of WHO Option B)

4. Maternal AZT (prophylaxis component during pregnancy and delivery of WHO Option A or WHO 2006 guidelines)

5. Single dose nevirapine (with or without tail) only

6. Other (please comment: e.g. specify regimen, uncategorized, etc.)

Disaggregation of regimen definitions

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

	titled total number of pregnant women on lifelong antiretroviral therapy.	
3) Maternal triple ARV prophylaxis (prophylaxis component of WHO Option B during pregnancy and delivery)	A three-drug regimen provided for MTCT prophylaxis started during pregnancy or as late as during labour or delivery with the intention of stopping at the end of the breastfeeding period (or stopping at delivery if not breastfeeding) If a woman is receiving triple ARVs for the first time at labour or delivery then she should still be counted in this category if the facility is implementing Option B.	■ TDF+3TC+EFV ■ AZT+3TC+EFV ■ AZT+3TC+LPV/r
4) Maternal AZT (prophylaxis component of WHO Option A during pregnancy and delivery)	A prophylactic regimen that uses AZT (or another NRTI) started as early as 14 weeks or as late as during labour or delivery to prevent HIV transmission If a woman is receiving ARVs for the first time at labour or delivery, then she should still be counted in this category if the facility is implementing Option A.	■ AZT at any point before labour + intrapartum NVP ■ AZT at any point before labour + intrapartum NVP +7 day post-partum tail of AZT/3TC
5) Single-dose nevirapine (sd-NVP) to the mother during pregnancy or delivery	■ Nevirapine is the only regimen provided to an HIV-positive pregnant woman during pregnancy, labour or delivery Do NOT count as sd-NVP if: ■ Nevirapine is provided as part of Option A during pregnancy or ■ An HIV-positive pregnant woman is initiated on Option A, B, or B+ at labor and delivery	■ sd-NVP for mother only at onset of labour ■ sd-NVP + 7 day AZT/3TC tail ONLY ■ sd-NVP for mother at onset of labour and sd-NVP 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.

GARPR	Spectrum
1) Newly initiated on treatment during the current pregnancy	Option B+: antiretroviral therapy started during current pregnancy
2) Already on treatment before the pregnancy	Option B+: antiretroviral therapy started before current pregnancy
3) Maternal triple ARV 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 (sd-NVP) 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 2006 WHO guidelines Spectrum requires data on historical regimens. This category is maintained to describe the regimens provided in previous years.

Explanation of denominator

Two methods can be used to estimate the denominator: an estimation model, such as Spectrum, using the output, number of pregnant women needing PMTCT; 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 in pregnant women (which can be derived from HIV sentinel surveillance in ANC and appropriate adjustments related to coverage of ANC surveys).

To ensure comparability the Spectrum output will be used for the denominator when global analyses are done.

Strengths and weaknesses

Countries are encouraged to track and report the number of women receiving the various regimens so the impact of ARVs on mother-to-child transmission can be modelled on the basis of 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.

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 links:

www.who.int/hiv/pub/mtct/en/

www.who.int/hiv/pub/me/en/index.html

3.2 Early infant diagnosis

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

What it measures	Progress in the extent to which infants born to HIV-positive women 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 infected with HIV during pregnancy, delivery or early postpartum often die before they are recognized as having HIV infection. WHO recommends 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 progression is rapid in children; they need to be put on 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 HIV-positive pregnant women giving birth in the past 12 months
Calculation	Numerator/denominator
Method of measurement	**For the numerator:** early infant diagnosis (EID) testing laboratories **For the denominator:** estimation models such as Spectrum, or antenatal clinics (ANC) surveillance surveys in combination with demographic data and appropriate adjustments related to coverage of antenatal clinic (ANC) 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, rejected for testing).

Explanation of numerator

To be collected from databases held at early infant diagnosis testing laboratories. The numerator should represent the number of infants who received virologic 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 data bases. Where possible, double counting should be minimized when aggregating data to produce national-level data. It is expected that the number of infants receiving more than one virologic test in the first two months of life will be low. Efforts should be made to

include all public, private and nongovernmental organization-run health facilities 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. When reporting this information only the most recent test result for an infant tested in the first two months of life should be included.

Explanation of denominator

This is a proxy measure for the number of infants born to HIV-positive women. 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 prevention of 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 in pregnant women (which can be derived from HIV sentinel surveillance in ANC and appropriate adjustments related to coverage of ANC surveys).

To ensure comparability, the Spectrum output will be used for the denominator when global analyses are done.

Strengths and weaknesses

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

Due to the small number of testing laboratories, and the electronic format of testing databases, this indicator should not have a heavy collection burden. Data quality at the laboratories is generally high, resulting in a robust indicator. The indicator does not capture the number of children with a definitive diagnosis (i.e. of HIV infection), or measure whether appropriate follow-up services were provided to the child based on interpretation of test results. It also does not measure the quality of testing nor 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 virologic 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 EID coverage of national need or the EID testing coverage in the first two months of life is low, low positivity rates among infants tested will not necessarily mean programme success, as many other infants who are likely positive are not represented in this sample.

While early virological testing is a critical intervention for identifying infected infants, it is also important for countries to strengthen the quality of HIV-exposed infant follow-up and to train health providers to recognize signs and symptoms of early HIV infection among exposed infants, particularly where 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 infants

born to HIV-positive women. Countries should ensure appropriate systems and tools, particularly tools for logistics management information systems (LMIS), are in place to procure, distribute and manage supplies at facility, district and central level.

Further information

WHO, UNICEF and UNAIDS. *Towards universal access: scaling up priority HIV/AIDS interventions in the health sector. Progress report 2010*. Geneva, World Health Organization, 2010. http://www.who.int/hiv/pub/2009progressreport/en/index.html

Next generation indicators reference guide. Washington, DC, United States President's Emergency Plan for AIDS Relief, 20013.

http://www.pepfar.gov/documents/organization/206097.pdf

Monitoring and evaluation toolkit. Part 2. Tools for monitoring programs for HIV, tuberculosis, malaria and health systems strengthening. Geneva, Global Fund to Fight AIDS, Tuberculosis and Malaria, 2009.

http://www.theglobalfund.org/documents/monitoring_evaluation/ME_MonitoringEvaluation_Toolkit_en/

Measuring the impact of national PMTCT programmes: towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive. A short guide on methods. Geneva, World Health Organization, 2012.

http://apps.who.int/iris/bitstream/10665/75478/1/9789241504362_eng.pdf

3.3 Mother-to-child transmission of HIV

Estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months

What it measures	Progress in providing women with antiretroviral medicines (ARVs) to reduce mother-to-child HIV transmission
Rationale	Efforts have been made to increase access to interventions that can significantly reduce mother-to-child transmission, including combination antiretroviral prophylactic and treatment regimens and strengthened infant-feeding counselling. It is important to assess the impact of prevention of mother-to-child transmission (PMTCT) interventions in reducing new paediatric HIV infections through mother-to-child transmission.
	The percentage of children who are HIV-positive should decrease as the coverage of interventions for PMTCT and the use of more effective regimens increases.
Numerator	Estimated number of children newly infected with HIV due to mother-to-child transmission among children born in the previous 12 months to HIV-positive women
Denominator	Estimated number of HIV-positive women who delivered in the previous 12 months
Calculation	Numerator/denominator
Method of measurement	The mother-to-child transmission probability differs with the antiretroviral drug regimen received and infant-feeding practices. The transmission can be calculated by using Spectrum. The Spectrum computer programme uses information on:

a.   the distribution of HIV-positive pregnant women receiving different antiretroviral regimens prior to and during delivery (peripartum) by CD4 category of the mother

b.   the distribution of women and children receiving antiretroviral medicines after delivery (postpartum) by CD4 category of the mother

c.   the percentage of infants who are not breastfeeding in PMTCT programmes by age of the child

d.   mother-to-child transmission of HIV probabilities based on various categories of antiretroviral drug regimen and infant feeding practices

The estimated national transmission rate is reported in the PMTCT

summary display in Spectrum. This variable can also be calculated using the variables in Spectrum on 'New HIV infections' for children aged 0–14 and dividing this by the variable 'Women in need of PMTCT'.

There is not enough information available about other HIV transmission routes for children to include such infections in the model. In addition other modes of transmission are believed to be a small fraction of the overall infections among children. The Spectrum output variable 'New HIV infections for children 0–1 years' is not used because some infections due to breastfeeding will take place in children older than one.

Measurement frequency	Annual
Disaggregation	None

Additional information requested

To ensure comparability, the Spectrum output will be used for calculating this indicator when global analyses are done.

If using programme data, report data based on equal birth cohorts for numerator and denominator and not by 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

Over time, this indicator assesses the ability of PMTCT programmes by estimating the impact of increases in the provision of ARVs and the use of more efficacious regimens and optimal infant feeding practice. This indicator is generated from a model, which provides estimates of HIV infection in children. The estimated indicator is reliant on the assumptions and data used in the model. The indicator may not be a true measure of mother-to-child transmission. For example, in countries where other forms of PMTCT (e.g. Caesarean section) are widely practised, the indicator will overestimate mother-to-child transmission. It also relies on programme data that often captures ARV regimens provided rather than taken and could, therefore, underestimate mother-to-child transmission.

This indicator allows countries to assess the impact of PMTCT programmes by estimating the HIV transmission rate from HIV-positive women to their children. It is difficult to follow up mother-children pairs, particularly at 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 PMTCT and child care interventions delivered over a timespan. In countries where data are available, facility attendance is high and confirmatory tests are conducted systematically, efforts should be made to monitor the impact through directly assessing the percentage of children found to be HIV-positive among those

born to HIV-positive mothers. All countries should make efforts to monitor the HIV status and survival of children born to HIV-positive women, gathered during follow-up health care visits.

Further information
http://www.who.int/hiv/pub/me/en/index.html

3.3a Programme level mother-to-child transmission of HIV

Registered percentage of child HIV infections from HIV-positive women delivering in the past 12 months

What it measures	Progress of programmes to reduce mother-to-child HIV transmission
Rationale	This indicator is different from 3.3 because it is limited to women and child pairs that are reached and tracked through medical programmes.
Numerator	Reported number of children born, in a defined year, to HIV-positive mothers, who were diagnosed as HIV positive
Denominator	Reported number of infants born to HIV-positive mothers within the defined year with a definitive diagnosis (sum of HIV-positive and HIV-negative)
Calculation	Numerator/denominator
Method of measurement	Ideally, this indicator should be collected from all programmes and facilities in the country, public and private. It should include any transmission once breastfeeding has been completed.
	For countries entering data from other sources, such as surveys or special studies, an explanation of that source should be included in the notes section. If a special study is used of a representative sample of HIV-positive women, the sample size should be provided.
	Countries with strong case-based reporting systems and virtually complete coverage can monitor the impact of prevention of mother-to-child transmission services using data on the HIV status of infants born to mothers living with HIV, gathered during follow-up health-care check-ups on these infants. Due to the time lag in reporting and the wide range of health-care facilities, infants lost to follow-up are relatively common. The percentage of infants lost to follow-up or with an undetermined diagnosis should be less than 10%.
Measurement frequency	Annual
Disaggregation	None

Additional information requested

Please enter the number of children found to be HIV negative, who did not receive a definitive diagnosis and were lost to follow-up, and the total number of HIV-exposed children during the

defined calendar year to enable a review of the calculation. Report data based on equal birth cohorts for numerator and denominator and not by year of diagnosis. This additional information should be reported by countries applying to validate mother-to-child transmission (MTCT) of HIV or seeking to maintain validation status.

Strengths and weaknesses

The reported number of children born to mothers living with HIV can be much lower than the actual number if reporting systems are weak. A sensitivity analysis for the MTCT rate should be conducted when the percentage of infants without diagnosis is high.

All countries should endeavour to monitor the HIV status and survival of children born to HIV-positive women, gathered during follow-up health-care visits.

3.4 PMTCT testing coverage
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   **For the numerator:** programme records; for example, ANC registers, labour and delivery registers

For the population-based denominator: estimates from central statistics office, UN Population Division or vital statistics

For the 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

- total identified HIV-positive women = 1+2

- optional disaggregation: pregnant women who inject drugs

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

Countries are encouraged to track and report the number of women receiving the various regimens, so that the impact of ARVs on mother-to-child transmission can be modelled based on the efficacy of the regimens. If countries do not have a system for collecting and reporting data on ARV regimens for the PMTCT of HIV, they should establish such a system. Efforts should be made to remove women who might have been captured twice in the reporting systems.

Further information

PMTCT of HIV is a rapidly evolving programmatic area, and the methods for monitoring coverage of these services are also evolving. To access the most current information please follow these links:

www.who.int/hiv/pub/mtct/en/

www.who.int/hiv/pub/me/en/index.html

3.5 Testing coverage of pregnant women's partners

Percentage of pregnant women attending antenatal clinics (ANC) whose male partners were tested for HIV during pregnancy

What it measures	Effectiveness of efforts to test partners of pregnant women. Identifying serodiscordant couples is the first step in preventing HIV infection in women during pregnancy (Prong 1) and male partners of pregnant women.
Rationale	If the pregnant woman is HIV positive it is likely the partner is also.
Numerator	Number of pregnant women attending ANC within the past 12 months whose male partners were tested or were already known to be HIV positive
Denominator	Number of pregnant women attending ANC within the past 12 months
Calculation	Numerator/denominator
Method of measurement	Programme records; for example, ANC registers, prevention of mother-to-child transmission (PMTCT) registers.
Measurement frequency	Annual
Disaggregation	▪ test result

Additional information requested

Please provide any comments that might indicate how representative the data is.

If the number of discordant couples is easily available, please provide data and comments in the comments section.

Strengths and weaknesses

This indicator allows countries to monitor efforts to increase testing of male partners of pregnant women attending antenatal care services. It does not measure whether the male partner received his result or any follow-up services.

The indicator does not take into account antenatal clinic clients that have more than one partner or that may change partners over time. It also may not include partners that received HIV testing at non-ANC settings and which are not linked to ANC; for example, general voluntary counselling and testing (VCT) or provider-initiated testing).

Not all sites may be collecting data on male-partner testing or routinely aggregating and reporting the data. Measuring this indicator may require additional investment and resources to revise data collection tools and summary reporting forms.

Although testing male partners is an important tool for increasing male involvement and preventing infection during pregnancy, it is also a critical entry point into ongoing and family-focused care for the man. Health providers should ensure they document all male partners who test HIV positive and provide them with appropriate follow-up services as part of a comprehensive care and treatment programme.

Interpret data based on country context and applicability. Discuss how to increase coverage.

Further information
http://www.who.int/hiv/pub/guidelines/hivtestingservices

3.7 Coverage of infant ARV prophylaxis

Percentage of HIV-exposed infants who initiated antiretroviral medicines (ARV) prophylaxis

What it measures	Effectiveness of programme efforts to reduce the risk of mother-to-child transmission (MTCT) in the immediate postpartum period (Prong 3)
Rationale	ARV prophylaxis decreases mortality among children exposed to mothers with HIV and prevents possible HIV infection.
Numerator	Number of HIV-exposed infants born within the past 12 months who were started on ARV prophylaxis at birth
Denominator	**Population-based denominator:** number of HIV-positive women who delivered within the past 12 months **Facility-based denominator:** number of HIV-positive women who delivered in a facility within the past 12 months
Calculation	Numerator/denominator
Method of measurement	For the numerator: programme records; for example, prevention of mother-to-child transmission registers For the population-based denominator: internationally consistent modelling estimates; for example, Spectrum AIM For the facility-based denominator: programme records, labour and delivery registers
Measurement frequency	Annual
Disaggregation	None

Strengths and weaknesses

Tracking service coverage of infants, children and adolescents as they age and move between different facilities can identify gaps. Data collection systems should disaggregate data by age group, account for multiple possible entry points into care and avoid double-counting individuals who move through the system. HIV-exposed infants and young children may be lost to follow-up before their HIV status is determined, making it difficult to accurately count the number of HIV-positive children.

