2015

Global Reference List of

100 Core Health Indicators

World Health Organization

2015

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World Health Organization

WHO/HIS/HSI/2015.3

Design and layout by Reto Schürch
Printed in Luxembourg

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Acknowledgements

This document is the outcome of technical consultations of the Interagency Working Group on Indicators and Reporting Burden, established by global health agency leaders in September 2013 and chaired by the Director-General of the World Health Organization (WHO).

The document was produced by the WHO Department of Health Statistics and Information Systems (HSI), in close collaboration with WHO technical programmes, further to a series of technical consultations and peer review by technical experts from countries and focal points from international and multilateral partners and technical reference groups: Bill & Melinda Gates Foundation; Department of Foreign Affairs, Trade and Development (DFATD), Canada; European Commission; Ministry of Foreign Affairs, France; GAVI Alliance; Federal Ministry for Economic Cooperation and Development, Germany; The Global Fund to Fight AIDS, Tuberculosis and Malaria; International Cooperation Agency, Japan; Joint United Nations Programme on HIV/AIDS (UNAIDS); Norwegian Agency for Development Cooperation (Norad); Rockefeller Foundation; Ministry of Foreign Affairs, Sweden; United States Agency for International Development (USAID); United States Centers for Disease Control and Prevention (CDC); United States Department of Health and Human Services (HHS); United Nations Population Fund (UNFPA); United Nations International Children's Emergency Fund (UNICEF); Department for International Development (DFID), United Kingdom; The World Bank Group.

Abbreviations

AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
ARV	Antiretroviral
BEmOC	Basic emergency obstetric care
BMI	Body mass index
CEmOC	Comprehensive emergency obstetric care
DHS	Demographic and Health Surveys
FAOSTAT	Food and Agriculture Organization of the United Nations' statistical database
HIV	Human immunodeficiency virus
HPV	Human papillomavirus
HSS	Health system strengthening
ICD	International Classification of Diseases
IHP	International Health Partnership
IHR	International Health Regulations
IPTp	Intermittent preventive therapy for malaria during pregnancy
IRS	Indoor residual spraying
ITN	Insecticide treated net
JMP	WHO/UNICEF Joint Monitoring Programme on Water Supply and Sanitation
MDG	Millennium Development Goals
MDR-TB	Multidrug-resistant tuberculosis
MICS	Multiple Indicator Cluster Survey
MSH	Management Sciences for Health
NCD	Noncommunicable disease
TB	Tuberculosis
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations International Children's Emergency Fund
UN-IGME	United Nations Inter-agency Group for Child Mortality Estimation
USAID	United States Agency for International Development
VIA	Visual inspection with acetic acid/vinegar
WHO	World Health Organization

Background

At the informal meeting of global health agency leaders in New York, United States, on 24 September 2013, it was decided to establish a group of senior focal points from the participating global health agencies to review critically the respective agency requirements for reporting from countries with the aim of reducing the reporting burden for countries. An interagency Working Group on Indicators and Reporting Burden, consisting of 19 agency representatives and chaired by the Director-General of WHO, was established and a rapid assessment of the burden of indicators and reporting requirements for health monitoring was conducted. The assessment included an analysis of the situation from both global and country perspectives. Key findings and recommendations were published in *A rapid assessment of the burden of indicators and reporting requirements for health monitoring.*[1]

The report revealed how global investments in disease- and programme-specific monitoring and evaluation programmes by different agencies have contributed to very large numbers of indicators, diverse indicator definitions and reporting frequencies, fragmented data collection, and uncoordinated efforts to strengthen national institutional capacity, resulting in an unnecessary reporting burden on countries and inefficiencies in strengthening country health information systems.

One of the priority actions identified by the interagency working group was that global agencies should bring greater alignment and efficiency to their investments by rationalizing existing reporting demands in order to reduce reporting requirements and ease the reporting burden on countries. To achieve this end, WHO collaborated with international and multilateral partners and countries to develop and agree on a global reference list of 100 core health indicators that the global community would prioritize for the purposes of monitoring national and global progress, maintaining programme support and advocating for resources and funding. The list was developed from existing lists that had been recommended in the context of international governing bodies of international organizations and forums, global and regional health initiatives, technical reference groups and programmes.

Scope

The Global Reference List of 100 Core Health Indicators for results monitoring, referred to herafter as *"The Global Reference List,"* is a standard set of 100 core indicators prioritized by the global community to provide concise information on the health situation and trends, including responses at national and global levels. *The Global Reference List* contains indicators of relevance to country, regional and global reporting across the spectrum of global health priorities relating to the post-2015 health goals of the Sustainable Development Goals.[2] These include the Millennium Development Goals (MDGs) agenda, new and emerging priorities such as noncommunicable diseases, universal health coverage and other issues in the post-2015 development agenda.

The Global Reference List is not an exclusive list of indicators and it is not intended to limit information collection only to that which meets management and programmatic needs. Rather, the list is intended as a general reference and guide for

[1] A rapid assessment of the burden of indicators and reporting requirements for health monitoring. Prepared for the multi-agency working group on indicators and reporting requirements by WHO's Department of Health Statistics and Information Systems. Geneva: World Health Organization; 2014.

[2] Sustainable Development Goals. https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals.

standard indicators and definitions that countries can use for monitoring in accordance with their own health priorities and capacity.

Purpose

The aim of *the Global Reference List* is to contribute to the reduction of reporting requirements and to promote greater alignment with, and investment in, one country-led health sector platform for results and accountability that forms the basis for global reporting.[3] *The Global Reference List* aims at rationalization and encourages stakeholders to consider only the most important and critical indicators.

The Global Reference List is a means to an end. The main objectives are:

- to guide monitoring of health results nationally and globally;
- to reduce excessive and duplicative reporting requirements;
- to enhance efficiency of data collection investments in countries;
- to enhance availability and quality of data on results; and
- to improve transparency and accountability.

The outcome statement of the meeting of global health agency leaders on 24 September 2015, presented hereafter, puts The Global Reference List in a broader context.

[3] Monitoring, evaluation and review of national health strategies. A country-led platform for information and accountability. Geneva: World Health Organization; 2011.

Outcome statement of the Working Group on Indicators and Reporting Burden, September 2014

Preamble

a. This statement is the result of the work of a multi-agency working group, established by Global Health Agency Leaders in September 2013 and chaired by the DG-WHO, aiming to reduce the indicators reporting burden for countries. On 27–28 August 2014 the working group, country and civil society representatives met under the auspices of IHP+ in Geneva to discuss and produce a statement for consideration by the Global Health Agency Leaders.

b. As described in the IHP+ Monitoring & Evaluation (M&E) framework, strong country M&E systems are characterized by a comprehensive national M&E plan; institutional capacity among state and non-state actors; an M&E framework that specifies core indicators; data sources, analysis and use; and inclusive transparent country mechanisms for review and action. A tested, relevant, balanced and parsimonious set of core indicators is one critical element that contributes to the overall strengthening of country M&E systems and accountability.

Global Reference List of 100 Core Health Indicators

a. *The Global Reference List of 100 Core Health Indicators* for results monitoring is a standard set of 100 indicators prioritized by the global community to provide concise information of the health situation and trends, including responses at national and global levels. *The Global Reference List* reflects indicators of relevance for country, regional and global reporting across the full spectrum of global health priorities relating to the MDG agenda, as well as to new and emerging priorities such as NCDs, universal health coverage and other key issues in the post-2015 development agenda. This list will be a "living document", updated periodically as technologies develop, new priorities emerge and interventions change.

b. *The Global Reference List* will contribute to reduced reporting requirements and to greater alignment and smarter investment in country data and M&E systems. The list does not focus on those indicators that are required for more detailed programme management at national and sub-national levels or for financial tracking of specific grants and projects. It is recommended, however, that investments in monitoring of specific project management indicators be made in a way that strengthens the country M&E systems, and minimizes the use of parallel reporting systems that are not interoperable with the national health information system. *The Global Reference List* and the behaviours described below are drafted in the spirit of the IHP+ and should be understood within that framework.

c. The purpose of *The Global Reference List* is to:

- reduce excessive and duplicative reporting requirements;
- serve as a general reference and guidance for standard indicators and definitions;
- enhance efficiency of data collection investments in countries;
- enhance availability and quality of data on results; and
- improve transparency and accountability.

d. *The Global Reference List* should be used as normative guidance, rather than as a required or exclusive list, to:

- guide monitoring of health results nationally and globally;
- guide the selection of priority indicators;
- provide a basis for the rationalization and alignment of reporting requirements on results by global partners;
- contribute to higher quality global data bases of health results;
- facilitate more harmonized investments in country data systems and analytical capacity;
- reflect evolving public health priorities and as such be updated and maintained in a sustainable way.