3.9 Co-trimoxazole (CTX) prophylaxis coverage

Percentage of HIV-exposed infants started on CTX prophylaxis within two months of birth

What it measures	Provision of CTX to reduce opportunistic infections and bacterial infections
	Serves as proxy for follow-up care for HIV-exposed infants
Rationale	CTX prophylaxis is a simple, cost-effective intervention to prevent *Pneumocystis jiroveci* pneumonia in HIV-positive infants. This infection is the leading cause of serious respiratory disease in these infants in resource-constrained countries and often occurs before HIV infection can be diagnosed. Owing to resource and logistical constraints in diagnosing HIV infection in young infants, all infants born to HIV-positive women should receive co-trimoxazole prophylaxis, starting 4–6 weeks after birth and continuing until HIV infection has been excluded and the infant is no longer at risk of acquiring HIV through breastfeeding.
Numerator	Number of HIV-exposed infants born within the past 12 months who started on CTX within two months of birth
Denominator	Number of HIV-positive women who delivered within the past 12 months
Calculation	Numerator/denominator
Method of measurement	For the numerator: programme records
	For the denominator: internationally consistent modelling estimates; for example, Spectrum AIM
Measurement frequency	Annual
Disaggregation	None

Additional information requested

If this indicator is obtained from a subset of facilities, please add comments on how representative it is.

If the data reported represents CTX provided in infants beyond two months of age, please note this in the comments section.

Strengths and weaknesses

This indicator enables countries to monitor progress in the early follow-up of exposed infants by measuring provision of CTX in line with international guidelines. It can also be used as a proxy indicator for early follow-up visits of exposed infants within the recommended first 4–6 weeks of life. The indicator captures only those infants who return for HIV-exposed infant follow-up services

within two months of birth. It does not measure coverage of CTX prophylaxis for HIV-exposed infants as some infants may have been started on treatment after two months. A low value of the indicator could signal potential bottlenecks in the system, including poor management of CTX supplies in the country, poor data collection and inadequate distribution systems.

Countries may also wish to document provision of CTX for HIV-exposed infants older than two months as a way to monitor overall progress of the programme, identify existing challenges with early initiation of CTX and to monitor consumption for procurement needs.

Poor management of supplies can negatively affect the value of the indicator and significantly reduce access to CTX for HIV-exposed infants. Countries should ensure appropriate systems and tools, particularly tools for logistics management information systems (LMIS), are in place to adequately procure, distribute and manage supplies at facility, district and central levels.

Data can also be reviewed as an indication of the number of exposed infants who are seen at a facility within two months of birth. If indicator value is low, explore reasons why; for example, whether exposed infants are not attending facilities within two months, or if there are stock-outs of CTX).

4.1 HIV treatment: antiretroviral therapy

Percentage of adults and children receiving antiretroviral therapy among all adults and children living with HIV

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 those living with HIV, and onward HIV transmission. Studies have also shown that early initiation, regardless of an individual's CD4 cell count, can enhance treatment benefits and save lives, and WHO currently recommends treatment for all. For this reason the number of adults and children receiving antiretroviral therapy relative to all adults and children living with HIV is referenced.
	The percentage of adults and children receiving antiretroviral therapy among all adults and children 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 WHO's 2015 *Consolidated strategic information guidelines for HIV in the health sector*.
	Countries monitoring HIV treatment and care cascades as part of UNAIDS' 90-90-90 targets should note that this indicator replaces the second 90 target, which references the number of people receiving antiretroviral therapy among those knowing their status. The revision is necessary because of limited quality HIV testing data. When countries construct the revised estimate of coverage, the national and global target is 81%.
Numerator	Number of adults and children receiving antiretroviral therapy at the end of the reporting period
Denominator	Estimated number of adults and children living with HIV
Calculation	Numerator/denominator
Method of measurement	The number of adults and children receiving treatment can be obtained through data from facility-based antiretroviral therapy registers or drug supply management systems. Data should be collected continuously and aggregated on a monthly or quarterly basis to obtain subnational and national totals. The most recent full year of data should be used for annual reporting.
	For the numerator: facility-based antiretroviral therapy registers or drug supply management systems and corresponding cross-sectional forms
	For the denominator: HIV estimation models such as Spectrum

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	- sex - age (less than 15 years, 15 years and older, <1 year, 1–4 years, 5–9, 10–14, 15–19, 20–24, 25–49, 50+) - sector (public, private) - people newly initiating antiretroviral therapy during the last reporting year (this indicator should be available from the same sources as the total number of people receiving antiretroviral therapy)

Additional information requested

The subset of people initiating antiretroviral therapy during the last reporting year is requested. For countries where antiretroviral therapy eligibility according to national antiretroviral therapy criteria guideline is a subset of all people living with HIV, provide the number eligible.

Please provide subnational data disaggregated by administrative areas, as well as city-specific data for this indicator. 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.

The data entry screen has separate space for this. You may also submit the digital version of any related reports using the upload tool.

Users now have the option to use Spectrum data for the denominator. If Spectrum estimates are chosen, the values will be pulled directly from the software once the national file is finalized.

Explanation of numerator

The numerator can be generated by counting the number of adults and children receiving antiretroviral therapy at the end of the reporting period. This value should equal the number of adults and children who have ever started antiretroviral therapy minus those not currently on treatment prior to the end of the reporting period. This will include those who died, stopped treatment or were lost to follow-up during the year.

Some people pick up several months of antiretroviral medicines (ARVs) at one visit, which could cover the last months of the reporting period. Efforts should be made to include these people in the numerator as receiving antiretrovirals even if they do not attend the clinic in the last month of the reporting period.

When disaggregating the numerator by age, people receiving antiretroviral therapy should be reported in the relevant age category based on their age at the end of the reporting year.

ARVs taken only for the purpose of prevention of mother-to-child transmission and post-exposure prophylaxis are not included in this indicator. HIV-positive pregnant women who are on lifelong antiretroviral therapy should be included in the numerator.

People receiving antiretroviral therapy in the private and public sectors should be included where data are available.

Explanation of denominator

The denominator is generated by estimating the number of people living with HIV. In previous years UNAIDS and WHO reported on the percentage eligible based on WHO criteria in place at the time. In 2014 this changed to include all adults and children living with HIV. This simpler measure produces coverage values that are consistent when compared globally and when calculated for national purposes over time.

Denominator estimates of adults and children living with HIV are most often based on the latest data available from HIV surveillance and case reporting systems used with HIV modelling programmes such as Spectrum. For further information on estimates of HIV need and the use of Spectrum, refer to the UNAIDS/WHO Reference Group on Estimates, Modelling and Projections methodology. If estimates of the number of people living with HIV are derived from a different data source than Spectrum, upload the report describing these methods and the uncertainty of the corresponding estimates.

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 will vary within and between countries and are likely to change over time.

Antiretroviral therapy use will depend on factors such as cost relative to local incomes, service delivery infrastructure and quality, availability and uptake of testing and counselling services, and perceptions of effectiveness and possible side-effects. The indicator measures the number of people provided with medication, not whether the individual took the medication, so it is not a measure of adherence.

Countries with strong, patient-based monitoring systems will likely provide more accurate estimates of the number of people receiving antiretroviral therapy than those with aggregate data systems. For countries with weak systems, it may be difficult to quantify the number of people who are lost to follow up through deaths or who transfer to another facility. In these cases, the number of people receiving antiretroviral therapy may be overstated.

Countries with strong HIV surveillance and survey data or HIV-case based reporting and mortality systems will be able to more accurately estimate the number of adults and children living with HIV. Uncertainty around the estimates will reduce the accuracy of this indicator as a measure of actual antiretroviral therapy coverage.

Further information

WHO guidance on treatment and care

http://www.who.int/hiv/topics/treatment/en/index.html

4.2 Twelve-month retention on antiretroviral therapy

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

What it measures	Progress in increasing survival among HIV-positive adults and children by maintaining them on antiretroviral therapy
Rationale	One of the goals of any antiretroviral therapy programme is to increase survival among HIV-positive individuals. As antiretroviral therapy is scaled up around the world, it is important to understand why and how many people drop out of treatment programmes. 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 on antiretroviral therapy at 12 months after initiating treatment in 2014
Denominator	Total number of adults and children initiating antiretroviral therapy in 2014, 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/group analysis forms
	Antiretroviral therapy registers 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. The predefined number of months can be determined by national reporting requirements. If the reporting period is 1 January to 31 December 2015, countries will calculate this indicator by using all patients who started antiretroviral therapy any time during the 12-month period from 1 January to 31 December 2014.
	Retention at 12 months after starting antiretroviral therapy is defined as the outcome (i.e. whether the patient is still alive and on antiretroviral therapy, dead or lost to follow-up). For example, patients who started antiretroviral therapy during the 12-month period from 1 January to 31 December 2013 will have reached their 12-month outcomes for the reporting period 1 January to 31 December 2015.
Measurement frequency	As patients 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
- sex
- age (<15, 15+)
- pregnancy status at start of therapy
- breastfeeding status at start of 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 numerator

The numerator requires that adult and child patients must be alive and on antiretroviral therapy 12 months after starting treatment. For a comprehensive understanding of survival, the following data must be collected:

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

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

For example, for patients who started antiretroviral therapy in May 2014: if at any point during the period May 2014 to May 2015 they die, or are lost to follow-up (and do not return) or stop treatment (and do not restart), then at month 12 (May 2015) they are not on antiretroviral therapy, and not included. However, a patient who started antiretroviral therapy in May 2014 and who missed an appointment in June 2014 but is recorded as on antiretroviral therapy in May 2015 (at month 12) is on antiretroviral therapy and will be included in the numerator. What is important is that the patient who started antiretroviral therapy in May 2014 is recorded as being alive and on antiretroviral therapy after 12 months, regardless of what happens from May 2014 to May 2015.

Antiretroviral therapy registries should include a number of variables describing patients, such as their age at the start of treatment. In addition, many registries will include information indicating whether the patient was pregnant or breastfeeding when starting treatment. Retention for these subsets should be calculated to determine antiretroviral retention at 12 months.

Explanation of 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 prior to the beginning of the reporting period, regardless of their 12-month outcome.

For example, the reporting period 1 January to 31 December 2015 will include all patients who started antiretroviral therapy during the 12-month period from 1 January to 31 December 2014. This includes all those on antiretroviral therapy as well as those who are dead, have stopped treatment or are lost to follow-up at month 12.

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

Strengths and weaknesses

This denominator may underestimate true survival, since a proportion of those lost to follow-up are alive. The number of people alive and on antiretroviral therapy (i.e. retention on antiretroviral therapy) in a treatment cohort is captured here.

Priority reporting is for aggregate survival reporting. 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 comparison over time of survival on antiretroviral therapy. As it stands, it is possible to identify whether survival at 12 months increases or decreases over time. However, it is not possible to attribute cause 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 view of the baseline characteristics of the cohort of patients at the start of antiretroviral therapy; mortality will be higher in sites where patients accessed antiretroviral therapy at a later stage of infection. Therefore, collecting and reporting data on of survival over longer durations of treatment outcomes may 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

4.2a Twenty-four month retention on antiretroviral therapy

Percentage of adults and children with HIV known to be on treatment 24 months after starting antiretroviral therapy in 2013

What it measures	Retention on antiretroviral therapy, taking into account the increased survival and willingness among patients to continue with treatment. The indicator should be produced at 12 months, and at 24 (as described here) and 36 months into follow-up. These indicators complete programme coverage as a measure of effectiveness.
	A high retention rate is an important measure of programme success and overall quality.
	As an early warning indicator (EWI) for HIV drug resistance (HIVDR): good performance is >85%, passable performance is >75% and immediate remediation needed if ≤75%.
Rationale	Antiretroviral therapy is a lifelong intervention. Measuring retention is critical to determine the effectiveness of programmes and highlight obstacles to expanding them.
Numerator	Number of adults and children who are still alive and on antiretroviral therapy 24 months after initiating treatment in 2013
Denominator	Total number of adults and children who started antiretroviral therapy in 2013, or a specified period, who were expected to remain in treatment for 24 months within the 2015 reporting period, or 24 months after the specified initiation period. Includes those who have died since starting antiretroviral therapy, those who have stopped the treatment and those recorded as lost to follow-up at month 24.
Calculation	Numerator/denominator
Method of measurement	Programme monitoring tools, antiretroviral therapy register and cohort analysis forms
	Ideally, data should be collected on all patients from all antiretroviral therapy clinics. Where this is not possible, this indicator can be generated from a sample of patients from a subset of representative clinics.
	A three-month grace period should be observed before concluding a patient is lost to follow-up; the cohort assessed should be those starting antiretroviral therapy between 27 (for 24 months retention) and 15 months (for 12 months retention) before the survey start date.

Measurement frequency	Annual

Disaggregation   Among the people who started (denominator), in addition to reporting the number alive and on treatment (numerator), it is also important to report the number lost to follow-up, stopped therapy or died. These four outcomes should provide the total number starting antiretroviral therapy.

When generating information at site level, patients who have transferred into treatment should be included in the statistics and those who have transferred out excluded. If such information is national, the statistics should be reported for 12-month analysis.

Additional information requested
If data on 24-month retention are not available for patients who initiated antiretroviral therapy in 2013 but available for patients starting earlier (e.g. 2012), specify the period in the comment field; for example, started antiretroviral therapy between month/year and month/year.

The numerator does not require patients to have been on antiretroviral therapy continuously for the 24-month period. For example, patients who may have missed one or two appointments or drug pick-ups but are recorded as being on treatment at month 24 are still included in the numerator. However, patients who have died since starting the treatment, stopped treatment or been lost to follow-up at 24 months are not included.

In countries where this indicator is not produced in all antiretroviral therapy sites but at a subset of facilities, data should be interpreted as a representative sample. This should be stated in the comments box.

Note any particularly low retention and assess the reasons behind it, analysing the distribution of those who have died, stopped treatment or been lost to follow-up. If data is available, assess those lost to follow-up to see whether they are likely to have died, stopped treatment or transferred out. Compare cohorts.

If this indicator is produced only in a subset of facilities, comment on the source of information and whether it is representative of all antiretroviral therapy sites.

Strengths and weaknesses
The continuation of antiretroviral therapy is mostly related to survival (but also willingness to continue). Survival might reflect the services offered but also depends on the baseline characteristics of patients. Clinical, immunological and virological staging are independent predictors of survival under antiretroviral therapy. Baseline characteristics of the cohort of patients should help in interpreting the results and, in particular, comparing antiretroviral therapy sites.

4.2b Sixty-month retention on antiretroviral therapy

Percentage of adults and children with HIV known to be on treatment 60 months after starting antiretroviral therapy in 2010

What it measures	Retention on antiretroviral therapy, taking into account the increased survival and willingness among patients to continue with treatment. The indicator should be produced at 12 months, and at 24 and 36 months (as described here) into follow-up. These indicators complete programme coverage as a measure of effectiveness.
	A high retention rate is an important measure of programme success and overall quality.
	As an early warning indicator (EWI) for HIV drug resistance (HIVDR): good performance is >85%, passable performance is >75% and immediate remediation needed if ≤75%.
Rationale	Antiretroviral therapy is a lifelong intervention. Measuring retention is critical to determine the effectiveness of programmes and highlight obstacles to expanding them.
Numerator	Number of adults and children who are still alive and on antiretroviral therapy 60 months after initiating treatment in 2010
Denominator	Total number of adults and children who started antiretroviral therapy in 2010, or another specified period, who were expected to remain in treatment for 60 months within the 2015 reporting period, or 60 months after the specified initiation period. Includes those who have died since starting antiretroviral therapy, those who have stopped treatment and those recorded as lost to follow-up at month 60
Calculation	Numerator/denominator
Method of measurement	Programme monitoring tools, antiretroviral therapy register and cohort analysis forms
	Ideally, data should be collected on all patients from all antiretroviral therapy clinics. Where this is not possible, this indicator can be generated from a sample of patients from a subset of representative clinics.
	A three-month grace period should be observed before concluding a patient is lost to follow-up; the cohort assessed should be those starting antiretroviral between 27 (for 24 months retention) and 15 months (for 12 months retention) before the survey start date.
Measurement	Annual

frequency

Disaggregation   Among the people who started (denominator), in addition to reporting the number alive and on treatment (numerator), it is also important to report the number lost to follow-up, stopped therapy or died. These four outcomes should provide the total number starting antiretroviral therapy.

When generating information at site level, patients who have transferred into treatment should be included in the statistics and those who have transferred out excluded. If such information is national, the statistics should be reported for 12-month analysis.

Additional information requested

If data on 60-month retention are not available for patients who initiated antiretroviral therapy in 2010 but available for patients starting earlier (e.g. 2009), specify the period in the comment field; for example, started antiretroviral therapy between month/year and month/year.

The numerator does not require patients to have been on antiretroviral therapy continuously for the 60-month period. For example, patients who may have missed one or two appointments or drug pick-ups but are recorded as being on treatment at month 60 are still included in the numerator. However, patients who have died since starting the treatment, stopped treatment or been lost to follow-up at 60 months are not included.

In countries where this indicator is not produced in all antiretroviral therapy sites but at a subset of facilities, data should be interpreted as a representative sample. This should be stated in the comments box.

Note any particularly low retention, and assess reasons behind it, analysing the distribution of those who have died, stopped treatment or been lost to follow-up. If data is available, assess those lost to follow-up to see whether they are likely to have died, stopped treatment or transferred out. Compare cohorts.

I this indicator is produced only in a subset of facilities, comment on the source of information and whether it is representative of all antiretroviral sites.

Strengths and weaknesses

The continuation of antiretroviral therapy is mostly related to survival (but also willingness to continue). Survival might reflect the services offered but also depends on the baseline characteristics of patients. Clinical, immunological and virological staging are independent predictors of survival under antiretroviral therapy. Baseline characteristics of the cohort of patients should help in interpreting the results and, in particular, comparing treatment sites.

4.3 HIV care coverage

Percentage of people currently receiving HIV care

What it measures	The proportion of people living with HIV (PLHIV) receiving HIV care, both antiretroviral therapy and pre-antiretroviral therapy services. Time trends can be monitored to assess progress in increasing percentages of people in care. Reviewing the number of those receiving HIV care out of the number of PLHIV diagnosed can also be useful. Linking individuals who are HIV positive to care services is essential for the treatment cascade. This indicator presents the proportion of individuals who might be missing from services that will keep them healthy and reduce transmission risk.
Rationale	It helps to track global trends in coverage of care and treatment across populations of PLHIV. In addition to HIV testing it is important to monitor the linking to HIV care and treatment. Comparing the evolution of the number of people tested for HIV at year end does not reveal the number of new people enrolled in HIV care, especially when attrition and loss to follow-up of patients along the HIV care continuum may be high. This indicator captures the number of patients either on HIV care waiting to start antiretroviral therapy or on antiretroviral therapy during a reporting year.
Numerator	Number of people enrolled in HIV care in 2015, as proxied by receipt of at least one of the following: ▪ clinical assessment (WHO staging) ▪ CD4 count ▪ viral load ▪ currently receiving antiretroviral therapy.
Denominator	Estimated number of adults and children living with HIV
Calculation	Numerator/denominator
Method of measurement	**For the numerator:** programme records (e.g. pre-antiretroviral therapy and antiretroviral therapy registers), visit records **For the denominator:** internationally consistent modelling estimates (Spectrum AIM)
Measurement frequency	Annual
Disaggregation	▪ sex

- age (<5, 5–14, 15+); additional categories in settings where more detailed age information is needed and feasible to collect (e.g. electronic system, <1, 1–9, 10–14, 15–19, 20–49, 50+)
- mode of transmission (for European region only)
- received care for the first time in the reporting year

Strengths and weaknesses

This indicator helps monitor trends of total patients linked to HIV health services but does not attempt to distinguish between HIV care and antiretroviral therapy, or to measure the cost, quality or effectiveness of treatment provided.

The degree of antiretroviral therapy initiation will depend on policies, the cost relative to local incomes, service delivery infrastructure and quality, availability and uptake of voluntary counselling and testing services, and perceptions of effectiveness and possible side-effects of treatment.

This indicator should be analysed in view of the waiting list of patients eligible and not started on antiretroviral therapy.

In addition to the numbers on antiretroviral therapy, the number of patients in care is necessary to accurately plan resources and drug stocks to avoid shortages and wastage.

Double reporting: if patient transfers, in and out, are not correctly registered and if patients being monitored in different antiretroviral therapy sites are not identified, there is a risk of double reporting and overestimates of antiretroviral therapy initiation. In this instance, please comment.

Similarly, if patients who temporarily stop and then restart antiretroviral therapy are coded as new patients, this will overestimate the number of patients newly initiated.

If the numerator is a national indicator, produced by all health facilities. Comment on your data as necessary.

Triangulation options: pharmacy report, comparing the number of people being tested, the number of patients in the pharmacy register and the antiretroviral therapy register.

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

4.4 ARV stock-outs

Percentage of facilities with stock-outs of antiretroviral drugs

What it measures   Performance of the supply chain system

At the facility level, it measures the ability to maintain the supply of antiretroviral medicines (ARVs) and avoid interruption of antiretroviral therapy.

As an early warning indicator (EWI) for HIV drug resistance (HIVDR): target is 0% (i.e. all sites have continuous stock of ARVs)

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

Numerator   Number of health facilities dispensing ARVs that experienced a stock-out of one or more required ARV medicines in the past 12 months

Denominator   Total number of health facilities dispensing ARVs

Calculation   Numerator/denominator

Method of measurement   This information comes from health facility inventory control reports or requisition forms for ARVs. These forms detail patients on antiretroviral therapy, consumption data and stock on hand with stock-out information, if any. The indicator requires the following tools:

- stock inventory control reports from health facilities, indicating the stock level of each reported item;
- requisition forms for ARVs submitted from facilities during a defined time period (e.g. last order period, last quarter, last year);
- list of ARVs that each facility is expected to dispense, if not included in the inventory control reports or requisition forms.

These work if the national logistics management information system (LMIS) 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 ARV stock-outs.

If there is one LMIS with details on ARV availability at 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 limited number of health facilities dispense ARVs, they should all

be included in the survey or site visits. If a large number dispense ARVs, it may be necessary to select a representative sample. The full list should be available at national level.

When sampling, it is important to ensure the sample includes facilities at different levels, such as central, district and peripheral. In countries where ARVs are dispensed at pharmacies or other non-health facility delivery points, stock-outs should also be monitored at these venues; feasibility will depend on the coverage of the LMIS.

The HIV drug resistance early warning indicator on ARV 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	Annual
Disaggregation	- site level [community, primary, secondary, tertiary] - location [e.g. region, district] - type of site [e.g. general clinic, maternal and child site, tuberculosis site - type of medicine

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 is included, and whether it 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 ARVs at health-facility level.

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

If stock-outs exist, assess whether the problem lies in the national distribution system, or if it is a financial flow or a global ARV shortage problem. Find out whether it is due to supply projections, the distribution system or another issue. Use this as an opportunity to see whether LMIS 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 a patient would not be receiving a required medicine for treatment. In settings where reserve stock is not issued, it is preferable to collect information on a functional stock-out; that is, the inability to access or use a required ARV.

Further information

Harmonized monitoring and evaluation indicators for procurement and supply management systemshttp://www.who.int/hiv/pub/amds/monitoring_evaluation/en/

4.5 Late HIV diagnoses

Percentage of HIV-positive people with first CD4 cell count <200 cells/µL in 2015

What it measures	Proportion of people with a CD4 cell count <200 cells/µl out of those who had a first 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 is still diagnosed at a late stage.
Numerator	Number of HIV-positive people with first CD4 cell count <200 cells/µl in 2015
Denominator	Total number of HIV-positive people with first CD4 cell count in 2015
Calculation	Numerator/denominator
Method of measurement	Based on data from laboratory information systems and from the records of patients in treatment. Data can be compiled from health services registers, case report forms or laboratory information systems.
Measurement frequency	Annual
Disaggregation	▪ sex ▪ age (<15, 15+)

Explanation of numerator

HIV-positive individuals whose initial CD4 lymphocyte count was less than 200 cells/µL in the reporting period.

Explanation of denominator

Number of HIV-positive individuals 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 were late in seeking treatment. In order to differentiate between the two, it is necessary to look at the diagnosis date and the date of the initial CD4 lymphocyte count. Where there is more than one month difference between the dates, this 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 patient.

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

4.6 Viral load suppression

Percentage of adults and children receiving antiretroviral therapy who were virally suppressed in the reporting period (2015)

What it measures	Viral load is a measure of the effect of antiretroviral therapy on viral replication. A viral load threshold of <1000 copies/ml defines treatment failure according to the *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection* (Geneva, WHO, 2013) and is considered the level above which a person is not suppressing the virus.
	The viral load of patients receiving antiretroviral therapy provides an indication of adherence to treatment, patient compliance with disease monitoring and the quality of care delivered. Measured using antiretroviral therapy registry or other programme data, it can also indicate how many of those receiving antiretroviral therapy had a viral load test in the past year.
Rationale	Viral load is the recommended measure of antiretroviral therapy efficacy and provides an indication of treatment adherence and the risk of HIV transmission at individual and population levels.
	Effective antiretroviral therapy reduces transmission of HIV. Various studies strongly support the premise that treating HIV-positive individuals can significantly reduce sexual transmission of HIV. Suppressing viral load, therefore, should greatly reduce the transmission risk to an uninfected partner. It also prevents perinatal transmission. People receiving antiretroviral therapy frequently develop treatment resistance. A key determinant of treatment failure is increase in viral load.
	Measuring viral suppression is a key programmatic indicator related to effective treatment. It is one of the 10 global indicators in WHO's 2015 *Consolidated strategic information guidelines for HIV in the health sector*, and helps monitor the third 90 of UNAIDS' 90-90-90 treatment target, that 90% of people receiving antiretroviral therapy will have viral suppression by 2020.
Numerator	Number of adults and children receiving antiretroviral therapy in the reporting period with suppressed viral load (i.e. ≤1000 copies)
Denominator	Number of adults and children currently receiving antiretroviral therapy
Calculation	Numerator/denominator
Method of measurement	Countries should measure suppression using a viral-load threshold of <1000 copies/ml. For countries with other thresholds (e.g. undetectable <50 copies/ml or <400 copies/ml), preliminary evidence from several studies suggests 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.

Viral-load testing should be routine rather than episodic; for example, when treatment failure is suspected. If multiple viral-load tests are done annually for a person, only the last routine test result should be reported. Results from episodic viral loads should not be reported. If viral-load testing coverage is less than 75% of those receiving antiretroviral therapy in the reporting year, results should be interpreted with caution.

Tools for measuring viral load may vary across countries. Routine viral-load suppression tests from clinical and programme data should be reported where available. In countries where such data are not available, results from HIV population-based surveys or drug-resistance surveys based on a random sample of people on antiretroviral therapy may be reported. Countries should report the source of the numerator and denominator data, and data from both sources should be reported if available, although clinical and programme data are preferred. If results from a survey are used, that should be included when reporting.

Where clinical and programme data are available from routine monitoring systems, results will be recorded in patient files or in a laboratory system. Data should be deduplicated where patients receive multiple viral-load tests in a year.

If an HIV population-based or drug-resistance survey is used in place of routine programme monitoring data, measurement of viral load should be done for the entire population of HIV-positive individuals where ARV is detected in specimens. Self-reported treatment status has been shown to be of limited quality. Therefore, viral-load estimates among those who report receiving antiretroviral therapy should not be used.

Viral-load test results may also be recorded electronically and reported as part of cohort monitoring studies as the percentage of people who are virologically suppressed at defined time points. See indicator 4.2 on the proportion retained in treatment at 12 months.

Measurement frequency	Annual
Disaggregation	- age (less than 15 years, 15 years and older, 15–49, <1 year, 1–4 years, 5–9, 10–14, 15–19, 20–24, 25–49, 50+) when reporting based on routine programme or clinical data; (less than 15 years, 15 years and older) when reporting based on an HIV-related survey - sex (male, female)

Additional information requested

The number of people tested for viral suppression during the last reporting year is requested to quantify the representativeness of this indicator.

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 that have committed to ending AIDS by 2030.

Strengths and weaknesses

Viral-load measurements provide information on adherence, treatment efficacy and transmission risk at the individual and programme level.

The accuracy of the value of an individual's viral-load level may depend on the specimen available (whole blood versus dried blood spots). Determining whether a person has achieved undetectable viral load also varies depending on the sensitivity of the assays used. For this reason, suppression at a value of <1000 copies/mL rather than undetectable viral load should be used.

Evidence suggests that, depending on the stage of disease progression and other factors, time to viral suppression after starting antiretroviral therapy may be up to eight months, even in people who are fully adherent.

Viral-load monitoring capacity is being scaled up but remains limited in low-income settings.

Summary data from the viral-load indicator as measured through antiretroviral therapy registries or clinical programme data may not be representative of the broader treatment population viral load, as results may only be from a non-representative subset. This applies in particular if viral-load testing is not routine for all antiretroviral therapy patients but performed selectively to determine when to initiate treatment or for those with questionable treatment outcomes. Exercise caution in reporting and interpreting the percentage of people receiving antiretroviral therapy who are virally suppressed if testing is performed on an 'as needed' basis rather than routinely.

It is important to restrict this indicator to people receiving antiretroviral therapy, not all tests performed, to exclude re-testing in the reporting period.

Patient monitoring systems may yield cross-sectional and programme data. Data may also come from studies. If laboratory data are used, it needs to be adjusted to avoid double counting patients with more than one viral-load test in the reporting period.

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 better describe the impact of effective antiretroviral therapy.

Further information

Guidelines on monitoring the impact of the HIV epidemic using population-based surveys (Geneva, UNAIDS/WHO, 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. Geneva, World Health Organization, 2013.

Consolidated strategic information guidelines for HIV in the health sector. Geneva, World Health Organization, 2015.

WHO guidance on treatment and care

http://www.who.int/hiv/topics/treatment/en/index.html

4.7 AIDS-related deaths

Total number who have died of AIDS-related illness in 2015

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 2015 change in WHO guidelines to recommend treatment for all, should significantly reduce the number of AIDS-related deaths, provided these services are accessible and delivered effectively. It is important to assess the impact of the HIV response by monitoring changes in the number of AIDS-related deaths over time. This indicator, modified as the total number who have died of AIDS-related illness in the reporting period divided by the population (per 100 000), is one of the 10 global indicators in the WHO's *Consolidated strategic information guidelines for HIV in the health sector.*
Numerator	Number of AIDS-related deaths in 2015
Denominator	NA
Calculation	NA
Method of measurement	AIDS-related mortality 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 tools such as Spectrum. Modelling tools typically use demographic data, HIV prevalence from survey and surveillance, the number of people receiving antiretroviral therapy, HIV incidence and assumptions around survival patterns to estimate the number of people dying. In some instances, data from vital reporting systems and estimates of underreporting and misclassification also may be incorporated into these models to derive estimates of the number of AIDS-related deaths.
Measurement frequency	Annual
Disaggregation	▪ sex ▪ age (<5, 5–14, 15+ years) ▪ geographic area

Additional information requested

The source of the estimate is requested. For countries providing the number of AIDS-related deaths derived from a source other than Spectrum, 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, values will be pulled directly from the software once the national file is finalized.

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
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, it is useful to conduct periodic evaluations 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 are important. Estimates of AIDS-related deaths should be reported along with ranges of uncertainty.

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 (Connecticut, USA), Avenir Health.
http://www.avenirhealth.org/software-spectrum.php, accessed 29 March 2015

6.1 AIDS Spending

Domestic and international AIDS spending by categories and financing sources

What it measures   How funds are spent at the national level and where those funds are sourced in an intended accurate and consistent manner

Rationale   To end the AIDS epidemic as a public health threat by 2030, data on domestic and international financial flows for HIV are needed to have an understanding of all available resources and their comparative advantage in targeting certain populations. Indicator 6.1 aims to strengthen advocacy for sufficient, strategic and sustainable investments in HIV programmes at the national level and worldwide.

To effectively manage and allocate resources, national governments need to access information on the totality of investments made by aid donors, as well as by public and private stakeholders. To inform investments, data on domestic and international resources must be disaggregated, timely, open and comprehensive. Disaggregated data by type of programme and location can drive targeted investments and track progress across groups. Disaggregated data is needed to understand where investments are being made and who is benefiting from them.

The National Funding Matrix provides a framework to report on primary HIV expenditure indicators. It captures data by specific HIV programme and funding source. It is intended to capture HIV expenditure reflecting the specific context of a country and reproduce its strategic approach towards financing HIV. Only the categories relevant to a specific context are required to be captured; irrelevant programmes can be left blank. Encountered limitations and assumptions are to be submitted along with a National Funding Matrix.

There are certain requirements for data collection and quality. Building capacity and strengthening national systems for data collection by applying one of the methodologies and tools outlined hereafter is a prerequisite. Technical assistance for capacity building, study design and data collection is another requirement. An incorrect approach towards data collection affects the findings and their credibility.

Financial and programme records from service delivery organizations are the basis for data collection. These data sources will include information on actual expenditure on HIV. Budgets should not be used to report on HIV expenditure and to fill in the National Funding Matrix as there might be large discrepancies between budgetary allocations and actual expenditures.