Global partners should aspire to the following behaviours

a. Use of core indicators for rationalizing reporting requirements: focus results reporting requirements on *The Global Reference List,* including disaggregation (by gender, age, socioeconomic status, place of residence), and the related M&E system strengthening investments.

b. Align reporting cycles: rationalize reporting requirements in terms of contents and frequency and progressively align with countries' own monitoring practices.

c. Ensure global data collection investments meet country health data and M&E systems needs, including data quality, in the most efficient manner.

d. Include a significant proportion of investments for country institutional capacity and M&E system strengthening, including government and non-government actors.

e. Broaden monitoring to focus on measuring overall country results, which may include specific contributions to collective results.

Good behaviours at the country level (with examples of actions)

a. Countries lead and invest in strengthening their M&E and review platforms that have the key attributes and characteristics of the IHP+ monitoring framework. Examples include:

- existence of a good quality comprehensive costed national M&E plan;
- adequate and qualified staffing of the M&E system, centrally and sub-nationally;
- institutionalization of routine mechanisms to independently assess data quality, including transparent accessible quality databases and explicit mechanisms for data sharing and use by state and non-state actors;
- regular system of household surveys;
- high quality timely results reports for national joint annual health reviews and other accountability processes;
- systematic use of common, sustainable and interoperable digital solutions where feasible and appropriate; and
- existence of an effective country-led coordination mechanism for M&E and review with active involvement and support of relevant development partners, civil society and other non-state actors.

b. Development partners support the strengthening of a single country-led platform for information and accountability, as described in the IHP+ framework for monitoring national health strategies. Examples include:

- support for the country M&E plan, including a process for progressive alignment of program-specific monitoring and reviews with the overall health strategy, using the same indicators, data collection, and time cycles;
- use of a common investment framework based on comprehensive assessment of country needs for a multi-year period;
- alignment of results reporting requirements related to specific grants with the country monitoring system including a process of progressive alignment, using the same indicators;
- investments in data collection and quality verification investments that strengthen the national monitoring and accountability platforms including surveys and health facility data collection; and
- investment in and use of common, sustainable and interoperable digital solutions where feasible and appropriate.

Indicator classification

Many indicators and indicator definitions have been developed by international organizations, reference groups, interagency groups, countries, academics, advocacy groups and others. The indicators are often used for different purposes, including programme management, allocation of resources, monitoring in-country progress, performance-based disbursement and global reporting.

The Global Reference List presents the indicators according to multiple dimensions. First, each indicator belongs to one of four domains: health status, risk factors, service coverage and health systems. This last domain includes service delivery which includes quality of care, health financing, essential medicines, the health workforce and health information.

Second, each indicator is further categorized into subdomains. These include communicable diseases (HIV/AIDS, sexually transmitted infections [STIs], tuberculosis [TB], malaria, neglected tropical diseases, outbreaks, epidemic diseases), reproductive, maternal, newborn, child and adolescent health (including sexual health and reproductive rights and immunization), noncommunicable diseases (including chronic disease, health promotion, nutrition, mental health and substance abuse), injuries and violence and the environment.

The third dimension presents the indicators according to levels of the results chain framework (input, output, outcome and impact), as defined for the International Health Partnership (IHP+) technical monitoring and evaluation (M&E) framework.[4] This framework not only facilitates the identification of core indicators along each link in the results chain but also links indicators to underlying country data systems and data collection methods, highlights the need for analysis and synthesis of data from multiple sources, emphasizes regular data quality assessment, and demonstrates how the data need to be communicated and used for both country and global reporting purposes.

The results chain framework has also been used to develop a monitoring framework for universal health coverage.[5] The monitoring of universal health coverage focuses on coverage of interventions and financial risk protection, supported by evidence on selected indicators of health system inputs, service delivery and quality, and health and developmental outcomes.

[4] Monitoring, evaluation and review of national health strategies. A country-led platform for information and accountability. Geneva: World Health Organization; 2011.

[5] Monitoring progress towards universal health coverage at country and global levels: framework, measures and targets. Geneva: World Health Organization and The World Bank; 2014 (http://www.who.int/healthinfo/universal_health_coverage/en/, accessed 7 July 2014).

Process and criteria for selecting indicators

Process

The process of selecting a global reference set of 100 core health indicators was guided by the priority global monitoring requirements relating to the MDGs, as well as by consideration of the measurement requirements for universal health coverage, noncommunicable diseases, other new global health challenges and the post-2015 development agenda.

To this end, an initial landscaping exercise was undertaken to take stock of existing global indicator sets and related reporting requirements that have been developed through global agreements, initiatives and reference groups. The exercise took into consideration the indicators and reporting requirements relating to:

1. Monitoring of international commitments and resolutions by which governments have committed their countries, such as United Nations and World Health Assembly declarations and resolutions.

   Examples include:
   - United Nations MDGs
   - World Health Assembly resolutions associated with monitoring of international commitments[6]
   - Declaration of Commitment of the United Nations General Assembly Special Session (UNGASS) on HIV/AIDS
   - The recommended indicators of the Commission on Information and Accountability for Women's and Children's Health[7]
   - Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development (ICPD) beyond 2014.

2. Disease- and programme-specific indicators and reporting requirements recommended through technical monitoring and evaluation reference groups and processes involving United Nations, multilateral and bilateral agencies, and countries.

   Examples include:
   - Monitoring and Evaluation Technical Reference Group for Roll-Back Malaria
   - WHO/UNICEF joint reporting for immunization
   - UNICEF/WHO Every Newborn action plan to end preventable deaths
   - WHO/PEPFAR/UNAIDS guide to monitoring and evaluation for collaborative TB/HIV activities.

The landscaping assessment resulted in an initial master list of over 800 global indicators that included many similar indicators of varying definitions and periodicities.

Indicator prioritization

After duplications and variations of similar indicators were removed from the master list, a prioritization process was applied. This resulted in a first draft core list of indicators that was circulated to the members of the working group and was fur-

[6] Where a World Health Assembly resolution is associated with the monitoring of international commitments on a specific indicator, the indicator's metadata includes a link to the WHO Governing Body documentation section of the WHO website (http://apps.who.int/gb/or/)

[7] http://www.who.int/woman_child_accountability/progress_information/recommendation2/en/

ther distributed to several agency M&E groups. The current version of *The Global Reference List* reflects as far as possible the comments and inputs from those groups.

An indicator is prioritized as part of the 100 core health indicators if it meets the following criteria:

1. The indicator is prominent in the monitoring of major international declarations to which all member states have agreed, or has been identified through international mechanisms such as reference or interagency groups as a priority indicator in specific programme areas.
2. The indicator is scientifically robust, useful, accessible, understandable as well as specific, measurable, achievable, relevant and time-bound (SMART).
3. There is a strong track record of extensive measurement experience with the indicator (preferably supported by an international database).
4. The indicator is being used by countries in the monitoring of national plans and programmes.

Within the core set it may be important to further identify a small set of the most "powerful" indicators that can guide political commitment to health from beyond the health sector. Some health-related MDG indicators, such as the child mortality rate and the maternal mortality ratio, are examples of this. Some of the indicators prioritized as part of the 100 core health indicators could be considered aspirational. Many countries will not be able to report regular data on several core indicators – such as causes of death in the population. Yet, few would argue that cause-of-death indicators should not be included as core, whether mortality is due to human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), malaria, road traffic accidents or lung cancer. The indicators are fundamental for health resource allocation and planning, and for the monitoring of progress and impact.