Timely data is also important. Data on resource flows in many countries are years out of date, meaning aid agencies and national stakeholders are

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unable to fully incorporate recent trends and changing contexts when deciding how to allocate resources. Timely and accurate data is also important to enable governments to plan and coordinate resources.

The resource-tracking exercise is to be thoroughly planned as it can be a laborious process taking up to six months to complete a study and validate the findings. Critically, data governance and accountability must be in place to define data ownership. Data on HIV expenditure must be validated by all key stakeholders providing transparency and accountability.

Numerator	NA
Denominator	NA
Calculation	NA
Method of measurement	Primary tool: National AIDS Spending Assessment (NASA) Alternative tool: System of Health Accounts (SHA) 2011 Appendix 2 of the GARPR guide provides instructions on how to complete the cover sheet of the National Funding Matrix and reporting forms, and to submit the report. Providing accurate data and correct specifications of the data on the cover sheet reduces confusion around countries' estimates. We strongly encourage reviewing Appendix 2 carefully. For the 2016 reporting cycle, we encourage countries to apply NASA or SHA 2011 to report on indicator 6.1. NASA and SHA yield information that can be used to inform a minimum set of core indicators on totality of HIV expenditure disaggregated by funding source.
Measurement frequency	Preferably, every defined period of time; that is, every consequent calendar or fiscal year In this reporting cycle we suggest countries submit up to five years of estimates, capturing their specific financial cycle. If the estimates were previously submitted and have not been improved on, the data should not be submitted again. Otherwise, if improved or new estimates are available, the data is to be reported in this reporting cycle.
Disaggregation	▪ funding source ▪ HIV and AIDS programme area

Explanation of measurement tool

National Funding Matrix

The classification framework of HIV programmes in the National Funding Matrix is structured around the 10 targets of the 2011 United Nations Political Declaration on HIV and AIDS and is divided into eight AIDS core programme areas. It was introduced in GARPR cycle 2015. Each programme area comprises a set of specific spending categories, including basic prevention and treatment programmes, as well as critical enablers and development synergies. The core structure of the National Funding Matrix is provided in the screenshot below. The full range of HIV programme classifications and financing sources of the National Funding Matrix is provided in Appendix 2 to the GARPR guide.

TEN TARGETS: 2011 United Nations General Assembly Political Declaration on HIV/AIDS	HIV and AIDS programmes	Programme codes of the previous National Funding Matrix	Public Sources — Total Public	Private Sources — Total Private	International Sources — Total International	TOTAL
Target 1. Reduce sexual transmission of HIV by 50 percent by 2015	1. Prevention of sexual transmission of HIV					
Target 2. Reduce transmission of HIV among people who inject drugs by 50 percent by 2015	2. HIV prevention for people who inject drugs					
Target 3. Eliminate new HIV infections among children by 2015 and substantially reduce AIDS-related maternal deaths	3. Prevention of mother to child transmission					
Target 4. Reach 15 million people living with HIV with lifesaving antiretroviral treatment by 2015	4. Universal access to treatment					
Target 5. Reduce tuberculosis deaths in people living with HIV by 50 percent by 2015	5. TB					
Target 6. Close the global AIDS resource gap by 2015 and reach annual global investment of US$22-24 billion in low- and middle-income countries	6. Governance and sustainability					
Target 8. Eliminate stigma and discrimination against people living with and affected by HIV through promotion of laws and policies that ensure the full realization of all human rights and fundamental freedoms / Target 9. Eliminate HIV-related restrictions on entry, stay and residence	7. Critical enablers					
Target 7. Eliminate gender inequalities and gender-based abuse and violence and increase the capacity of women and girls to protect themselves from HIV / Target 10. Eliminate parallel systems for HIV-related services to strengthen integration of the AIDS response in global health and development efforts, as well as to strengthen social protection systems	8. Synergies with development sectors					
	Addendum items / Non-core global / Other					

Figure x. A snapshot of the core structure of the National Funding Matrix

Useful links

To find methodological guidelines and sample questionnaires, visit NASA publications and tools web page at the UNAIDS web site that is being gradually updated:
http://www.unaids.org/en/dataanalysis/datatools/nasapublicationsandtools

NASA reports can be found at:
http://www.unaids.org/en/dataanalysis/knowyourresponse/nasacountryreports

To find methodological guidelines on SHA 2011, visit the WHO web site at:
http://www.who.int/health-accounts/methodology/en/

WHO health accounts reports can be found at the WHO Global Health Expenditure Database: http://apps.who.int/nha/database/DocumentationCentre/Index/en

Data for decision-making

This section is intended to provide insights into the post-2015 approach to reporting HIV expenditure indicators. The envisioned approach is based on performance-oriented resource-tracking. It is being considered for introduction, to a certain extent, as part of the next GARPR framework and a broader programme evaluation agenda.

To fast-track the response, an in-depth analysis is required to inform different indicators that would encourage smart investments in HIV. Combining the data and linking input and outcome for service delivery provides substantial benefits for policy analysis and directions. While the National Funding Matrix is intended to provide core financial indicators, a set of additional secondary indicators linked with programmatic outcomes is required for insights into efficiency and performance.

Result area 7 of the newly developed UNAIDS Strategy 2016–2021 reads: "AIDS response is fully funded and efficiently implemented based on reliable strategic information." This result area provides an illustrative list of indicators, establishing a framework of core primary and secondary indicators. It captures indicator 6.1 as a primary indicator, namely: "Annual total HIV expenditure for in-country response disaggregated by key programme area and by source of funding (international and domestic)."

Result area 7 also provides a set of example secondary indicators, presented in the text box below. Secondary indicators cannot be derived from a National Funding Matrix. They are a result of combining financial and nonfinancial indicators that are consistent in boundaries and granularity.

The vision of performance-oriented resource-tracking and programme impact analysis will require more work to establish data standards and definitions across all GARPR indicators, as well as outside the GARPR framework. It will also require more deliberations on the methodologies and tools.

> - *ARV prices for first, second and third lines and reagents for laboratory monitoring of patients (CD4 and viral load)*
> - *Costs per person living with HIV receiving antiretroviral therapy and virally suppressed*
> - *Costs per infection averted, cost per death averted, and cost savings due to optimal resource allocation*

Strengths and weaknesses

Both NASA and SHA are internationally recognized methodologies that enable countries to report on a set of core indicators on total HIV expenditure disaggregated by funding source. It is intended that NASA and SHA apply standard accounting rules to report expenditure on HIV. NASA allows a broader level of disaggregation by type of HIV programme and by source of funding, reaching a deeper level of granularity of a specific context. SHA does not allow the same level of data disaggregation by programme but it enables countries to report the estimates of total health-related HIV expenditure by funding source.

NASA has broader boundaries that reflect a multisectoral approach to the HIV response, capturing health and non-health expenditures; for example, social mitigation, education and human rights. SHA is focused on health-related expenditures for HIV. The estimates on total expenditure captured by NASA and SHA may, therefore, have a certain level of discrepancy.

We encourage countries and members of the international community who play a supporting role by investing in core statistical systems and data collection to join efforts to track HIV-specific resources. That would support international efforts to build joined-up data that is combined and comparable.

The design of a questionnaire and data collection approach (top-down or bottom-up), as well as the expertise of the national team on standard methods and principles, are critical for carrying out an accurate resource-tracking exercise. We encourage countries to plan thoroughly and seek the methodological guidance necessary to build comprehensive, accountable and transparent indicators.

Further information

National AIDS Spending Assessment (NASA): classification and definitions. Geneva, UNAIDS, 2009.
http://www.unaids.org/en/media/unaids/contentassets/dataimport/pub/manual/2009/20090916_nasa_classifications_edition_en.pdf

Guide to produce National AIDS Spending Assessment (NASA). Geneva, UNAIDS, 2009.
http://data.unaids.org/pub/BaseDocument/2009/20090406_nasa_notebook_en.pdf

Producing national health accounts. Geneva, World Health Organization.
http://apps.who.int/nha/create/en/

A system of health accounts. 2011 edition. Paris, OECD/Eurostat/World Health Organization, 2011.
http://www.who.int/health-accounts/methodology/sha2011.pdf?ua=1

Guidelines on the implementation of the System of Health Accounts 2011. Geneva, World Health Organization, 2011.
http://www.who.int/health-accounts/documentation/system_of_health_accounts_2011/en/

Linking NASA and SHA: concepts and mechanics. Washington, DC, USAID/Health Systems 20/20/UNAIDS/World Health Organization, 2009.
http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/dataimport/pub/globalreport/2009/SHA_nasa_crosswalk_final_en.pdf

UNAIDS Strategy 2016–2021. On the Fast-Track to End AIDS. Geneva, UNAIDS, 2015.
http://www.unaids.org/sites/default/files/media_asset/20151027_UNAIDS_PCB37_15_18_EN_rev1.pdf

7.1 Prevalence of recent intimate partner violence

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

What it measures	Progress in reducing 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, particularly in sub-Saharan Africa, high rates of HIV infection in women have brought into sharp focus the problem of violence against women. There is growing recognition the risk of and vulnerability to HIV infection for women and girls is shaped by deep-rooted, pervasive gender inequalities, especially violence against them. Violence and HIV have been linked through direct and indirect pathways. Studies in many countries indicate a substantial proportion of women have experienced violence in some form or another at some point in their life. WHO estimates that globally one in three women have experienced intimate-partner violence and/or non-partner sexual violence.
Numerator	Women aged 15–49 who have or have ever had an intimate partner, who report experiencing physical or sexual violence by at least one of these partners in the past 12 months. See numerator explanation below for specific acts of physical or sexual violence to include.
Denominator	Total women surveyed aged 15–49 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/AIDS indicator surveys (domestic violence module) and the International Violence Against Women Surveys.
	Data collection on violence against women requires special methodologies that ensure 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, 25–49) ▪ HIV status (if available)

Explanation of numerator

Ever married or partnered women aged 15–49 includes those who have been married or had an intimate partner in that timespan. They are asked if they experienced physical or sexual violence from a male intimate partner in the past 12 months. Physical or sexual violence is determined by asking if 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
- 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

Those reporting at least one incident corresponding to any item in the past 12 months are included in the numerator.

Explanation of denominator

Total women surveyed aged 15–49 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. Gender equality has a clear, inverse relationship with intimate partner violence; in countries where intimate partner violence is high, gender equality, women's rates of education and women's reproductive health and rights are low.

The indicator focuses on recent intimate partner violence, rather than any experience of it, to enable monitoring and evaluating progress. 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 for 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 household and community level, 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 child health. Neither are they possible without promoting male responsibility for HIV prevention. Changes in this intimate partner violence indicator will be a leader for 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, there will be women who will not disclose information. This means 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 on condom use by a male partner who they suspect is living with HIV;
- 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 psychological distress that is manifested in risky sexual behaviour, increasing the chances of HIV transmission.

Further information

Investing in gender equality: ending violence against women and girls. UNIFEM brief, October 2010. Geneva, World Health Organization, 2010.

Addressing violence against women and HIV/AIDS: what works? Geneva, World Health Organization, 2010.

Dunkle KL, Head S, Garcia Moreno C. *Current intervention strategies at the intersection of gender-based violence and HIV: a systematic review of the peer-reviewed literature describing evaluations of interventions addressing the interface between gender, violence and HIV*. Geneva, World Health Organization, 2009.

Program on International Health and Human Rights, Harvard School of Public Health. *Gender-based violence and HIV*. Cambridge, MA, Harvard School of Public Health, 2009.

Maman S et al. The intersections of HIV and violence: directions for future research and interventions. *Social Science and Medicine*, 2000, 50:459–478.

Global and regional estimates of violence against women. Geneva, World Health Organization, 2013.

16 ideas for addressing violence against women in the context of the HIV epidemic: a programming tool. Geneva, World Health Organization/UNAIDS, 2013.

Unite with women, unite against violence and HIV. Geneva, UNAIDS, 2014.

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.

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*. American Journal of Reproductive Immunology, 2013; 69 (Suppl. 1): 20–26.

Adolescents and young women. In: *The Gap Report.* Geneva, UNAIDS, 2014, 2:132–145. http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2014/unaids _gap_report_en.pdf

8.1 Discriminatory attitudes towards people living with HIV

Percentage of women and men aged 15–49 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 is not a direct measure of discrimination but rather a measure of discriminatory attitudes that may result in discriminatory actions (or omissions). One item in the indicator measures the potential support by respondents for discrimination that takes place at an institution, 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 pointing to priority areas for action.

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

Denominator   Number of all respondents (aged 15–49) 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 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, 25-49) ▪ sex ▪ responses for each of the individual questions (based on the same denominator) are required, as well as the consolidated response for the composite indicator

Explanation of numerator

Those 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 there are any "don't knows" or missing values. It would be inaccurate, therefore, to calculate the percentage of people responding no to this question by subtracting the percentage of yes responses from 100%.

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 as it is applicable in settings with both high and low HIV prevalence, and in high- 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 in many contexts are rare and difficult to characterize and quantify. Rather, the individual measures and the composite indicator assess an individual's attitudes, which may have a more direct role in influencing behaviour.

The recommended questions assess agreement with hypothetical situations rather than measuring events of discrimination witnessed. Therefore, social desirability bias may 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 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 compare findings with 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*.

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 et al. A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? *Journal of the International AIDS Society*, 2013, Vol 16.
www.jiasociety.org/index.php/jias/issue/view/1464

www.stigmaactionnetwork.org

For more on DHS/AIS methodology and survey instruments:
http://dhsprogram.com/

This indicator provides an important measure of prevalence of discriminatory attitudes towards people living with HIV. For a more complete assessment of progress towards eliminating HIV-related stigma and discrimination, and of the success or failure of stigma reduction efforts, it is important to measure other domains of stigma and discrimination.

10.2 External economic support to the poorest households

Proportion of the poorest households who received external economic support in the past three months

What it measures   Progress in providing external economic support to poorest households affected by HIV and AIDS

Rationale   Economic support (with focus on social and livelihoods assistance) to poor and HIV-affected households remains a high priority in many comprehensive care and support programmes. This indicator reflects the growing international commitment to HIV-sensitive social protection. It recognizes the household should be the primary unit of analysis since many care and support services are directed to the household level. Tracking coverage of households with orphans and within the poorest quintile remains a developmental priority.

Numerator   Number of the poorest households that received any form of external economic support in the last three months

Denominator   Total number of poorest households

Calculation   Numerator/denominator

Method of measurement   Population-based surveys such as household income and expenditure surveys, Household Budget Surveys, Demographic and Health Surveys, AIDS indicator surveys, Multiple Indicator Cluster Surveys or other nationally representative surveys. National statistics offices conduct household income and expenditure surveys, where questions include current transfers received of cash and goods, and of services.

An assessment of a household's wealth (through asset ownership) is completed at the data analysis stage using the wealth quintile to identify the poorest 20% of households. However, since it is not possible to identify the poorest households at the time of data collection, all households should be asked questions on economic support. Only those who fall in the lowest wealth quintile will be included in the indicator.

As part of a household survey, a roster should be used to list all members of the household, together with their ages, identifying all those with children less than 18 years of age, and with orphans, in the past year before the survey. These households are then asked the following questions about the type of economic support received and the primary source of the help.

Has your household received any of the following forms of external economic support in the past three months?

- cash transfer (e.g. pensions, disability grant, child grant, to be adapted according to country context)
- assistance for school fees
- material support for education (e.g. uniforms, school books)
- income-generation support in cash or kind (e.g. agricultural inputs)
- food assistance provided at the household or an external institution (e.g. at school)
- material or financial support for shelter
- other form of economic support (specify)

An assessment of the household's wealth (through an assessment of asset ownership) is completed at the data analysis stage using the wealth quintile, at which point it will be possible to assess the extent to which the poorest households are receiving external support.

Measurement frequency

Every 4–5 years

Disaggregation

It is recommended the indicator be disaggregated by type of external economic support in order to track the different types of support provided, particularly to distinguish between access to free social assistance such as cash transfers (often specifically for poor labour-constrained households) and livelihoods support, which is often targeted at poor households that are less labour-constrained. It is also recommended the indicator be disaggregated according to whether households have orphans, a major determinant of vulnerability, particularly for access to services. Where possible, data should be disaggregated for rural and urban residence. For countries that opt to add data collection for households in other wealth quintiles in addition to those in the bottom quintile, the indicator can be compared with other wealth quintiles to track whether external economic support is reaching the bottom quintile.

Explanation of numerator
External economic support is defined as free economic help (cash grants, assistance for school fees, material support for education, income generation support in cash or kind, food assistance provided at the household level, or material or financial support for shelter) that comes from a source other than friends, family or neighbours, unless they are working for a community-based group or organization. This source is most likely to be the national government or a civil society organization.