The list does not focus on those indicators that are required for more detailed programme management at national and sub-national levels or for financial tracking of specific grants and projects. The indicators for grant and project monitoring differ in multiple ways: they are often input or output indicators and tend to be based on crude data (i.e. counting of events). The scope is often subnational and limited to a certain population, area or set of clinics engaged in the project. The indicators tend to be computed against a grant or project target rather than the population as a whole.

It will be important over the longer term to work towards further rationalization of this category of indicators. A key principle is that grant and project monitoring should be carried out in such a way that the national monitoring and evaluation system as a whole is strengthened.

An additional list of indicators is included in Annex 2 for reference. These are indicators which are considered relevant and desirable but did not meet all the criteria mentioned above or currently have serious measurement challenges.

Indicator metadata

For many of the indicators in *The Global Reference List*, a comprehensive set of metadata is available (Annex 1). The metadata have been derived from existing sources such as the WHO Indicator and Metadata Registry and programme-specific monitoring and evaluation guides. Key metadata include:

- Indicator definition, including numerator and denominator. Further work is required to fine-tune the definitions of some indicators. For some indicators only a numerator is reported by the country, while models are used to estimate the denominator (although models also need reported data).

- Disaggregations that include equity stratifiers (e.g. age and sex, geography, socioeconomic status, place of residence).

- In some cases, additional dimensions are used to include further breakdowns of the indicator (e.g. mortality rates by main cause of death or prevalence rate of neglected tropical diseases by disease).

- Data sources: The main (preferred) data source or data collection methodology is specified for each indicator, including:
  - civil registration and vital statistics systems;
  - population-based health surveys;
  - facility-generated data that include routine facility information systems and health facility assessments and surveys;
  - administrative data sources such as financial and human resources information systems;
  - indicators from other sources, including modelling.

- Further information and related links i.e. the key reference group, governing body, resolution, or programme publication that specifies monitoring of that particular indicator.

The extent to which an indicator is associated with a reporting burden differs by data source. Household surveys require a large investment and are conducted at a relatively low frequency. Adding an indicator or disaggregation is often considered a relatively small burden, although there are always concerns about the potential effect of over-long interviews on data quality. Facility data are collected continuously and are reported at short time intervals. The bulk of the burden of collecting and reporting often falls on health service providers. A simple new disaggregation may double the recording workload for health workers.

Rationalization of indicators needs to go hand in hand with rationalization of reporting requirements. Annual reporting is desirable for some indicators – i.e. those that can change rapidly and can be measured with great accuracy.

Process for updating

The Global Reference List will be reviewed and updated periodically as global and country priorities evolve and measurement methods improve. The review will be conducted under the auspices of the multi-agency working group on indicators and reporting requirements. This document contains the 2015 version.

100 Core Health Indicators 2015

Health status

Mortality by age and sex
- Life expectancy at birth
- Adult mortality rate between 15 and 60 years of age
- Under-five mortality rate
- Infant mortality rate
- Neonatal mortality rate
- Stillbirth rate

Mortality by cause
- Maternal mortality ratio
- TB mortality rate
- AIDS-related mortality rate
- Malaria mortality rate
- Mortality between 30 and 70 years of age from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
- Suicide rate
- Mortality rate from road traffic injuries

Fertility
- Adolescent fertility rate
- Total fertility rate

Morbidity
- New cases of vaccine-preventable diseases
- New cases of IHR-notifiable diseases and other notifiable diseases
- HIV incidence rate
- HIV prevalence rate
- Hepatitis B surface antigen prevalence
- Sexually transmitted infections (STIs) incidence rate
- TB incidence rate
- TB notification rate
- TB prevalence rate
- Malaria parasite prevalence among children aged 6–59 months
- Malaria incidence rate
- Cancer incidence, by type of cancer

Risk factors

Nutrition
- Exclusive breastfeeding rate 0–5 months of age
- Early initiation of breastfeeding
- Incidence of low birth weight among newborns
- Children under 5 years who are stunted
- Children under 5 years who are wasted
- Anaemia prevalence in children
- Anaemia prevalence in women of reproductive age

Infections
- Condom use at last sex with high-risk partner

Environmental risk factors
- Population using safely managed drinking-water services
- Population using safely managed sanitation services
- Population using modern fuels for cooking/heating/lighting
- Air pollution level in cities

Noncommunicable diseases
- Total alcohol per capita (age 15+ years) consumption
- Tobacco use among persons aged 18+ years
- Children aged under 5 years who are overweight
- Overweight and obesity in adults *(Also: adolescents)*
- Raised blood pressure among adults
- Raised blood glucose/diabetes among adults
- Salt intake
- Insufficient physical activity in adults *(Also: adolescents)*

Injuries
- Intimate partner violence prevalence

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Service coverage

Reproductive, maternal, newborn, child and adolescent
- Demand for family planning satisfied with modern methods
- Contraceptive prevalence rate
- Antenatal care coverage
- Births attended by skilled health personnel
- Postpartum care coverage
- Care-seeking for symptoms of pneumonia
- Children with diarrhoea receiving oral rehydration solution (ORS)
- Vitamin A supplementation coverage

Immunization
- Immunization coverage rate by vaccine for each vaccine in the national schedule

HIV
- People living with HIV who have been diagnosed
- Prevention of mother-to-child transmission
- HIV care coverage
- Antiretroviral therapy (ART) coverage
- HIV viral load suppression

HIV/TB
- TB preventive therapy for HIV-positive people newly enrolled in HIV care
- HIV test results for registered new and relapse TB patients
- HIV-positive new and relapse TB patients on ART during TB treatment

Tuberculosis
- TB patients with results for drug susceptibility testing
- TB case detection rate
- Second-line treatment coverage among multidrug-resistant tuberculosis (MDR-TB) cases

Malaria
- Intermittent preventive therapy for malaria during pregnancy (IPTp)
- Use of insecticide treated nets (ITNs)
- Treatment of confirmed malaria cases
- Indoor residual spraying (IRS) coverage

Neglected tropical diseases
- Coverage of preventive chemotherapy for selected neglected tropical diseases

Screening and preventive care
- Cervical cancer screening

Mental Health
- Coverage of services for severe mental health disorders

Health systems

Quality and safety of care
- Perioperative mortality rate
- Obstetric and gynaecological admissions owing to abortion
- Institutional maternal mortality ratio
- Maternal death reviews
- ART retention rate
- TB treatment success rate
- Service-specific availability and readiness

Access
- Service utilization
- Health service access
- Hospital bed density
- Availability of essential medicines and commodities

Health workforce
- Health worker density and distribution
- Output training institutions

Health information
- Birth registration coverage
- Death registration coverage
- Completeness of reporting by facilities

Health financing
- Total current expenditure on health (% of gross domestic product)
- Current expenditure on health by general government and compulsory schemes (% of current expenditure on health)
- Out-of-pocket payment for health (% of current expenditure on health)
- Externally sourced funding (% of current expenditure on health)
- Total capital expenditure on health (% current + capital expenditure on health)
- Headcount ratio of catastrophic health expenditure
- Headcount ratio of impoverishing health expenditure

Health security
- International Health Regulations (IHR) core capacity index

100 Core Health Indicators by results chain

Inputs and processes → **Output** → **Outcome** → **Impact**

Health financing

- Total current expenditure on health (% of gross domestic product)
- Current expenditure on health by general government and compulsory schemes (% of current expenditure on health)
- Externally sourced funding (% of current expenditure on health)
- Total capital expenditure on health (% current + capital expenditure on health)
- Out-of-pocket payment for health (% of current expenditure on health)

Health workforce

- Health worker density and distribution
- Output training institutions

Health infrastructure

- Health service access
- Hospital bed density

Health information

- Birth registration coverage
- Death registration coverage
- Completeness of reporting by facilities