Explanation of denominator
Poorest households are defined as those in the bottom wealth quintile. Countries should use the exact indicator definition and method of measurement for standardized progress monitoring and reporting at national and global levels. This will enable monitoring of changes over time and comparisons across different countries. However, countries can add or exclude other categories

locally (e.g. other wealth quintiles) depending on country needs for national programme planning and implementation.

Strengths and weaknesses

This indicator reflects new evidence of the need for greater focus on wealth dimensions of vulnerability and the fact that targeting on the basis of extreme poverty in high-prevalence contexts ensures good coverage of poor households affected by HIV. Proxy indicators of AIDS affectedness, such as chronic illness, have often been poorly associated with HIV, have weak associations with adverse developmental outcomes and have proved difficult to define in household questionnaires.

This indicator demonstrates changing levels of economic support for the poorest households. In high-prevalence contexts, in particular, the majority are likely to be HIV affected. The indicator also demonstrates changes in the composition of external support (e.g. cash, food, livelihoods) received by poor households.

The indicator does not measure directly economic support to households including people living with HIV or affected by HIV but suggests that households living in the bottom wealth quintile in high-prevalence contexts are more likely to be negatively impacted by HIV and need economic assistance. To keep measurement as simple as possible, the indicator does not try to identify the different sources of support to households but this should be partly captured in National AIDS Spending Assessments (NASA) or similar research.

Collecting data through population-based surveys, particularly demographic and health surveys and multiple indicator cluster surveys, means the indicator does not capture the status of people living outside of households, such as street children, children in institutions and internally displaced populations. Separate surveys are needed to track coverage for such vulnerable populations.

Further information

Enhancing social protection for HIV prevention, treatment, care and support

http://www.unicef.org/aids/files/Social_Protection_Brief_LowresOct2010.pdf

11.1 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 in people living with HIV
Rationale	TB is a leading cause of morbidity and mortality in people living with HIV, including those on antiretroviral therapy. Intensified TB case-finding and access to quality diagnosis and treatment of TB in accordance with international/national guidelines is 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 adults and children with HIV infection who received antiretroviral combination therapy in accordance with the nationally approved treatment protocol (or WHO/UNAIDS standards) and who were started on TB treatment (in accordance with national TB programme guidelines) 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 estimate for 2015 can be found 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, 15+)

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

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 TB cases among people living with HIV should be started on TB treatment, and on antiretroviral therapy within eight weeks of starting TB treatment, regardless of CD4 count. Those HIV-positive TB patients with profound immunosuppression (e.g. CD4 counts of 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 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 as this information has implications for antiretroviral therapy eligibility and choice of antiretroviral regimen. It is recommended, therefore, that the TB treatment start date is 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 2015. Geneva, World Health Organization, 2015.
http://apps.who.int/iris/bitstream/10665/191102/1/9789241565059_eng.pdf?ua=1

A guide to monitoring and evaluation for collaborative TB/HIV activities (2015 revision). Geneva, World Health Organization, 2015.
http://apps.who.int/iris/bitstream/10665/150627/1/9789241508278_eng.pdf?ua=1

11.2 Proportion of people living with HIV newly enrolled in HIV care with active tuberculosis disease

Total number of people living with HIV having active tuberculosis (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 aim of intensified TB case-finding in HIV-care settings and provider-initiated HIV testing and counselling in TB patients is 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, as the risk of undetected TB is higher among newly enrolled patients than among those already on antiretroviral therapy. Also, 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 be started on anti-TB treatment immediately and on antiretroviral therapy within eight weeks if not already receiving antiretroviral medicines.
Numerator	Total number of people who have active TB disease during the reporting period out of those newly enrolled in HIV care
Denominator	Total number of people newly enrolled in HIV care during the reporting period (pre-antiretroviral therapy plus antiretroviral therapy)
Calculation	Numerator/denominator
Method of measurement	The outcome of TB investigations in presumptive TB cases among people living with HIV 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 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. Also, information on the 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	None

Strengths and weaknesses

Reviewing the trend of 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 as 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 careful interpretation.

Further information

A guide to monitoring and evaluation for collaborative TB/HIV activities (2015 revision). Geneva, World Health Organization, 2015.
http://apps.who.int/iris/bitstream/10665/150627/1/9789241508278_eng.pdf?ua=1http://www.who.int/hiv/pub/tb/hiv_tb_monitoring_guide.pdf

11.3 Proportion of people living with HIV newly enrolled in HIV care started on tuberculosis preventive therapy

Number of patients started on treatment for latent tuberculosis (TB) infection, expressed as a percentage of the total number 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 are started on 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 one 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 this therapy to reduce the risk of developing active TB, both those on antiretroviral therapy and those who are not.
Numerator	Total number of people living with HIV newly enrolled in HIV care who are started on treatment for latent TB infection during the reporting period
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	TB preventive therapy should be started in 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/year column).
	Numerator: count the total number of people living with HIV newly enrolled in HIV care during the reporting period who are started on treatment for latent TB infection; that is, those who are given 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. It should be consolidated annually and reported to WHO.
Disaggregation	None

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 development of such a benchmark at 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://apps.who.int/iris/bitstream/10665/150627/1/9789241508278_eng.pdf?ua=1http://www.who.int/hiv/pub/tb/hiv_tb_monitoring_guide.pdf

11.4 Hepatitis B testing

Proportion of people in HIV care who were tested for hepatitis B

What it measures	It monitors trends in hepatitis B testing among HIV-positive patients, a critical intervention for assessing needs related to managing hepatitis B coinfection.
	Presence of hepatitis B surface antigen (HBsAg) for a minimum of six months indicates chronic hepatitis B, informing clinicians on the need for further clinical and laboratory evaluation and treatment. Knowing HIV/hepatitis B status makes possible prescribing antiretroviral medicines (ARVs) effective against hepatitis B virus (HBV) and HIV infections.
Rationale	Testing for hepatitis B identifies coinfections in order to adapt treatment
Numerator	Number of people in HIV care who were tested for hepatitis B during the reporting period using HBsAg tests
Denominator	Number of people in HIV care during the reporting period
Calculation	Numerator/denominator
Method of measurement	Clinical and/or laboratory records
Measurement frequency	Annual
Disaggregation	▪ sex ▪ age (<15, 15+) ▪ 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 HIV/HBV coinfected people in HIV care aware of their hepatitis B coinfection. This would be reflected by indicator C.6 of the viral hepatitis monitoring and evaluation framework, disaggregated by HIV status.

11.5 Proportion of HIV/HBV coinfected persons on combined treatment

What it measures	Proportion of patients coinfected with hepatitis B virus (HBV) and HIV being treated with antiretroviral medicines (ARVs) effective against both viruses among patients enrolled in HIV care
Rationale	HIV patients are often coinfected with HBV. The prevalence of coinfection is particularly high in the WHO African and European regions because of early childhood transmission and injecting drug use, respectively. Treating hepatitis B in people living with HIV has an impact on quality of life, life expectancy and mortality. Some ARVs are effective against the HIV and HBV virus, which simplifies treatment of coinfected patients.
Numerator	Number of HIV/HBV coinfected people who receive treatment with ARVs effective against both viruses during the reporting period
Denominator	Number of people diagnosed with HIV/HBV coinfection in HIV care during a reporting period (12 months)
Calculation	Numerator/denominator
Method of measurement	The numerator and denominator are calculated from clinical records of health-care facilities providing HIV/AIDS 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/AIDS 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.

11.6 Hepatitis C testing

Proportion of people in HIV care who were tested for hepatitis C virus (HCV)

What it measures	It monitors trends of hepatitis C testing, a critical intervention for assessing needs related to managing hepatitis C.
	Hepatitis C testing provides information on the prevalence of HIV/HCV coinfection, informing clinicians on the need for further clinical and laboratory evaluation and treatment.
Rationale	Testing for hepatitis C identifies HIV/HCV coinfections in order to adapt treatment
Numerator	Number of adults and children in HIV care who were tested for hepatitis C during the reporting period using anti-HCV antibody tests
Denominator	Number of adults and children in HIV care during the reporting period
Calculation	Numerator/denominator
Method of measurement	Clinical and/or laboratory records
Measurement frequency	Annual
Disaggregation	▪ sex ▪ age (<15, 15+) ▪ people who inject drugs

Strengths and weaknesses

Patients who are anti-HCV positive have serological evidence of past or present infection. They must be tested for HCV RNA (detects hepatitis C virus 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 HIV/HCV coinfected people in HIV care aware of their hepatitis C coinfection. This would be reflected by indicator C.6 of the viral hepatitis monitoring and evaluation framework, disaggregated by HIV status.

11.7 Proportion of persons diagnosed with HIV/HCV infection started on HCV treatment.

What it measures	Initiation of hepatitis C virus (HCV) treatment for HIV/HCV coinfected patients among patients enrolled in HIV care
Rationale	The prevalence of HCV coinfection is particularly high among HIV-positive people in the WHO European Region because of injecting drug use. Treatment of hepatitis C in people living with HIV has an impact on patient quality of life, life expectancy and mortality.
Numerator	Number of people diagnosed with HIV/HCV coinfection started on treatment for HCV during a specified time frame (e.g. 12 months)
Denominator	Number of people diagnosed with HIV/HCV coinfection in HIV care during a specified time period (12 months)
Calculation	Numerator/denominator
Method of measurement	The numerator and denominator are calculated from clinical records of health-care facilities providing HIV/AIDS treatment and care.
Measurement frequency	Annual
Disaggregation	▪ people who inject drugs

Strengths and weaknesses

This indicator monitors access to hepatitis C treatment for people living with HIV coinfected with HCV. The weakness is that it reflects only one year of activity. To describe the cumulated effect of placing HIV/HCV coinfected people on treatment, it is necessary to compile cumulative data on those placed on treatment and to account for new HCV infections and HCV reinfections in the denominator.

Further information

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

11.8 Syphilis testing in pregnant women

Percentage of pregnant women accessing antenatal care services who were tested for syphilis

What it measures	Coverage of syphilis testing in women attending antenatal care services
Rationale	Testing pregnant women for syphilis early in pregnancy is important for their health and that of the fetus, and contributes to monitoring the quality of antenatal care services, and services to prevent HIV among pregnant women. It is also a core process indicator for assessing the validation of eliminating mother-to-child transmission (MTCT) of syphilis.
Numerator	Number of women attending antenatal care services who were tested for syphilis
Denominator	Number of women attending antenatal care services
Calculation	Numerator/denominator
Method of measurement	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 first visit. Countries unable to distinguish first visit from testing at any visit should still report data on this indicator but ensure it is clearly reported as data for any visit. This indicator should be measured annually.
	Either nontreponemal tests that measure reaginic antibody (e.g. VDRL or RPR) or treponemal tests that measure treponemal antibody (e.g. TPHA, TPPA, EIA or rapid treponemal tests) may be used for screening. 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 in 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 deemed representative of the national situation. Specify the source and coverage of your data (e.g. 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. It should also be consolidated annually and reported to WHO.
Disaggregation	Tested at any visit, tested at first visit

Additional information requested

Comment on whether the data you are providing is routine programme data and deemed representative of the entire country.

Strengths and weaknesses

Countries may wish to also monitor the week of pregnancy in which each woman is tested. Preventing congenital syphilis requires testing early in pregnancy as 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 those who attend antenatal care services can later be combined with data on antenatal care attendance to estimate overall coverage of syphilis testing among pregnant women.

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

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.

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

11.9 Syphilis rates among antenatal care attendees

Percentage of antenatal care attendees who were positive for syphilis

What it measures

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

Rationale

Syphilis infection in antenatal care attendees can be used to guide sexually transmitted infection (STI) prevention programmes and may provide early warning of potential changes in HIV transmission in the general population.

Numerator

Number of antenatal care attendees who tested positive for syphilis

Denominator

Number of antenatal care attendees who were tested for syphilis

Calculation

Numerator/denominator

Method of measurement

Syphilis positivity can be measured using either nontreponemal tests (for example, RPR or VDRL), treponemal tests (TPHA, TPPA, EIA or a variety of available rapid tests), or ideally a combination of both. A reactive nontreponemal test, particularly if the titre is high, is suggestive of 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), it is acceptable to report positivity based on a single test result. If both treponemal and nontreponemal test results on an individual patient 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.

National programme records aggregated from health-facility data, sentinel surveillance or special surveys, using serologic tests to detect reaginic and/or treponemal antibody, may be used. In the comments section, specify the source and coverage of your data; for example, sentinel surveillance of all ANC attendees in two of 10 provinces. Also specify what test type is generally used in your country to define positivity in pregnant women; for example, nontreponemal (RPR, VDRL), treponemal (rapid tests, TPPA), patients positive on both, or unknown.

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

Since most countries will have data from a variety of test types,

subanalysis (disaggregation) in women aged 15–24 may increase the likelihood that test positivity reflects recent infection.

Measurement frequency	Data should be recorded daily and reported quarterly to the national or subnational level. It should also be consolidated annually and reported to WHO.
Disaggregation	▪ age (15–24, 25+)

Additional information requested

Comment on whether the data you are providing is routine programme data deemed to be representative of the entire country and what test type was used to define positivity in ANC attendees; for example, nontreponemal, treponemal, patients positive on both, or mixed/unknown.

Strengths and weaknesses

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

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

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

Local: follow trends over time to assess changes in the burden of disease and STI prevention programme needs. Data is used to estimate syphilis incidence and prevalence.

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

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.

https://extranet.who.int/iris/restricted/handle/10665/44790

11.10 Syphilis treatment coverage among syphilis-positive antenatal care attendees

Percentage of antenatal care attendees positive for syphilis who received treatment

What it measures	Percentage of antenatal care attendees during a specified period with a positive syphilis serology who were treated adequately
Rationale	Treating antenatal care attendees positive for syphilis is a direct measure of the elimination of mother-to-child transmission of syphilis programme and efforts to strengthen primary HIV prevention. It is also a core process indicator for validating elimination of mother-to-child transmission of syphilis.
Numerator	Number of antenatal care attendees with a positive syphilis serology who received at least one dose of benzathine penicillin 2.4 mU IM
Denominator	Number of antenatal care attendees with a positive syphilis serology
Calculation	Numerator/denominator
Method of measurement	Data should be collected annually. Seropositivity on either the 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 deemed representative of the national situation. Specify the source and coverage of your data (e.g. 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. It should also be consolidated annually and reported to WHO.
Disaggregation	None

Additional information requested

Comment if the data you are providing does not cover the entire country.

Strengths and weaknesses

Data on treating syphilis in antenatal care attendees is often routinely monitored in health facilities.

Collecting treatment data may require collaboration with maternal and child health programmes to ensure such data is available at a 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 benzathine penicillin prior to 24 weeks gestational age is sufficient to prevent transmission of syphilis from mother to infant. However, three injections at weekly intervals are recommended to treat latent syphilis and prevent tertiary syphilis in the mother.

Global/regional/local: estimate programme effectiveness 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.

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

11.11 Congenital syphilis rate (live births and stillbirth)

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

What it measures	Progress in eliminating mother-to-child transmission (MTCT) of syphilis
Rationale	Untreated syphilis infection in pregnancy can not only increase the risk of HIV transmission and acquisition in the mother and the infant 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 MTCT of syphilis have been launched. The rate of congenital syphilis is a measure of the impact of programmatic interventions to eliminate MTCT 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	Data should be recorded daily and reported quarterly to the national or subnational level. It 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:
http://www.who.int/reproductivehealth/publications/rtis/9789241505895/en/index.html

In particular, countries should note whether or not stillbirths are counted in their national case definition.

Strengths and weaknesses

Diagnosing congenital syphilis is most reliable when using specific diagnostic tests that are seldom available even in developed 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, 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 denominator per UNPD.

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, by using a consistent case definition, trends over time may be 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

11.12 Men with urethral discharge

Number of men reporting urethral discharge in the past 12 months

What it measures	Progress in reducing unprotected sex in men
Rationale	Urethral discharge in men is a sexually transmitted infection (STI) syndrome generally most commonly caused by Neisseria gonorrhoeae or Chlamydia trachomatis. Presentation with an acute STI syndrome, such as urethral discharge, is a marker of unprotected sexual intercourse, and urethral discharge facilitates HIV transmission and acquisition. Therefore, surveillance for urethral discharge 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 need more aggressive programme interventions to reduce the risk. Untreated urethral discharge can result in infertility, blindness and disseminated disease. Increasing resistance to 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 males aged 15 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. It should also be consolidated annually and reported to WHO.
Disaggregation	None

Strengths and weaknesses

Although WHO has provided a global case definition, actual case definition may vary between and within countries, as may clinical diagnostic capacity. Although underreporting of this indicator may occur, 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.

It is important that countries, when reporting on urethral discharge, communicate on the extent to which data are deemed representative of the national population.

Following trends in urethral discharge is a feasible means to monitor incident STI in a population. Data on vaginal discharge among women, although useful for monitoring purposes at a local and national level, are not requested at the global level because in many settings the majority of vaginal discharge cases are not due to sexually transmitted infections.

Countries should conduct periodic assessments of the etiology 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 denominator from United Nations Population Division (UNPD).

Look at 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/

11.13 Genital ulcer disease in adults

Number of adults reported with genital ulcer disease in the past 12 months

What it measures	Progress in reducing unprotected sex in the general population
Rationale	Genital ulcer disease is a sexually transmitted infection (STI) syndrome generally most commonly caused by syphilis, chancroid or herpes simplex virus (HSV). Presentation with an acute STI syndrome such as genital ulcer disease is a marker of unprotected sexual intercourse and facilitates HIV transmission and acquisition. Therefore, surveillance for genital ulcer disease 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 need more aggressive programme interventions to reduce risk. Untreated genital ulcer diseases can cause stillbirths and neonatal disease, and can progress to debilitating or fatal outcomes in adults.
Numerator	Number of adults reported with genital ulcer disease during the reporting period
Denominator	Number of individuals aged 15 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. It should also be consolidated annually and reported to WHO.
Disaggregation	▪ sex

Strengths and weaknesses

Although WHO has provided a global case definition, actual case definition may vary between and within countries, as may clinical diagnostic capacity. Although underreporting of this indicator may occur, 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.

It is important that countries, when reporting on genital ulcer disease, communicate on the extent to which data are deemed representative of the national population.

Countries should conduct periodic assessments of the aetiology of genital ulcer disease to ensure appropriate drug selection for syndromic management and to understand the extent to which genital ulcer disease reflects incident infection due to recurrent HSV infection versus acute infection with syphilis, chancroid or HSV.

If a country is unable to report on the denominator, WHO will use denominator per UNPD.

Look at 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/

Government HIV and AIDS policies

The National Commitments and Policy Instrument (NCPI) measures progress in developing and implementing national HIV policies, strategies and laws. It has been a key component of monitoring

the 2011 Political Declaration. A review of the NCPI was started in 2014 to assess its utility and propose a revised instrument reflecting lessons learned from 10 years of NCPI implementation, as well as the current environment and data needs. The review concluded that monitoring policy development and implementation is crucial in assessing progress in the HIV response, and that the NCPI continues to be a relevant tool for this, bringing together the perspectives of national authorities, civil society and other partners. In 2015 a revised NCPI questionnaire and methodology was developed and piloted in five countries. Incorporating pilot feedback and finalizing the revised tool will be integrated in the broader review of the global HIV monitoring framework in 2016.

WHO programmatic and policy questions

HIV testing services

1) Populations. Do the current HIV testing services (HTS) guidelines address:

a) children

___ yes

___ no

___ don't know

b) adolescents

___ yes

___ no

___ don't know

c) key populations[3]

___ yes

___ no

___ don't know

2) Provider-initiated HIV testing and counselling **(**PITC). Do the current HTS guidelines recommend PITC for:

a) all people attending health facilities

___ yes

___ no

___ don't know

b) all pregnant women attending health facilities

___ yes

___ no

___ don't know

c) all paediatric patients attending health facilities

___ yes

___ no

___ don't know

d) all people with presumed or diagnosed tuberculosis (TB) infection attending health facilities

___ yes

___ no

[3] Refer to men who have sex with men, people in prison, people who inject drugs, sex workers and transgender people.

___ don't know

e) all people with presumed or diagnosed sexually transmitted infection (STI) attending health facilities

___ yes

___ no

___ don't know

f) all people with presumed or diagnosed hepatitis (B/C) attending health facilities

___ yes

___ no

___ don't know

g) all key populations attending health facilities

___ yes

___ no

___ don't know

h) sexual partners of an HIV-positive person

___ yes

___ no

___ don't know

i) other populations attending health facilities

___ yes

___ no

___ don't know

If others, please specify _____

3) Do the current HTS guidelines recommend:

a) the use of community-based HTS

___ yes

___ no

___ don't know

b) the use of rapid diagnostic tests for community-based testing

___ yes

___ no

___ don't know

c) the use of rapid diagnostic tests in primary health care (PHC) settings
___ yes

___ no

___ don't know

d) the use of rapid diagnostic tests for same day results for facility-based testing

___ yes

___ no

___ don't know

e) the use of rapid diagnostic tests to be performed by lay providers[4]

___ yes

___ no

___ don't know

f) the use of rapid diagnostic tests for HIV self-testing

___ yes

___ no

___ don't know

4) Couples/partner HTS. Do the current HTS guidelines recommend:

a) couples/partner HTS in all settings

___ yes

___ no

___ don't know

b) couples/partner HTS in prevention of mother-to-child transmission (PMTCT) programmes

___ yes

___ no

___ don't know

c) partner notification services in all settings

___ yes

___ no

___ don't know

Antiretroviral therapy

1) Status of antiretroviral (ARV) guidelines. Please provide month and year of last completed and published revision of the guidelines, as well as indicate if it is standalone or consolidated.

---

[4] Any person who performs functions related to health-care delivery and has been trained to deliver specific services but has received no formal professional or paraprofessional certificate or tertiary education degree.

a) adult antiretroviral therapy guidelines:
month and year of last revision ___
___ standalone
___ consolidated

b) PMTCT guidelines:
month and year of last revision ___
___ standalone
___ consolidated

c) paediatric antiretroviral therapy guidelines:
month and year of last revision ___
___ standalone
___ consolidated

d) Operational/service delivery guidelines:
month and year of last revision ___
___ standalone
___ consolidated

Please upload a copy of the document(s) if available

2) Have recommendations from WHO's 2013 *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection* been adapted in a national process for:

a) adult antiretroviral therapy guidelines

___ yes, completed

___ ongoing

___ no

___ other

Please provide comment if you choose other _____

b) PMTCT guidelines

___ yes, completed

___ ongoing

___ no

___ other

Please provide comment if you choose other _____

c) paediatric antiretroviral therapy guidelines

___ yes, completed

___ ongoing

___ no

___ other

Please provide comment if you choose other _____

3) Have recommendations from WHO's 2015 *Consolidated Guidelines on the use of antiretroviral drugs for treating and preventing HIV infection* and early-release guidelines been adapted in a national process for:

   a) adult antiretroviral therapy guidelines

   ___ yes, completed

   ___ ongoing

   ___ no

   ___ other

   Please provide comment if you choose other _____

   b) PMTCT guidelines

   ___ yes, completed

   ___ ongoing

   ___ no
   ___ other

   Please provide comment if you choose other _____

   c) paediatric antiretroviral therapy guidelines

   ___ yes, completed

   ___ ongoing

   ___ no

   ___ other

   Please provide comment if you choose other _____

4) What are the national antiretroviral therapy targets for:

   a) Total number of people on antiretroviral therapy (e.g. 1 million by 2015)

   adults   ___ by year ___

   children ___ by year ___

   b) PMTCT antiretroviral therapy coverage among pregnant women[5] (e.g. XX% in 2016)

---

[5] Under Prong 4: the target for antiretroviral therapy coverage among pregnant women is 90% for 2015.

___% in year ___

___% in year ___

---

5) What is the recommended CD4 threshold for initiating antiretroviral therapy in adults and adolescents who are asymptomatic:

   a) as per Ministry of Health (MOH) guidelines or directive
   _____ TREAT ALL regardless of CD4 count
   _____ ⩽500
   _____ ⩽350
   _____ other

   Please specify if you chose other _____

   b) what is the implementation status of the policy adopted above:

   ___ not done in practice

   ___ done in a small number of treatment sites

   ___ done in a large number of treatment sites

   ___ done countrywide

   ___ other

   Please provide comment if you choose other _____

---

6) If national guidelines recommend a CD4 threshold of 500 or TREAT ALL, is prioritization given to persons with a CD4 <350 or to those with advanced clinical disease:

   ___ yes

   If yes, please specify _____

   ___ no

   ___ not applicable (e.g. country not yet adopted CD4 threshold of 500 or TREAT ALL)

   ___ other

   Please provide comment if you choose other _____

---

7) If your country has not yet adopted a TREAT ALL policy as per the WHO 2015 consolidated ARV guidelines, is there a plan to move towards adopting and implementing a TREAT ALL policy:

   ___yes

   ___no

If yes, please include planned year and approach (pilot, phase-in or countrywide approach) _____

If no, please provide feedback regarding challenges to adopting and implementing TREAT ALL _____

8) Antiretroviral therapy initiation criteria adopted in national guidelines for infants and children with HIV:

a) what is the age cut-off to treat all children irrespective of symptoms as per MOH guidelines or directive

___ <1 years

___ <2 years

___ <5 years (as per WHO 2013 guidelines)

___ <10 years (as per WHO 2015 guidelines)

___ other

Please provide comment if you choose other _____

b) what is the implementation status of the age cut-off policy adopted in 8a)

___ not done in practice

___ done in a small number of treatment sites

___ done in a large number of treatment sites

___ done countrywide

___ other

Please provide comment if you choose other _____

c) what is the CD4 cell count threshold in children aged five years and older who are asymptomatic per MOH guidelines or directive

___ regardless of CD4 count, TREAT ALL

___ $\leqslant$500

___ $\leqslant$350

___ other

Please provide comment if you choose other _____

d) what is the implementation status of the CD4 cell count threshold policy adopted above

___ not done in practice

___ done in a small number of treatment sites

___ done in a large number of treatment sites

___ done countrywide

___ other

Please provide comment if you choose other _____

9) Do national guidelines recommend antiretroviral therapy for all HIV-positive patients with active TB:

___ yes

___ no

___ other

Please provide comment if you choose other _____

10) Do national guidelines recommend antiretroviral therapy for all HIV-positive patients with hepatitis B, and severe liver disease:

___ yes

___ no

___ other

Please provide comment if you choose other _____

11) Do national guidelines recommend antiretroviral therapy for the HIV-positive partner in serodiscordant couples:

___ yes

___ no

___ other

Please provide comment if you choose other _____

12) Do national guidelines recommend treating HIV-positive persons identified as key populations[6] irrespective of CD4 cell count (TREAT ALL):

___ yes

___ no

If yes, please specify the key population(s) _____

13) For which population(s) is nurse-initiated antiretroviral therapy allowed (multiple choices possible):

___ non-pregnant adults (men, women and transgender)

___ pregnant women

___ adolescents (10–19 years old)

___ children <10 years old

---

[6] Refer to men who have sex with men, people in prison, people who inject drugs, sex workers and transgender people.

___ none

Regimens

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

a) adults and adolescents

___yes

___no

___ other

Please provide comment if you choose other _____

b) pregnant women

___yes

___ no

___ other

Please provide comment if you choose other _____

15) Does the country use fixed-dose antiretroviral therapy combinations as the preferred first-line therapy (multiple choices possible):

___ yes, 3 drug one pill once a day

___ yes, 2 drug FDC + 1 drug

___ no

___ other

Please provide comment if you choose other _____

16) Is there a policy to phase out D4T for:

a) adults and adolescents

___ yes, fully phased out

___ yes, partially phased other

___ other

Please provide comment if you choose other _____

b) children

___ yes, fully phased out

___ yes, partially phased other

___ other

Please provide comment if you choose other _____

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 provide comment if you choose other _____

18) What is the preferred nucleoside reverse transcriptase inhibitor (NRTI) for treatment initiation in children aged less than three with HIV:

___ abacavir (ABC)

___ zidovudine (AZT)

___ stavudine (d4T)

___ other

Please specify if you chose other_____

19) Are LPV/r based-regimens the preferred treatment option for all infants and children <36 months with HIV (irrespective of NNRTI exposure) in the national guidelines:

___ yes, for all

___ no, but recommended for NNRTI-exposed infants only

___ not recommended

20) Is efavirenz (EFV) recommended as the preferred NNRTI for treatment initiation in children aged three and older:

___ yes

___ no

___ other

Please comment if you choose other _____

21) What is the recommended NRTI backbone for treatment initiation in children aged 3–10 years:
___ TDF + 3TC (or FTC)

___ AZT + 3TC (or FTC)

___ ABC + 3TC (or FTC)

___ other

Please specify if you choose other_____

22) What is the recommended NRTI backbone for treatment initiation in adolescents >35kg and at least 10 years of age:

___ TDF + 3TC (or FTC)

___ AZT + 3TC (or FTC)

___ ABC + 3TC (or FTC)

___ other

Please specify if you choose other _____

Monitoring treatment response

23) Does the country use CD4 technology:

a) at the point of care

___ yes

___ no

If yes, what proportion of facilities use point-of-care CD4 testing ___%

b) at the laboratory

___ yes

___ no

c) both at the point of care and laboratory

___ yes

___ no

d) if CD4 testing is available, what proportion of district hospitals have CD4 testing capacity

Provide an estimate ___ %

e) what proportion of primary health-care facilities have access to CD4 cell count for testing their patients, whether on-site or nearby referral

Provide an estimate ___ %

---

24) Is there a current national policy on routine viral load for monitoring antiretroviral therapy and what is the level of implementation:

a) for adults and adolescents

___ yes, fully implemented, provide date ___

___ yes, partially implemented, provide date ___

___ yes, but not implemented

___ no

b) for children

___ yes, fully implemented, provide date ____

___ yes, partially implemented, provide date ___

___ yes, but not implemented

___ no

---

25) What is the viral load testing policy/strategy for monitoring the treatment response:

a) for adults and adolescents

i. routine first test at:
___ 3 months
___ 6 months
___ 12 months

ii. routine follow-up testing every:
___ 3 months
___ 6 months
___ 12 months

iii. targeted (based on suspected non-response to antiretroviral therapy)
___ yes
___ no
___ other

Please provide a comment if you chose other _____

 b) for children

i. routine first test at: 3 months ___, or 6 months ___, or 12 months ___

ii. routine follow-up testing every: 3 months ___, or 6 months ___, or 12 months ___

iii. targeted (based on suspected non-response to antiretroviral therapy)

___ yes

___ no

___ other

Please provide a comment if you chose other _____

---

26) Do you prioritize viral-load testing in select patient populations and situations:

___ yes

___ no

If yes, please explain _____

---

27) What is the current availability and coverage of viral-load testing:
___ at specialized centres only

___ at all antiretroviral therapy facilities, either on-site or by referral

___ available at ___ % of antiretroviral therapy facilities

28) Do you have point-of-care viral load available in the country:

___ yes

___ no

If yes, please explain how you are using point-of-care viral load in your strategy _____

Service Delivery:

29) Which of the following service provision modalities are included in the antiretroviral therapy national policy (multiple choices possible):

a) for adults and adolescents

___ antiretroviral therapy provision in TB clinics by TB providers

___TB treatment in antiretroviral therapy settings by antiretroviral therapy providers

___ antiretroviral therapy provision in maternal, newborn and child health (MNCH) clinics by MNCH providers

___ antiretroviral therapy provision in settings providing opioid substitution therapy

___ antiretroviral therapy provision in primary health care (PHC) by PHC providers

___ community health workers providing antiretroviral therapy and patient support

___ antiretroviral therapy delivered in the community as part of a differentiated care model

___ cardiovascular disease screening and management by antiretroviral therapy providers

___ mental health screening and treatment by antiretroviral therapy providers

___other

If other, please specify _____

b) for children

___ antiretroviral therapy provision in TB clinics by TB providers

___TB treatment in antiretroviral therapy settings by antiretroviral therapy providers

___ antiretroviral therapy provision in MNCH clinics by MNCH providers

___ antiretroviral therapy provision in PHC by PHC providers

___ community health workers providing antiretroviral therapy and patient

support

___ antiretroviral therapy delivered in the community as part of a differentiated care model

___ cardiovascular disease screening and management by antiretroviral therapy providers

___ mental health screening and treatment by antiretroviral therapy providers

___ other

If other, please specify _____

---

30) Which of the following coinfection policies are in place (multiple choices possible):

a) for adults and adolescents

___ isoniazid preventive therapy (IPT) for people living with HIV (PLHIV)

___ intensified TB case finding in PLHIV

___ TB infection control in HIV health-care settings

___ co-trimoxazole prophylaxis

___ hepatitis B screening in antiretroviral therapy clinics

___ hepatitis C screening in antiretroviral therapy clinics

___ hepatitis B management in antiretroviral therapy clinics

___ hepatitis C management in antiretroviral therapy clinics

___ hepatitis B vaccination provided at antiretroviral therapy clinics

___ hepatitis C treatment provided in antiretroviral therapy clinics

___ other

If other, please specify _____

b) for children

___ isoniazid preventive therapy (IPT) for PLHIV

___ intensified TB case finding in PLHIV

___ TB infection control in paediatric HIV health-care settings

___ co-trimoxazole prophylaxis

___ hepatitis B screening in antiretroviral therapy clinics

___ hepatitis C screening in antiretroviral therapy clinics

___ hepatitis B management in antiretroviral therapy clinics

___ hepatitis C management in antiretroviral therapy clinics

___ hepatitis B vaccination provided in antiretroviral therapy clinics

___hepatitis C treatment provided in antiretroviral therapy clinics

___ sexual and reproductive health services (including STI and family planning) provided in antiretroviral therapy clinics