Service access and availability

- Service utilization
- Service-specific availability and readiness
- Availability of essential medicines and commodities

Service quality and safety

- Perioperative mortality rate
- Obstetric and gynaecological admissions owing to abortion
- Institutional maternal mortality ratio
- Maternal death reviews
- ART retention rate
- TB treatment success rate

Health security

- International Health Regulations (IHR) core capacity index

Coverage of interventions

- Demand for family planning satisfied with modern methods
- Contraceptive prevalence rate
- Antenatal care coverage
- Births attended by skilled health personnel
- Postpartum care coverage
- Care-seeking for symptoms of pneumonia
- Children with diarrhoea receiving oral rehydration solution (ORS)
- Vitamin A supplementation coverage
- Immunization coverage rate by vaccine for each vaccine in the national schedule
- People living with HIV who have been diagnosed
- Prevention of mother-to-child transmission
- HIV care coverage
- Antiretroviral therapy (ART) coverage
- HIV viral load suppression
- TB preventive therapy for HIV-positive people newly enrolled in HIV care
- HIV test results for registered new and relapse TB patients
- HIV-positive new and relapse TB patients on ART during TB treatment
- TB patients with results for drug susceptibility testing
- TB case detection rate
- Second-line treatment coverage among multidrug-resistant tuberculosis (MDR-TB) cases
- Intermittent preventive therapy for malaria during pregnancy (IPTp)
- Use of insecticide treated nets (ITNs)
- Treatment of confirmed malaria cases
- Indoor residual spraying (IRS) coverage
- Coverage of preventive chemotherapy for selected neglected tropical diseases
- Cervical cancer screening
- Coverage of services for severe mental health disorders

Risk factors and behaviours

- Exclusive breastfeeding rate 0–5 months of age
- Early initiation of breastfeeding
- Incidence of low birth weight among newborns
- Children under 5 years who are stunted
- Children under 5 years who are wasted
- Anaemia prevalence in children
- Anaemia prevalence in women of reproductive age
- Condom use at last sex with high-risk partner
- Population using safely managed drinking-water services
- Population using safely managed sanitation services
- Population using modern fuels for cooking/heating/lighting
- Air pollution level in cities
- Total alcohol per capita (age 15+ years) consumption
- Tobacco use among persons aged 18+ years
- Children aged under 5 years who are overweight
- Overweight and obesity in adults *(Also: adolescents)*
- Raised blood pressure among adults
- Raised blood glucose/diabetes among adults
- Salt intake
- Insufficient physical activity in adults *(Also: adolescents)*
- Intimate partner violence prevalence

Health status

- Life expectancy at birth
- Adult mortality rate between 15 and 60 years of age
- Under-five mortality rate
- Infant mortality rate
- Neonatal mortality rate
- Stillbirth rate
- Maternal mortality ratio
- TB mortality rate
- AIDS-related mortality rate
- Malaria mortality rate
- Mortality between 30 and 70 years of age from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
- Suicide rate
- Mortality rate from road traffic injuries
- Adolescent fertility rate
- Total fertility rate
- New cases of vaccine-preventable diseases
- New cases of IHR-notifiable diseases and other notifiable diseases
- HIV incidence rate
- HIV prevalence rate
- Hepatitis B surface antigen prevalence
- Sexually transmitted infections (STIs) incidence rate
- TB incidence rate
- TB notification rate
- TB prevalence rate
- Malaria parasite prevalence among children aged 6–59 months
- Malaria incidence rate
- Cancer incidence, by type of cancer

Finanical risk protection

- Headcount ratio of catastrophic health expenditure
- Headcount ratio of impoverishing health expenditure

Annex 1

100 Core Health Indicators Metadata

Health status indicators

Mortality by age and sex

- Life expectancy at birth
- Adult mortality rate between 15 and 60 years of age
- Under-five mortality rate
- Infant mortality rate
- Neonatal mortality rate
- Stillbirth rate

Mortality by cause

- Maternal mortality ratio
- TB mortality rate
- AIDS-related mortality rate
- Malaria mortality rate
- Mortality between 30 and 70 years of age from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
- Suicide rate
- Mortality rate from road traffic injuries

Fertility

- Adolescent fertility rate
- Total fertility rate

Morbidity

- New cases of vaccine-preventable diseases
- New cases of IHR-notifiable diseases and other notifiable diseases
- HIV incidence rate
- HIV prevalence rate
- Hepatitis B surface antigen prevalence
- Sexually transmitted infections (STIs) incidence rate
- TB incidence rate
- TB notification rate
- TB prevalence rate
- Malaria parasite prevalence among children aged 6–59 months
- Malaria incidence rate
- Cancer incidence, by type of cancer

Life expectancy at birth

Abbreviated name	Life expectancy at birth
Indicator name	Life expectancy at birth
Domain	Health status
Subdomain	General
Associated terms	Mortality by age and sex
Definition	The average number of years that a newborn could expect to live if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory or geographical area.
Numerator	(from life tables)
Denominator	(from life tables)
Disaggregation/ additional dimension	Place of residence, sex, socioeconomic status
Method of measurement	Life expectancy at birth is derived from life tables and is based on sex- and age-specific death rates. United Nations values for life expectancy at birth correspond to mid-year estimates, consistent with the corresponding United Nations fertility medium-variant quinquennial population projections.
Method of estimation	Procedures used to estimate WHO life tables for Member States vary according to the data available to assess child and adult mortality. Three basic methods have been used for this revision. In all three cases, the United Nations Inter-agency Group for Child Mortality Estimation (UN-IGME) estimates of neonatal, infant and under-five mortality rates were used. WHO has developed a model life table using a modified logit system based on some 1800 life tables from vital registration judged to be of good quality to project life tables and to estimate life tables using a limited number of parameters as input. 1. When mortality data from civil registration are available, their quality is assessed; they are adjusted for the level of completeness of registration if necessary and they are directly used to construct the life tables. 2. When mortality data from civil registration for the latest year are not available, the life tables are projected from available years from 1985 onwards. Estimated under-five mortality rates and adult mortality rates, or under-five mortality rates only, are applied using a modified logit model to which a global standard (defined as the average of all the 1800 life tables). 3. When no useable data from civil registration are available, the latest life table analyses of the United Nations Population Division were used. Predominant type of statistics: predicted.
Measurement frequency	Annual if based on preferred data source; otherwise less frequent
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration with high coverage
Other possible data sources	Household surveys and population census, sample registration system
Further information and related links	United Nations demographic yearbook. New York (NY): United Nations; 2013 (http://unstats.un.org/unsd/demographic/products/dyb/dyb2.htm, accessed 29 March 2015). World population prospects. New York (NY): United Nations; 2012 (http://esa.un.org/wpp/, accessed 29 March 2015).

Adult mortality rate between 15 and 60 years of age

Abbreviated name	Adult mortality rate between 15 and 60 years of age
Indicator name	Adult mortality rate (probably of dying between 15 and 60 years of age per 1000 population)
Domain	Health status
Subdomain	General
Associated terms	Mortality by age and sex
Definition	Probability that a 15-year-old person will die before reaching his or her 60th birthday. The probability of dying between the ages of 15 and 60 years (per 1000 population) per year among a hypothetical cohort of 100 000 people who would experience the age-specific mortality rate of the reporting year.
Numerator	Number of deaths at ages 15 to 59 years.
Denominator	Number of years of exposure to the risk of death between ages 15 and 59 years.
Disaggregation/ additional dimension	Place of residence, sex, socioeconomic status
Method of measurement	Civil or sample registration: Mortality by age and sex are used to calculate age-specific rates. Census: Mortality by age and sex is tabulated from questions on recent deaths that occurred in the household during a given period preceding the census (usually 12 months). Census or surveys: Direct or indirect methods provide adult mortality rates based on information on survival of parents or siblings.
Method of estimation	Empirical data from different sources are consolidated to obtain estimates of the level and trend of adult mortality by fitting a curve to the observed mortality points. However, to obtain the best possible estimates, judgement needs to be made on data quality and how representative it is of the population. Recent statistics based on data availability in most countries are point estimates at least 3–4 years old which need to be projected forward in order to obtain estimates of adult mortality for the current year. In case of inadequate sources of age-specific mortality rates, the latest life table analyses of the United Nations Population Division were used. Predominant type of statistics: predicted.
Measurement frequency	Annual if based on preferred data source; otherwise less frequent
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration with high coverage
Other possible data sources	Household surveys, population census, sample registration system
Further information and related links	World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Under-five mortality rate

Abbreviated name	Under-five mortality rate
Indicator name	Under-five mortality rate (probability of dying by age 5 per 1000 live births)
Domain	Health status
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Mortality by age and sex
Definition	The probability of a child born in a specific year or period dying before reaching the age of 5 years, if subject to age-specific mortality rates of that period, expressed per 1000 live births. The under-five mortality rate as defined here is, strictly speaking, not a rate (i.e. the number of deaths divided by the number of population at risk during a certain period of time) but a probability of death derived from a life table and expressed as a rate per 1000 live births.
Numerator	Number of deaths among children aged 0–4 years (0–59 months of age), broken down by age groups.
Denominator	Number of live births (person-years of exposure).
Disaggregation/ additional dimension	Place of residence, sex, socioeconomic status *Also: by cause, including pneumonia or diarrhoea*
Method of measurement	The most frequently used methods using the above-mentioned data sources are as follows: Civil registration: Number of deaths at age 0 and population of the same age are used to calculate death rates which are then converted into age-specific probability of dying. Census and surveys: An indirect method is used based on questions to each woman of reproductive age as to how many children she has ever given birth to and how many are still alive. The Brass method and model life tables are then used to obtain an estimate of infant mortality. Surveys: A direct method is used based on birth history – a series of detailed questions on each child a woman has given birth to during her lifetime. To reduce sampling errors, the estimates are often presented as period rates for five years preceding the survey. A synthetic cohort method developed by the Demographic and Health Surveys (DHS) is used to compute period rates.
Method of estimation	The UN-IGME produces trends of under-five mortality with a standardized methodology by group of countries depending on the type and quality of source of data available. For countries with adequate trend of data from civil registration, the calculations of under-five and infant mortality rates are derived from a standard period abridged life table. For countries with survey data, under-five mortality rates are estimated using the Bayesian B-splines bias-adjusted model. See the UN-IGME link for details. These under-five mortality rates have been estimated by applying methods to the available data from all Member States in order to ensure comparability across countries and time; hence they are not necessarily the same as the official national data. Predominant type of statistics: adjusted and predicted
Measurement frequency	Annual if based on registration system; otherwise, less frequent (3–5 years based on surveys)
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration with high coverage
Other possible data sources	Household surveys, population census
Further information and related links	Countdown to 2015. Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44770/1/9789241502818_eng.pdf, accessed 29 March 2015). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). UN-IGME estimation method for child mortality. New York (NY): United Nations Inter-agency Group for Child Mortality Estimation; 2014 (http://www.who.int/entity/gho/child_health/mortality/ChildCME_method.pdf.pdf, accessed 29 March 2015). World population prospects. New York (NY): United Nations; 2012 (http://esa.un.org/wpp/, accessed 29 March 2015).

Abbreviated name	Infant mortality rate
Indicator name	Infant mortality rate (probability of dying between birth and age of 1 year per 1000 live births)
Domain	Health status
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Mortality by age and sex
Definition	The probability that a child born in a specific year or period will die before reaching the age of 1 year, if subject to age-specific mortality rates of that period, expressed as a rate per 1000 live births. The infant mortality rate is, strictly speaking, not a rate (i.e. the number of deaths divided by the number of population at risk during a certain period of time) but a probability.
Numerator	Number of children who died before their first birthday (0–11 months of age).
Denominator	Number of live births (years of exposure).
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status (neonatal: 0–27 days, postneonatal: 28 days–<1 year)
Method of measurement	The most frequently used methods using the above-mentioned data sources are as follows: Civil registration: Number of deaths at age 0 and population for the same age are used to calculate the death rate which is then converted into the age-specific probability of dying. Census and surveys: An indirect method is used based on questions to each woman of reproductive age as to how many children she has ever given birth to and how many are still alive. The Brass method and model life tables are then used to obtain an estimate of infant mortality. Surveys: A direct method is used based on birth history – a series of detailed questions on each child a woman has given birth to during her lifetime. To reduce sampling errors, the estimates are often presented as period rates for five years preceding the survey. A synthetic cohort method developed by the DHS is used to compute period rates
Method of estimation	The UN-IGME produces trends of infant mortality rates with a standardized methodology by group of countries depending on the type and quality of source of data available. For countries with adequate trend of data from civil registration, the calculations of under-five and infant mortality rates are derived from a standard period abridged life table. For countries with survey data, since infant mortality rates from birth histories of surveys are exposed to recall biases, infant mortality is derived from the projection of under-five mortality rates converted into infant mortality rates using the Bayesian B-splines bias-adjusted model. These infant mortality rates have been estimated by applying methods to the available data from all Member States in order to ensure comparability across countries and time; hence they are not necessarily the same as the official national data. Predominant type of statistics: adjusted and predicted.
Measurement frequency	Annual if based on registration system; otherwise, less frequent (3–5 years based on surveys)
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration with high coverage
Other possible data sources	Household surveys, population census
Further information and related links	Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). World population prospects. New York (NY): United Nations; 2012 (http://esa.un.org/wpp/, accessed 29 March 2015).

Neonatal mortality rate

Abbreviated name	Neonatal mortality rate
Indicator name	Neonatal mortality rate (per 1000 live births)
Domain	Health status
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Mortality by age and sex
Definition	Probability that a child born in a specific year or period will die during the first 28 completed days of life if subject to age-specific mortality rates of that period, expressed per 1000 live births. Neonatal deaths (deaths among live births during the first 28 completed days of life) may be subdivided into early neonatal deaths, occurring during the first 7 days of life, and late neonatal deaths, occurring after the 7th day but before the 28th completed day of life.
Numerator	Number of children who died during the first 28 days of life.
Denominator	Number of live births (years of exposure).
Disaggregation/ additional dimension	Age in days/weeks, birth weight, place of residence, sex, socioeconomic status
Method of measurement	Data from civil registration: The number of live births and the number of neonatal deaths are used to calculate age-specific rates. This system provides annual data. Data from household surveys: Calculations are based on full birth history, whereby women are asked for the date of birth of each of their children, whether each child is still alive and if not the age at death.
Method of estimation	To ensure consistency with mortality rates in children younger than 5 years (under-five mortality rate) produced by the UN-IGME and to account for variation in survey-to-survey measurement errors, country data points for the under-five and neonatal mortality rates were rescaled for all years to match the latest time series estimates of the under-five mortality rate produced by UN-IGME. This rescaling assumes that the proportionate measurement error in neonatal and under-five mortality rates is equal for each data point. The following multilevel statistical model was then applied to estimate neonatal mortality rates: log (neonatal mortality rate/1000) = $\alpha 0 + \beta 1$*log(under-five mortality rate/1000) + $\beta 2$*([log(under-five mortality rate/1000)] 2) with random effects parameters or both level and trend regression parameters, and random effects parameters influenced by the country itself. For countries with high-quality civil registration data for neonatal deaths – defined as (i) 100% complete for adults and only civil registration data is used for child mortality, (ii) population greater than 800 000, (iii) and with at least three civil registration data points for the periods 1990–1994, 1995–1999, 2000–2004 and 2005 onwards – we used the same basic equation, but with random effects parameters for both level and trend regression parameters, and random effects parameters influenced by the country itself. Predominant type of statistics: adjusted and predicted. These neonatal rates are estimates, derived from the estimated UN-IGME neonatal rate infant population for *World population prospects* to calculate the live births; hence they are not necessarily the same as the official national statistics.
Measurement frequency	Annual if based on registration system; otherwise, less frequent (3–5 years based on surveys)
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration with high coverage
Other possible data sources	Household surveys, population census
Further information and related links	Every newborn: an action plan to end preventable deaths. Geneva: World Health Organization; 2014 (http://www.everynewborn.org/Documents/Full-action-plan-EN.pdf, accessed 29 March 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). World population prospects. New York (NY): United Nations; 2012 (http://esa.un.org/wpp/, accessed 29 March 2015).