___ other

If other, please specify _____

31) Are there national policies and strategies on linking HTC and enrolment into care:

___ yes

___ no

If yes, do they include:

a) streamlined interventions (enhanced linkage, disclosure, tracing)

___yes

___no

b) peer support and patient navigation approaches

___ yes

___ no

c) quality improvement approaches

___ yes

___ no

d) CD4 at point of care

___ yes

___ no

If others, please specify _____

32) Are there national policies and strategies on retention in antiretroviral therapy:

___ yes

___ no

If yes, do they include:

a) community-based interventions

___ yes

___ no

If yes, please specify _____

b) adherence clubs and peer support

___ yes

___ no

If yes, please specify _____

c) extra care for high-risk persons

___ yes

___ no

If yes, please specify _____

If others, please specify _____

33) Are there national policies and strategies on adherence support:
___ yes
___ no
If yes, do they include:

a) peer counsellors

___ yes

___ no

b) text messages

___ yes

___ no

c) use of reminder devices

___ yes

___ no

d) cognitive behavioural therapy

___ yes

___ no

e) behavioural skills training/medication adherence training

___ yes

___ no

f) fixed-dose combinations and once-daily regimens

___ yes

___ no

If others, please specify _____

34) Is there a national policy and strategy on community delivery of antiretroviral therapy:
___ yes
___ no
If yes, specify what approaches are utilized to support community delivery of antiretroviral therapy _____

35) Is antiretroviral therapy provided in community settings (e.g. out of health-

facility settings) and for stable patients on antiretroviral therapy:

___ yes

___ no

If yes, is it implemented

___ nationally

___ regionally

___ pilot sites

36) Is there a policy on differentiated care and prioritization of patients with advanced HIV disease:

___ yes

___ no

37) Is there a national policy on frequency of clinic visit and ARV pick-up for stable patients on antiretroviral therapy:

___ yes

___ no

If yes, please specify

___ once a month clinic visit

___ every 3 months clinic visit

___ every 6 months clinic visit

___ every 12 months clinic visit

38) Is there a national policy on frequency of ARV pick-up for stable patients on antiretroviral therapy:

___ yes

___ no

If yes, please specify

___ once a month ARV pick-up

___ every 3 months ARV pick-up

___ every 6 months ARV pick-up

___ every 12 months ARV pick-up

Prevention of mother-to-child transmission

1) Do you have a national plan for the elimination of mother-to-child transmission (MTCT) of HIV:

___ yes

___ no

If yes, specify the MTCT transmission rate target(s) ___ and year ___

If yes, specify the elimination target(s) (e.g. number of cases/pop) ___ and year ___

2) Do you have a national plan for the elimination of MTCT of syphilis:

___ yes, integrated with HIV or other elimination initiative(s)

___ yes, standalone (not integrated with HIV or other elimination

initiatives)

___ no national plan

---

3) Is there a national policy for routine screening of pregnant women for syphilis in your country:

___ yes

___ no

If yes, what tests are used

a) ___ laboratory-based non-treponemal (e.g. RPR/VDRL)

___ laboratory-based treponemal (e.g. TPPA, TPHA)

___ rapid syphilis treponemal tests (e.g. Bioline, Determine, Chembio)

___ dual HIV/syphilis rapid tests

---

4) What is the current nationally recommended PMTCT option, as per MOH guidelines or directive:

___ Option A

___ Option B, if yes, since ___

___ TREAT ALL (Option B+), if yes, since ___

a) what is the practice in applying a TREAT ALL policy for HIV-positive pregnant and breastfeeding women

___ not done in practice

___ done in a small number of MCH sites

___ done in a large number of MCH sites

___ done countrywide

___ other

---

5) If currently implementing Option A or B, is transition to TREAT ALL planned:

___ yes

___ no

If yes, in what year ___

---

6) Are you conducting longitudinal cohort monitoring for pregnant women and infants:

___ yes

___ no

If yes, at

a) national level

___ yes

___ no

b) subnational

___ yes

___ no

c) select clinics (pilot or surveillance)

___ yes

___ no

If yes, please specify _____

7) What is the current nationally recommended first-line antiretroviral therapy regimen for pregnant and breastfeeding women with HIV:

___ TDF/3TC(FTC)/EFV

___ other

If other, please specify _____

8) What is the current nationally recommended PMTCT regimen for exposed infants:

Please specify the infant prophylaxis regimen _____

and the duration ___

9) Is there a policy for dual prophylaxis exposure in high-risk HIV-exposed infants (HEI):

___ yes

___ no

If yes, what is the recommended regimen
___ NVP x 12 weeks
___ AZT/NVP x 12 weeks
___ AZT/NVP x 6 weeks with NVP for additional 6 weeks
___ AZT/NVP x 6 weeks

10) How is a high-risk exposure defined:

Please specify _____

11) Is nucleic acid testing for HIV (early infant diagnosis, DNA-PCR) at birth being introduced for HIV-exposed infants:

___ yes

___ no

12) Is point-of-care nucleic acid testing for early infant diagnosis available in your country:

___ yes

___ no

13) Are you conducting nine-month HIV antibody testing in HIV exposed infants:

___ yes

___ no

14) Are you conducting a final diagnosis HIV antibody test at 18 months or three months post-cessation of breastfeeding:

___ yes

___ no

15) Is there a national recommendation on infant feeding for HIV-exposed infants:

___ yes, breastfeeding

___ yes, replacement feeding

___ yes, both recommended, left to individual choice or different settings

___ no

16) If breastfeeding is recommended for HIV-positive women and exposed infants, is the duration specified:

___ yes

___ no

If yes, please specify the duration in months ___

Sexually transmitted infections (STI)

1) Are there national STI treatment guidelines or recommendations:

___ yes

___ no

If yes, year updated ___

2) Does your country have a national strategy or action plan for the prevention and control of STI:

___ yes

___ no

3) Is gonococcal antimicrobial-resistance monitoring conducted in your country:

___ yes, annually

___ yes, less than annually

___ no

4) Does the national definition for congenital syphilis include stillbirths:

___ yes

___ no

Key populations

1) Which of the following key populations or vulnerable groups are explicitly addressed in the national HIV policy or national plans (multiple choices possible):

___ 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

2) Do you have population-size estimates for the following populations (multiple choices possible):

___ 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

3) People who inject drugs. Which of the following components of the comprehensive package of HIV prevention, diagnosis, treatment and care interventions for people who inject drugs are implemented in your country:

a) needle and syringe programmes (NSP)

___ yes

___ no

b)i. opioid substitution therapy (OST)

___ yes

___ no

b)ii. other drug dependence treatment

___ yes

___ no

c) community provision of naloxone

___ yes

___ no

d) HIV testing services

___ yes

___ no

e) antiretroviral therapy

___ yes

___ no

f) sexually transmitted infection (STI) prevention and treatment

___ yes

___ no

g) comprehensive condom programming

___ yes

___ no

h) targeted information, education and communication (IEC)

___ yes

___ no

i) viral hepatitis prevention, diagnosis, treatment and vaccination

___ yes

___ no

j) tuberculosis prevention, diagnosis and treatment

___ yes

___ no

h) if other, please specify _____

---

4) People in prisons and other closed settings. Which of the following components of the comprehensive package of HIV prevention, diagnosis, treatment and care interventions for key populations are implemented in your country:

a) comprehensive condom and lubricant programming

___ yes

___ no

b) harm-reduction interventions for substance use

NSP ___ yes, ___ no

OST ___ yes, ___ no

naloxone ___ yes, ___ no

c) behavioural interventions

___ yes

___ no

d) HIV testing services

___ yes

___ no

e) HIV treatment and care

___ yes

___ no

f) coinfection and comorbidity (viral hepatitis, tuberculosis, mental health) prevention and management

___ yes

___ no

g) sexual and reproductive health interventions

___ yes

___ no

h) if other, please specify _____

5) Sex workers. Which of the following components of the comprehensive package of HIV prevention, diagnosis, treatment and care interventions for key populations are implemented in your country:

 a) comprehensive condom and lubricant programming

___ yes

___ no

b) harm reduction interventions for substance use

NSP ___ yes, ___ no

OST ___ yes, ___ no

naloxone ___ yes, ___ no

c) behavioural interventions

___ yes

___ no

d) HIV testing services

___ yes

___ no

e) HIV treatment and care

___ yes

___ no

f) coinfection and comorbidity (viral hepatitis, tuberculosis, mental health) prevention and management

___ yes

___ no

g)i. symptomatic STI treatment

___ yes

___ no

g)ii. screening for asymptomatic STI

___ yes

___ no

g)iii. periodic presumptive STI treatment

___ yes

___ no

h) if other, please specify

---

6) Men who have sex with men. Which of the following components of the comprehensive package of HIV prevention, diagnosis, treatment and care interventions for key populations are implemented in your country:

 a) comprehensive condom and lubricant programming

___ yes

___ no

b) harm reduction interventions for substance use

NSP ___ yes, ___ no

OST ___yes, ___no

naloxone ___yes, ___no

 c) behavioural interventions

___ yes

___ no

d) HIV testing services

___ yes

___ no

e) HIV treatment and care

___ yes

___ no

f) pre-exposure prophylaxis (PrEP)

___ yes

___ no

g) coinfection and comorbidity (viral hepatitis, tuberculosis, mental health) prevention and management

___ yes

___ no

h)i. symptomatic STI treatment

___ yes

___ no

h)ii. screening for asymptomatic STI

___ yes

___ no

i) if other, please specify

7) Transgender people. Which of the following components of the comprehensive package of HIV prevention, diagnosis, treatment and care interventions for key populations are implemented in your country:

   a) comprehensive condom and lubricant programming

___ yes

___ no

b) harm reduction interventions for substance use

   NSP ___ yes, ___ no

   OST ___ yes, ___ no

   naloxone ___ yes, ___ no

c) behavioural interventions

___ yes

___ no

d) HIV testing services

___ yes

___ no

e) HIV treatment and care

___ yes

___ no

f) coinfection and comorbidity (viral hepatitis, tuberculosis, mental health) prevention and management

___ yes

___ no

g)i. symptomatic STI treatment

___ yes

___ no

g)ii. screening for asymptomatic STI

___ yes

___ no

h) if other, please specify

Male circumcision

(only for 14 countries)

1) What is the target number for voluntary medical male circumcision, target age and current time frame:

target number of voluntary medical male circumcisions _____

target age ____

target year ____

---

2) What is the status of operational planning and monitoring (multiple choices possible):

a) operational plan for 2016 exists

___ yes

___ no

b) annual male circumcision (MC) programme performance review conducted

___ yes

___ no

If yes, please specify in what year _____

c) MC HIV prevention programme is linked/has working plan with adolescent health

___ yes

___ no

d) MC technical working group/committee to review adverse events is established

___ yes

___ no

3) What medical male circumcision methods are recommended/approved by the national programme:

a) conventional surgical methods (dorsal slit, forceps guided, sleeve resection)

___ yes

___ no

If yes, please specify any age disaggregations _____

b) prequalified device method approved for use

___ yes

___ no

If yes, please specify _____

Pre-exposure prophylaxis (PrEP) and post-exposure Prophylaxis PEP

1) Is PreP provided in the country:

___ yes, as a national policy

___ yes, as a pilot project

___ no

If yes, please specify for who _____

2) Is PEP provided in the country:

___ yes

___ no

If yes, specify for who _____

3) What drugs are recommended for:

a) adults and adolescents, please specify _____

b) children, please specify _____

4) Number of prescriptions (for the reporting year):

a) adults/adolescents ___

b) children ___

5) Reason(s) for prescription (e.g. occupational, non-occupational etc):
Please specify _____

Surveillance

1) Does the country carry out sentinel surveillance in the following special populations:

a) antenatal clinic attendees

__ yes

___ no

If yes, every ___ year(s), at number of sites ___ and last survey in year ___

b)i. sex workers

___ yes

___ no

If yes, every ___ year(s), at number of sites ___ and last survey in year ___

b)ii. people who inject drugs

___ yes

___ no

If yes, every ___ year(s), at number of sites ___ and last survey in year ___

b)iii. men who have sex with men

___ yes

___ no

If yes, every ___ years, at number of sites ___ and last survey in year ___

b)iv. transgender

___ yes

___ no

If yes, every ___ year(s), at number of sites ___ and last survey in year ___

b)v. in prisons and other closed settings

___ yes

___ no

If yes, every ___ year(s), at number of sites ___ and last survey in year ___

c) other specific populations, please specify _____

___ yes

___ no

If yes, every ___ year(s), at number of sites___ and last survey in year ___

Monitoring and evaluation

1) What is the current status of planning for monitoring and evaluation (M&E) of the HIV and AIDS health-sector response:

a) national M&E plan exists

___ yes

___ no

If yes, last updated in year ___

b) review of the M&E system was conducted

___ yes

___ no

If yes, year of last review ___ and please specify _____

c) review of the M&E system is planned

___ yes

___ no

If yes, in year ___ and please specify _____

HIV drug resistance

1) In the past two years, has the country carried out HIV drug resistance (HIVDR) surveillance according to the following WHO protocols:

a) pretreatment drug resistance surveys

___ yes

___ no

If yes, please specify year it was last started ___, and number of clinics surveyed ___

b) acquired drug resistance surveys among adults

___ yes

___ no

If yes, please specify year it was last started ___, and number of clinics surveyed ___

c) acquired drug resistance surveys among children

___ yes

___ no

If yes, please specify year it was last started ___,
and number of clinics surveyed ___

d) infants (<18 months) drug resistance surveys using early infant diagnosis

___ yes

___ no

If yes, please specify year it was last started ___,
and number of clinics surveyed ___

e) survey of clinic performance using early warning indicators for HIV drug resistance

___ yes

___ no

If yes, please specify year it was last started ___,
and number of clinics surveyed ___

Toxicity monitoring surveillance

1) Excluding passive pharmacovigilance approaches, is there an ongoing systematic effort to monitor the toxicity of ARVs in the country:

___yes

___ no

2) If yes, what approaches are used (multiple choices possible):
___ reporting of toxicities by sentinel sites
___ active surveillance within cohorts established to assess a range of treatment outcomes
___ active surveillance within cohorts established solely to monitor toxicity
___ pregnancy registry
___ birth defect surveillance
___ monitoring of mother-infant pairs during breastfeeding

Strategic planning and review

If applicable, please provide dates for the following:

1) National and sub-national epidemiological analysis:

a) last epidemiological analysis conducted ___

b) next epidemiological analysis planned ___

2) Programmatic and financial gap analysis:

a) last programmatic and financial gap analysis conducted ___

b) next programmatic and financial gap analysis planned ___

3) What is the status of national HIV and AIDS programme development that includes HIV in the health sector:

a) HIV national (health sector) strategic plan is in place, valid from year ___ to year ___

b) HIV (health sector) programme review was carried out in year ___,

please specify _____

c) next HIV (health sector) programme review is planned for year ___

4) Does the national HIV (health sector) strategy address the following:

a) achieving universal access to antiretroviral therapy

___ yes

___ no

b) collaboration between HIV and other services, including reproductive health

___ yes

___ no

c) strengthening health systems

___ yes

___ no

d) reducing inequities

___ yes

___ no

Reproductive health and research

1) Do you have service delivery points that provide the following appropriate medical and psychological care and support for women and men who have been raped and experienced incest, in accordance with the recommendations of WHO's 2013 guidelines, *Responding to intimate partner violence and sexual violence against women*:

a) first-line support or what is known as psychological first aid

___ yes

___ no

b) emergency contraception to women who seek services within five days

___ yes

___ no

c) safe abortion if a woman is pregnant as a result of rape, in accordance with national law

___ yes

___ no

d) STI and HIV post-exposure prophylaxis (within 72 hours of sexual assault) as needed

___ yes

___ no

APPENDICES

Appendix 1. Country Progress Report template

Appendix 2. National Funding Matrix

Appendix 3. Sample checklist for Country Progress Report

Appendix 4. Selected bibliography

Appendix 5. Guidance on monitoring progress towards eliminating gender inequalities

Appendix 1. Country Progress Report template

The following provides the full template of the narrative part of the Country Progress Report and detailed instructions for completing the different sections. It is highly recommended that indicator data are submitted through the recommended online reporting tool.