Stillbirth rate

Abbreviated name	Stillbirth rate
Indicator name	Stillbirth rate (per 1000 total births)
Domain	Health status
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Mortality by age and sex
Definition	Number of stillbirths per 1000 births (live and stillbirths). Stillbirths can occur antepartum or intrapartum. In many cases, stillbirths reflect inadequacies in antenatal care coverage or in intrapartum care. For purposes of international comparison, stillbirths are defined as third trimester fetal deaths (≥ 1000 g or ≥28 weeks).
Numerator	Number of stillbirths.
Denominator	Number of births (dead or alive).
Disaggregation/ additional dimension	Fresh/macerated
Method of measurement	Data from civil registration: the number of stillbirths divided by the number of total births. Data from surveys: the number of pregnancy losses during or after the seventh month of pregnancy for the 5 years preceding the interview, divided by the sum of live births and late pregnancy losses in the same time period. Data from administrative reporting systems/registries: the number of stillbirths divided by the number of total births. Data from health facilities: the number of stillbirths divided by the number of total births documented in the facility.
Method of estimation	For data from countries with civil registration and good coverage, data meeting definition criteria of greater than or equal to 1000 g or 28 completed weeks gestation are taken directly from civil registration without adjustment. For other countries, stillbirth rates are estimated with a regression model.
Measurement frequency	Continuous data collection; dissemination every 3—5 years
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration and vital statistics system, population-based surveys
Other possible data sources	Administrative reporting systems, health facility assessments, special studies
Further information and related links	Every newborn: an action plan to end preventable deaths. Geneva: World Health Organization; 2014 (http://www.everynewborn.org/Documents/Full-action-plan-EN.pdf, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Maternal mortality ratio

Abbreviated name	Maternal mortality ratio
Indicator name	Maternal mortality ratio (per 100 000 live births)
Domain	Health status
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Mortality by cause
Definition	The annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, expressed per 100 000 live births, for a specified time period.
Numerator	Number of maternal deaths.
Denominator	Number of live births.
Disaggregation/ additional dimension	Age, place of residence
Method of measurement	The maternal mortality ratio can be calculated by dividing recorded (or estimated) maternal deaths by total recorded (or estimated) live births in the same period and multiplying by 100 000. Measurement requires information on pregnancy status, timing of death (during pregnancy, childbirth, or within 42 days of termination of pregnancy), and cause of death. The maternal mortality ratio can be calculated directly from data collected through vital registration systems, household surveys or other sources. There are often data quality problems, particularly related to the underreporting and misclassification of maternal deaths. Therefore, data are often adjusted in order to take these data quality issues into account. Because maternal mortality is a relatively rare event, large sample sizes are needed if household surveys are used to identify recent maternal deaths in the household (e.g. last year). This may still result in estimates with large confidence intervals, limiting the usefulness for cross-country or over-time comparisons. To reduce sample size requirements, the sisterhood method used in the DHS and multiple indicator surveys (MICS4) measures maternal mortality by asking respondents about the survival of sisters. It should be noted that the sisterhood method results in pregnancy-related mortality: regardless of the cause of death, all deaths occurring during pregnancy, birth or the six weeks following the termination of the pregnancy are included in the numerator of the maternal mortality ratio. Censuses have also included questions about maternal deaths with variable success. Reproductive Age Mortality Studies (RAMOS) is a special study that uses varied sources, depending on the context, to identify all deaths of women of reproductive age and ascertain which of these deaths are maternal or pregnancy-related.
Method of estimation	For facility data-based maternal mortality, the denominator is estimated using population projections. WHO, UNICEF, UNFPA, the United Nations Population Division and The World Bank have developed a method to adjust existing data in order to take into account these data quality issues and ensure the comparability of different data sources. This method involves assessment of data for completeness and, where necessary, adjustment for underreporting and misclassification of deaths as well as development of estimates through statistical modelling for countries with no reliable national level data. Data on maternal mortality and other relevant variables are obtained through databases maintained by WHO, the United Nations Population Division, UNICEF, and The World Bank. Data available from countries varies in terms of source and methods. Given the variability of the sources of data, different methods are used for each data source in order to arrive at country estimates that are comparable and permit regional and global aggregation. Currently, only about one third of all countries/territories have reliable data available and do not need additional estimations. For about half of the countries included in the estimation process, country-reported estimates of maternal mortality are adjusted for the purposes of comparability of the methodologies. For the remainder of countries/territories – those with no appropriate maternal mortality data – a statistical model is employed to predict maternal mortality levels. However, the calculated point estimates with this methodology might not represent the true levels of maternal mortality. It is advised to consider the estimates together with the reported uncertainty margins within which the true levels are known to lie. Predominant type of statistics: predicted.
Measurement frequency	For civil registration: annual. For other sources: every 5 years or more
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration with high coverage and medical certification of cause of death and regular assessment of misreporting and underreporting
Other possible data sources	Household surveys, population census, sample or sentinel registration systems, special studies
Further information and related links	Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). WHO, UNICEF, UNFPA, The World Bank, United Nations Population Division. Trends in maternal mortality: 1990 to 2013. Geneva: World Health Organization; 2014 (http://www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2013/en/, accessed 29 March 2015). World population prospects. New York (NY): United Nations; 2012 (http://esa.un.org/wpp/, accessed 29 March 2015).

TB mortality rate

Abbreviated name	TB mortality rate
Indicator name	Tuberculosis (TB) mortality rate (per 100 000 population)
Domain	Health status
Subdomain	Infectious disease
Associated terms	Mortality by cause
Definition	Estimated number of deaths attributable to TB in a given year, expressed as a rate per 100 000 population.
Numerator	Number of deaths due to TB (all forms), excluding deaths in HIV-positive TB cases.
Denominator	Number of years of exposure.
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status
Method of measurement	Vital registration data based on ICD are used where available (approximately 120 countries). Elsewhere, estimates of mortality are derived from estimates of incidence and the case fatality rate.
Method of estimation	Estimates of TB mortality are generated through a consultative and analytical process led by WHO and are published annually. Uncertainty bounds are provided in addition to best estimates. Published values are rounded to three significant figures. Age standardization is done for comparability over time and between populations.
Measurement frequency	Annual
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration with full coverage and cause of death based on ICD
Other possible data sources	Special studies, sample or sentinel registration systems, population surveys with verbal autopsy
Further information and related links	Global tuberculosis report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/global_report/en/, accessed 29 March 2015). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

AIDS-related mortality rate

Abbreviated name	AIDS-related mortality rate
Indicator name	AIDS-related mortality rate (per 100 000 population)
Domain	Health status
Subdomain	Infectious disease
Associated terms	Mortality by cause
Definition	Estimated number of adults and children who have died due to AIDS-related causes in a specific year, expressed as a rate per 100 000 population.
Numerator	Number of deaths due to AIDS x 100 000.
Denominator	Estimated population in the reporting year.
Disaggregation/ additional dimension	Age (<5, 5–14, 15+), geographic location, sex, TB status
Method of measurement	Death registration data using ICD; verbal autopsy-based results are also used. The number of AIDs-related deaths can also be modelled using the Spectrum software.
Method of estimation	Empirical data from different HIV surveillance sources are consolidated to obtain estimates of the level and trend of HIV infection and of mortality in adults and children. Standard methods and tools for HIV estimates that are appropriate to the pattern of the HIV epidemic are used. However, to obtain the best possible estimates, judgement must be used as to the quality of the data and how representative it is of the population. Adjustments are often needed because of underreporting/misclassification of HIV/AIDS deaths. UNAIDS and WHO produce country-specific estimates of mortality due to AIDS every year. To calculate mortality rates, the total population is derived from the latest estimates produced by the United Nations Population Division. Predominant type of statistics: predicted.
Measurement frequency	Annual if based on civil registration data or United Nations estimates
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration with full coverage and cause of death based on ICD
Other possible data sources	Sample registration systems with causes of death, household surveys with verbal autopsy, modelled estimates
Further information and related links	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, accessed 10 June 2015). Spectrum software. Glastonbury (CT): Avenir Health. (http://www.avenirhealth.org/software-spectrum.php, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Malaria mortality rate