COUNTRY PROGRESS REPORT

[Country Name]

Submission date: fill in the date of the formal submission of the country report to UNAIDS.

Table of Contents

I.   Status at a glance

This section should provide the reader with a brief summary of:

a) the inclusiveness of the stakeholders in the report writing process

b) the status of the epidemic

c) the policy and programmatic response

d) Indicator data in an overview table.

II.   Overview of the AIDS epidemic

This section should cover the detailed status of the HIV prevalence in the country in 2015 based on sentinel surveillance, national surveys and specific studies. The source of information for all data provided should be included.

III.   National response to the AIDS epidemic

This section should reflect the change made in national commitment and programme implementation broken down by prevention, care, treatment and support; knowledge and behaviour change; and impact alleviation during 2015.

Countries should specifically address the links between the existing policy environment, implementation of HIV programmes, verifiable behaviour change and HIV prevalence as supported by the indicator data. Where relevant, these data should also be presented and analysed by sex and age groups. Countries should also use data from previous rounds of the National Commitments and Policy Instrument (NCPI) to describe progress made in policy/strategy development and implementation. Countries are encouraged to report on additional data to support their analysis and interpretation of the reported data.

IV.   Best practices

This section should cover detailed examples of what is considered best practice in-country in one or more of the key areas, such as: political leadership; a supportive policy environment; scale-up of effective prevention programmes; scale-up of care, treatment and/or support programmes; monitoring and evaluation; capacity-building; and infrastructure development. The purpose of this section is to share lessons learned with other countries.

V.   Major challenges and remedial actions

This section should focus on:

a)   progress made on key challenges reported in the 2013 Country Progress Report;

b)   challenges faced throughout the reporting period (–2015) that hindered the national response and the progress towards achieving targets;

(c)   remedial action plans to achieve agreed targets.

VI.   Support from the country's development partners (if applicable)

This section should focus on key support received from development partners, and further actions these partners need to take to ensure targets are achieved.

VII.   Monitoring and evaluation environment

This section should provide:

a) an overview of the monitoring and evaluation (M&E) system;

b) challenges faced in implementing a comprehensive M&E system;

c) remedial actions planned to overcome the challenges

d) highlight, where relevant, the need for M&E technical assistance and capacity-building.

ANNEXES

ANNEX 1: Consultation/preparation process for the country report on monitoring progress towards implementing the Declaration of Commitment on HIV and AIDS

Submit your complete Global AIDS Progress Report before 31 March 2015 using the recommended reporting tool.

Please direct all enquiries related to Global AIDS Reporting to the UNAIDS Secretariat at: **AIDSreporting@unaids.org**,

Appendix 2. National Funding Matrix

To report on Indicator 6.1 countries are required to complete and submit the National Funding Matrix with the best estimates, reflecting HIV expenditure over a defined period of time. The National Funding Matrix consists of the cover sheet and financial tables for each specific period of the five subsequent calendar or fiscal cycles.

The National Funding Matrix is an Excel file and can be downloaded from the GARPR Online Reporting Tool web page at: http://AIDSreportingtool.unaids.org.

Cover sheet

In this section you will find instructions on how to complete the cover sheet with provided snapshots. Please note that providing correct specifications of the data on the cover sheet reduces confusion around the estimates. We recommend reviewing this section thoroughly.

On the cover sheet countries are required to provide:

- **name of the country**, which can be selected via the drop-down menu;
- **date of data entry** in the following format: day/month/year;
- **institution** responsible for completing the indicator forms, along with the name and **contact details** of an expert responsible for submission and follow-up on the indicator;

- **reporting cycle** for each reported calendar or fiscal year. The drop-down menu allows a calendar or a fiscal year for each reporting cycle to be selected;
- **start and end date for each reporting cycle** in the following format: from: mm/yyyy to: mm/yyyy;

- **name of local currency**;
- **currency of each reporting cycle** via the drop-down menu, which allows local currency or US dollars to be selected;
- monetary units the **amounts are expressed in**; the drop-down menu allows units, thousand or million, to be selected for each reporting cycle. An example is provided on the cover sheet;
- reporting period **average exchange rate**; for example, local currency to US$ 1 for each reporting cycle;

5) Name of the local currency: [_____]

6) Currency of each reporting cycle: ▸
2015 [_____] (Local Currency or US Dollars)
2014 [_____]
2013 [_____]
2012 [_____]
2011 [_____]

7) Amounts expressed in: ▸
2015 [_____] (Units (x 1), Thousands (x 1,000) or Millions (x 1,000,000))
2014 [_____] Example: 1 million USD is spent of ART. Indicated in the matrix:
2013 [_____] (i) $1,000,000 in the matrix -- must appear "units" on the cover sheet
2012 [_____] (ii) $1,000 in the matrix -- indicate thousands on the cover sheet
2011 [_____] (iii) $1 in the matrix -- indicate million on the cover sheet

8) Average exchange rate with US dollar: ▸
2015 [_____] (Local Currency per 1 US Dollar)
2014 [_____]
2013 [_____]
2012 [_____]
2011 [_____]

- **data measurement methodology/tool** used to report on Indicator 6.1. The drop-down menu allows National AIDS Spending Assessment (NASA), System of Health Accounts (SHA) or other to be selected, along with a text box to provide an explicit reference to the way data were captured for each reporting cycle;
- **unaccounted expenditure** for each reporting cycle. Provided text boxes allow activities that were not captured in the National Funding Matrix to be listed, along with the reasons and limitations;
- amounts of **general budget support** provided within each reporting cycle from an international source, and reported under **public sources** of financing. If general budget support was provided and included under the central/national and/or subnational categories, for each reporting cycle please indicate the donor, the amount and the type of currency.

9) Methodology used: ▸
2015 [_____] [_____] (If "Other", please specify)
2014 [_____] [_____]
2013 [_____] [_____]
2012 [_____] [_____]
2011 [_____] [_____]

10) Unaccounted expenditures:
[_____] (Please specify ("Yes" or "No") if there were expenditure on some specific programmes not captured)

[_____] (If there were unaccounted expenditures, please specify which ones, and why it was not possible to capture them)

11) Budget Support: Is general budget support from an international source reported under Public Sources of financing (e.g. a bilateral donor to Ministry of Finance)? ▸

2015 [_____] (Please specify "Yes" or "No". If the answer is "Yes", please indicate funding source of the direct transfer, ▾rency, and amount spent specifically on HIV/AIDS) (Description)

2014 [_____]

2013 [_____]

2012 [_____]

2011 [_____]

Structure of the National Funding Matrix

The reporting framework of HIV expenditure for each fiscal cycle is organized around a two-axis system for recording, those being HIV programmes and financing sources. They address two basic questions:

- what types of programmes and services were implemented?
- which financing sources paid for these programmes and services?

HIV programmes and funding sources

As described in the chapter on Indicator 6.1, the National Funding Matrix is structured around 10 targets of the 2011 United Nations Political Declaration on HIV and AIDS. The list of HIV spending categories and funding sources of the National Funding Matrix is provided at the end of this section in separate text boxes.

The correspondence/crosswalk between the codes of the HIV programmes of the current National Funding Matrix and the codes of the previous version of the National Funding Matrix (used before GARPR 2015) is provided in the column headed **Programme codes of the previous National Funding Matrix**. This crosswalk is also applicable to the codes of the second digit-level categories of NASA AIDS Spending Categories (ASCs), which were identical to the codes of the previous version of the matrix.

For this reporting cycle, two HIV programme categories have been introduced for opportunistic infections prevention, diagnosis and treatment: i) diagnosis and treatment of AIDS-related cancers; and ii) diagnosis, treatment and prevention of AIDS-related coinfections (excluding tuberculosis and cancers).

If the column titled Programme codes of the previous National Funding Matrix is blank and does not provide a corresponding code, it indicates the category is new or represents a more detailed disaggregation of HIV programmes. These categories may require more granular information to be collected. They were grouped in broader categories in NASA and in the previous National Funding Matrix.

If countries have specific essential programmes that seem outside the suggested system of HIV and AIDS programmes, these may be listed in the **Addendum items/noncore global/other** category, which appears at the end of the table for each financial cycle. In this instance, we request a short description of these additional programmes underneath the table, indicating expenditures within each reporting cycle.

Countries are encouraged to include as much detail as possible in the National Funding Matrix, including a breakdown by all applicable AIDS spending and funding source categories and subcategories. Any categories or subcategories not applicable in a country should be clearly identified as such and left blank; explanations for categories or subcategories that do not include estimates for any other reason – unaccounted expenditure, for example – should be described on the cover sheet.

Expenditure should be counted and attributed to a single programme category or subcategory only to avoid double counting. All spending categories are AIDS-specific and should include only HIV- and AIDS-related expenditure. This applies to enablers and synergies, which should be only those directly attributable to the AIDS response.

Financing under public sources should include only revenue generated by the government and allocated to the AIDS response. It should not include development assistance from international sources. If the total amount of budget support can be identified, it should appear under the proper international sources subcategory (for example, the United States President's Emergency Plan for AIDS Relief, or PEPFAR) or other bilaterals). If any budget support is included in the public sources subcategory, please indicate this on the cover sheet.

Financing provided by individual bilateral donors does not need to be disaggregated by donor agency in the funding matrix, with the exception of PEPFAR.

Financing provided by a development bank should be designated either as reimbursable (loans, for example), which appears under public sources, or nonreimbursable (grants, for example), which appears under international sources. Countries that receive loans and grants from development banks should be careful to allocate these funds to the correct categories. Financing provided by international foundations should be listed in the other international aid subcategory.

Providing information on financing from private sources is optional. However, countries are encouraged to collect and report such data in order to provide a more complete picture of the funds available for the AIDS response.

The matrix provides automated subtotals and totals where necessary. The formulas for these cells are protected and provide the aggregated indicators only when the data for the components are entered accordingly.

List of HIV programmes of the National Funding Matrix

Target 1. Reduce sexual transmission of HIV by 50% by 2015
    1. Prevention of sexual transmission of HIV
    1.1 Behaviour change programmes
    1.2 Condom promotion
    1.3 Voluntary medical male circumcision
    1.4 Post-exposure prophylaxis
    1.5 Programmes for men who have sex with men
    1.6 Programmes for sex workers and their clients
    1.7 Programmes for transgender people
    1.8 Pre-exposure prophylaxis for serodiscordant couples
    1.9 Programmes for children and adolescents
    1.10 Community mobilization
    1.11 Cash transfers to girls

Target 2. Reduce transmission of HIV among people who inject drugs by 50% by 2015
    2. HIV prevention for people who inject drugs
    2.1 Needle and syringe exchange and other prevention programmes for people who inject drugs
    2.2 Substitution therapy

Target 3. Eliminate new HIV infections among children by 2015 and substantially reduce AIDS-related maternal deaths
    3. Prevention of mother-to-child transmission
    3.1 ARVs for PMTCT
    3.2 Non ARVs-related component of PMTCT

Target 4. Reach 15 million people living with HIV with life-saving antiretroviral treatment by 2015
    4. Universal access to treatment
    4.1 HIV testing
    4.2 Pre-antiretroviral treatment care and palliative care
    4.3 Adult antiretroviral treatment
    4.4 Paediatric antiretroviral treatment
    4.4 Support and retention
    4.5 Diagnosis and treatment of AIDS-related cancers
    4.6 Diagnosis, treatment and prevention of AIDS-related coinfections (excluding TB and cancers)

Target 5. Reduce tuberculosis deaths in people living with HIV by 50% by 2015
    5. TB
    5.1 TB screening and diagnostics for PLHIV
    5.2 TB treatment for PLHIV

Target 6. Close the global AIDS resource gap by 2015 and reach annual global investment of US$ 22–24 billion in low- and middle-income countries
    6. Governance and sustainability
    6.1 Strategic information
    6.2 Planning and coordination
    6.3 Procurement and logistics
    6.4 Health systems strengthening

Target 7. Eliminate gender inequalities and gender-based abuse and violence and increase the capacity of women and girls to protect themselves from HIV

Target 8. Eliminate stigma and discrimination against people living with and affected by HIV through promotion of laws and policies that ensure the full realization of all human rights and fundamental freedoms

Target 9. Eliminate HIV-related restrictions on entry, stay and residence
    7. Critical enablers
    7.1 Policy dialogue
    7.2 Stigma reduction
    7.3 Law reform and enforcement
    7.4 AIDS-specific institutional development/community mobilization

Target 10. Eliminate parallel systems for HIV-related services to strengthen integration of the AIDS response in global health and development efforts, as well as to strengthen social protection systems
    8. Synergies with development sectors
    8.1 Social protection

List of funding sources of the National Funding Matrix

1. Public Sources
    1.1 Central/national
    1.2 Subnational
    1.3 Development banks reimbursable (e.g. loans)
    1.4 Social security
2. Private sources
    2.1 Private insurance
    2.2 Households
    2.3 For-profit institutions/corporations
    2.4 Non-profit-making institutions
3. International sources
    3.1 Bilateral
        3.1.1 PEPFAR
        3.1.2 Other bilateral
    3.2 Multilateral
        3.2.1 Global Fund
        3.2.2 Development banks non-reimbursable (e.g. grants)
        3.2.3 All other multilateral
    3.3 All other international

Appendix 3.　　Sample checklist for Country Progress Report

- Reporting process established, including timelines and milestones, and roles of NAC, government agencies, UN agencies, civil society and other relevant partners.
- Funding secured for all aspects of the reporting process.
- Data collection, vetting and analysis process established, including:
  — identification of relevant tools (including Spectrum) and sources for data collection for each indicator;
  — timeline for data collection in line with other data collection efforts, including those via funding agencies such as the Global Fund, PEPFAR and UN agencies;
  — reporting timeline for facility-based indicators for national-level aggregation;
  — data vetting and triangulation workshops with the aim of reaching consensus on the correct value for each indicator.
- Protocols established for data processing and management, including:
  — basic data cleaning and validation
  — one database for analysis and reporting purposes.
- Relevant data analysed in coordination with partner organizations from government, civil society and the international community.
- Consensus reached with stakeholders, including government agencies and civil society, on the final report to be submitted.
- Data entered and narrative report attached to the online reporting tool by 31 March 2015.
- Data queries answered (sent from AIDSreporting@unaids.org or directly in the online reporting tool).

Appendix 4. Selected bibliography

12 components M&E system assessment - guidelines to support preparation, implementation and follow up activities. Geneva, UNAIDS, 2010

12 components M&E system strengthening tool. Geneva, UNAIDS, 2010

Glossary of M&E terminology. Geneva, UNAIDS, 2011

Guidance HIV M&E capacity-building. Geneva, UNAIDS, 2010

Indicator standards and assessment tool. Geneva, UNAIDS, 2010

Monitoring and evaluation fundamentals: a national evaluation agenda for HIV. Geneva, UNAIDS, 2010

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Monitoring and evaluation fundamentals: an introduction to indicators. Geneva, UNAIDS, 2010

Monitoring and evaluation fundamentals: basic terminology and frameworks for monitoring and evaluation. Geneva, UNAIDS, 2010

Organizing framework for a functional national HIV monitoring and evaluation system. Geneva, UNAIDS, 2008

UNAIDS report on the global AIDS epidemic. Geneva, UNAIDS, 2014

The gap report. Geneva, UNAIDS, 2014

Securing the future today – synthesis of strategic information on HIV and young people. Geneva, UNAIDS, 2011

Strategic guidance for the evaluation of HIV prevention programmes. Geneva, UNAIDS, 2010

Consolidated strategic information guidelines for HIV in the health sector. Geneva, World Health Organization, 2014

Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection. Geneva, World Health Organization, 2013

The state of the world's children report. New York, UNICEF, 2014

Country-led monitoring and evaluation systems. New York, UNICEF, 2009.