Abbreviated name	Malaria mortality rate
Indicator name	Malaria mortality rate (per 100 000 population)
Domain	Health status
Subdomain	Infectious disease
Associated terms	Mortality by cause
Definition	Number of adults and children who have died due to malaria in a specific year, expressed as a rate per 100 000 population.
Numerator	Number of deaths due to malaria.
Denominator	Number of years of exposure.
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status
Method of measurement	Death registration data using ICD-10; verbal autopsy-based results are also used.
Method of estimation	Modelling, using multiple inputs, is often used to obtain a malaria mortality estimate. WHO compiles information supplied by ministries of health (i.e. the agencies responsible for malaria surveillance in endemic countries). The procedures for adjusting data to allow for international comparability are as follows: The number of malaria deaths is derived by one of two methods: 1. by multiplying the estimated number of *P. falciparum* malaria cases in a country by a fixed case-fatality rate. This method is used for all countries outside the WHO African Region and for countries in the African Region where estimates of case incidence are derived from routine reporting systems and where malaria accounts for less than 5% of all deaths in children under 5 years, as described in the Global Burden of Disease Incremental Revision for 2004. A case fatality rate of 0.45% is applied to the estimated number of *P. falciparum* cases for countries in the African Region and a case fatality rate of 0.3% for *P. falciparum* cases in other regions. (In situations where the fraction of all deaths due to malaria is small, the use of a case fatality rate in conjunction with estimates of case incidence is considered to provide a better guide to the levels of malaria mortality than attempts to estimate the fraction of deaths due to malaria.) 2. For countries in the African Region where malaria comprises 5% or more of all deaths in children under 5 years, the number of deaths is derived from an estimate of the number of people living at high, low or no risk of malaria. Malaria death rates for these populations are inferred from longitudinal studies of malaria deaths, as recorded in the published literature. The malaria death rate is expressed as the number of deaths due to malaria per 100 000 population per year with the population of a country derived from projections made by the United Nations Population Division. The adjustment procedures described above aim to take into account underreporting of cases if patients do not use public sector facilities or if there are gaps in public sector reporting systems. For countries that do not undertake laboratory confirmation of cases, the adjustments also aim to correct for over-diagnosis of malaria. Where data from surveillance systems are not available, or are considered to be of insufficient quality, incidence is derived from estimated levels of malaria risk and will chiefly be from sources other than locally-available estimates. Predominant type of statistics: predicted. Age standardization is done for comparability over time and between populations.
Measurement frequency	Annual
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration with full coverage and medical certification of cause of death
Other possible data sources	Routine facility information systems, household surveys with verbal autopsy, special studies
Further information and related links	Household Survey Indicators for Malaria Control. Measure Evaluation/Measure DHS/President's Malaria Initiative/Roll Back Malaria Partnership/ UNICEF/WHO. 2013 (http://www.malariasurveys.org/documents/Household%20Survey%20Indicators%20for%20Malaria%20Control.pdf, accessed 15 April 2015. Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). Roll Back Malaria Partnership/WHO. Disease surveillance for malaria control: an operations manual. Geneva: World Health Organization; 2012 (http://www.who.int/malaria/publications/atoz/9789241503341/en/, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Mortality between 30 and 70 years of age from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases

Abbreviated name	Mortality between 30 and 70 years of age from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
Indicator name	Mortality between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
Domain	Health status
Subdomain	NCDs
Associated terms	Mortality by cause
Definition	Unconditional probability of dying between the exact ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases.
Numerator	Number of deaths between ages 30 and 70 years due to the four causes.
Denominator	Number of years of exposure.
Disaggregation/ additional dimension	Place of residence, sex, socioeconomic status
Method of measurement	Deaths from these four causes will be based on the following ICD codes: I00–I99, C00–C97, E10–E14 and J30–J98.
Method of estimation	Modelling, using multiple inputs, is often used if no complete and accurate data are available. Age standardization is done for comparability over time and between populations.
Measurement frequency	Annual if civil registration data; otherwise every 3–5 years
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration and vital statistics systems
Other possible data sources	Population-based health surveys with verbal autopsy
Further information and related links	Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Suicide rate

Abbreviated name	Suicide rate
Indicator name	Suicide rate (per 100 000 population)
Domain	Health status
Subdomain	Injury and violence
Associated terms	Mortality by cause
Definition	Suicide rate per 100 000 population in a specified period (age-standardized).
Numerator	Number of suicides.
Denominator	Number of years of exposure.
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status
Method of measurement	Death registration data using ICD-10, often with adjustments for underreporting.
Method of estimation	Modelling, using multiple inputs, is often used if no complete and accurate data are available.
Measurement frequency	Annual if civil registration data are available, otherwise every five years
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration and vital statistics systems with full coverage
Other possible data sources	Special studies
Further information and related links	Mental Health Action Plan, 2013–2020. Geneva: World Health Organization; 2013 (http://apps.who.int/iris/bitstream/10665/89966/1/9789241506021_eng.pdf?ua=1, accessed 29 March 2015).

Mortality rate from road traffic injuries

Abbreviated name	Mortality rate from road traffic injuries
Indicator name	Mortality rate from road traffic injuries (per 100 000 population)
Domain	Health status
Subdomain	Injury and violence
Associated terms	Mortality by cause
Definition	Number of road traffic fatal injury deaths per 100 000 population (age-standardized).
Numerator	Number of deaths due to road traffic crashes.
Denominator	Population.
Disaggregation/ additional dimension	Age, per motor vehicle (fatalities per 10 000 motor vehicles), sex, socioeconomic status
Method of measurement	Death registration data using ICD-10.
Method of estimation	Modelling, using multiple inputs, is often used if no complete and accurate data are available.
Measurement frequency	Annual if civil registration data are available, otherwise every five years
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration and vital statistics systems with full coverage
Other possible data sources	Population-based health surveys with verbal autopsy, administrative reporting systems (police reports)
Further information and related links	ESCAP road safety goals, targets and indicators for the Decade of Action, 2011-2020. In: Road safety: note by the Secretariat. Bangkok: United Nations Economic and Social Commission for Asia and the Pacific; 2011: Annex 1 of Document E/ESCAP/MCT.2/8 of United Nations ESCAP Ministerial Conference on Transport, Bangkok, 12-16 March 2012 (http://www.unescap.org/ttdw/MCT2011/MCT/MCT2-8E.pdf, accessed 21 April 2015). Global status report on road safety: time for action. Geneva: World Health Organization; 2009 (www.who.int/violence_injury_prevention/road_safety_status/2009, accessed 29 March 2015). Organisation for Economic Co-operation and Development. Health at a Glance 2013: OECD Indicators, Paris: OECD Publishing; 2013 (http://dx.doi.org/10.1787/health_glance-2013-en, accessed 29 March 2014).

Adolescent fertility rate

Abbreviated name	Adolescent fertility rate
Indicator name	Adolescent fertility rate (per 1000 girls aged 15–19 years)
Domain	Health status
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Fertility
Definition	Annual number of births to women aged 15—19 years per 1000 women in that age group. It is also referred to as the age-specific fertility rate for women aged 15—19 years.
Numerator	Number of live births to women aged 15—19 years.
Denominator	Exposure to childbearing by women aged 15—19 years.
Disaggregation/ additional dimension	Marital status (when possible, also capture girls < 15 years), place of residence, socioeconomic status
Method of measurement	The adolescent birth rate is generally computed as a ratio. The numerator is the number of live births to women aged 15—19 years, and the denominator is an estimate of exposure to childbearing by women aged 15—19 years. The numerator and the denominator are calculated differently for civil registration and survey and census data. Civil registration: In the case of civil registration the numerator is the registered number of live births born to women aged 15—19 years during a given year, and the denominator is the estimated or enumerated population of women aged 15—19 years. Survey data: In the case of survey data, the adolescent birth rate is generally computed on the basis of retrospective birth histories. The numerator refers to births to women who were 15—19 years of age at the time of the birth during a reference period before the interview, and the denominator to person-years lived between the ages of 15 and 19 years by the interviewed women during the same reference period. Whenever possible, the reference period corresponds to the five years preceding the survey. The reported observation year corresponds to the middle of the reference period. For some surveys, no retrospective birth histories are available and the estimate is based on the date of last birth or the number of births in the 12 months preceding the survey. Census data: With census data, the adolescent birth rate is generally computed on the basis of the date of last birth or the number of births in the 12 months preceding the enumeration. The census provides both the numerator and the denominator for the rates. In some cases, the rates based on censuses are adjusted for under-registration based on indirect methods of estimation. For some countries with no other reliable data, the own-children method of indirect estimation provides estimates of the adolescent birth rate for a number of years before the census (See: http://mdgs.un.org/unsd/mdg/Metadata.aspx, accessed 19 October 2009.) If numbers are available, adolescent fertility at ages under 15 years can also be computed.
Method of estimation	The United Nations Population Division compiles and updates data on adolescent fertility rates for MDG monitoring. Estimates based on civil registration are provided when the country reports at least 90% coverage and there is reasonable agreement between civil registration estimates and survey estimates. Survey estimates are provided only when there is no reliable civil registration. Given the restrictions of the United Nations MDG database, only one source is provided by year and country. In such cases precedence is given to the survey programme conducted most frequently at the country level, with other survey programmes using retrospective birth histories, census and other surveys in that order. (See: http://mdgs.un.org/unsd/mdg/Metadata.aspx, accessed 19 October 2009.)
Measurement frequency	Annual
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration systems with full coverage
Other possible data sources	Population census, household surveys
Further information and related links	Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Monitoring progress in family planning. FP2020 core indicators. Glastonbury (CT): Track20 (http://www.track20.org/pages/data/indicators, 21 March 2014). The UNFPA Strategic Plan, 2014—2017. Report of the Executive Director. New York (NY): United Nations Population Fund; 2013.

Total fertility rate

Abbreviated name	Total fertility rate
Indicator name	Total fertility rate
Domain	Health status
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Fertility
Definition	Average number of children that a hypothetical cohort of women would have at the end of their reproductive period if they were subject during their whole lives to the fertility rates of a given period and if they were not subject to mortality. It is expressed as children per woman.
Numerator	
Denominator	
Disaggregation/ additional dimension	Place of residence, socioeconomic status
Method of measurement	Total fertility rate is directly calculated as the sum of age-specific fertility rates (usually referring to women aged 15–49 years), or five times the sum if data are given in five-year age groups. An age-specific or age-group-specific fertility rate is calculated as the ratio of annual births to women at a given age or age group to the population of women at the same age or age group, in the same year, for a given country, territory or geographical area. Population data from the United Nations correspond to mid-year estimated values, obtained by linear interpolation from the corresponding United Nations fertility medium-variant quinquennial population projections.
Method of estimation	Population data are taken from the most recent United Nations Population Division's *World population prospects.*
Measurement frequency	Annual if based on civil registration and vital statistics (CRVS); once every 3–5 years if based on surveys and census
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration and vital statistics systems
Other possible data sources	Population-based health surveys, population census
Further information and related links	The UNFPA Strategic Plan, 2014–2017. Report of the Executive Director. New York (NY): United Nations Population Fund; 2013.

New cases of vaccine-preventable diseases

Abbreviated name	New cases of vaccine-preventable diseases
Indicator name	New cases of vaccine-preventable diseases
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Number of confirmed new cases of vaccine-preventable diseases that are included in the WHO recommended standards for surveillance of selected vaccine-preventable diseases, and vaccine-preventable diseases reported on the WHO-UNICEF reporting form in a specified time period.
Numerator	Number of new cases.
Denominator	
Disaggregation/ additional dimension	Disease (diphtheria, hepatitis B, pertussis, neonatal tetanus, total tetanus, measles, rubella, congenital rubella syndrome, mumps, diarrhoea, pneumonia, Japanese encephalitis, yellow fever) Age, geographic location (e.g. district) sex, vaccination status
Method of measurement	Active surveillance with regular reporting and quality control.
Method of estimation	Adjustments for underreporting may be needed.
Measurement frequency	Monthly; in some cases more frequently if continuous
Monitoring and evaluation framework	Impact
Preferred data sources	Active surveillance systems with laboratory confirmation
Other possible data sources	
Further information and related links	WHO/UNICEF joint reporting form on immunization. Geneva: World Health Organization; 2014 (http://www.who.int/entity/immunization/monitoring_surveillance/routine/reporting/WHO_UNICEF_JRF_EN.xls?ua=1, accessed 21 March 2014). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

New cases of IHR-notifiable diseases and other notifiable diseases

Abbreviated name	New cases of IHR-notifiable diseases and other notifiable diseases
Indicator name	New cases of IHR-notifiable diseases and other notifiable diseases per year
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Number of new confirmed cases of IHR-notifiable diseases (immediately notifiable diseases) and other notifiable diseases (diseases that could cause serious public health impact and could spread rapidly internationally) per year.
Numerator	Number of new cases.
Denominator	
Disaggregation/ additional dimension	IHR-notifiable diseases: smallpox, poliomyelitis due to wild type poliovirus, human influenza caused by a new subtype, severe acute respiratory syndrome (SARS) Other notifiable diseases: cholera, pneumonic plague, yellow fever, viral haemorrhagic fevers, West Nile fever, other diseases that are of special national or regional concern (dengue fever, Rift Valley fever, meningococcal disease) Age, geographic location, sex, vaccination status
Method of measurement	Surveillance with immediate reporting.
Method of estimation	
Measurement frequency	Continuous
Monitoring and evaluation framework	Impact
Preferred data sources	Active surveillance systems with laboratory confirmation
Other possible data sources	
Further information and related links	Decision instrument for the assessment and notification of events that may constitute a public health emergency of international concern. Agenda item 2, Intergovernmental Working Group on Revision of the International Health Regulations, 22 February 2005 . Report of the Ad Hoc Expert Group on Annex 2. Geneva: World Health Organization; 2005 (http://apps.who.int/gb/ghs/pdf/IHR_IGWG2_ID4-en.pdf, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

HIV incidence rate

Abbreviated name	HIV incidence rate
Indicator name	HIV incidence (per 1000 population)
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Number of new HIV infections per 1000 uninfected population. The incidence rate is the number of new cases per population at risk in a given time period.
Numerator	Number of new HIV infections.
Denominator	Uninfected population (which is the total population minus people living with HIV).
Disaggregation/ additional dimension	General population, Key populations (men who have sex with men, sex workers, people who inject drugs, transgender people, prisoners), Age groups (0–14, 15–24, 15–49, 50+ years), for key populations < 25, 25+ years), mode of transmission for children (including mother-to-child transmission), geographic location, sex
Method of measurement	Longitudinal data on individuals are the best source of data but are rarely available for large populations. Special diagnostic tests in surveys or from health facilities can be used to obtain data on HIV incidence. In generalized epidemics, prevalence among very young age groups can be reviewed as a proxy for or a data source for triangulating incidence. HIV incidence can also be modelled (e.g. using the Spectrum software).
Method of estimation	Modelling is often used to obtain an estimate of new infections. Prevalence data are the main input data.
Measurement frequency	Survey schedule; Spectrum model estimates updated every year
Monitoring and evaluation framework	Impact
Preferred data sources	Household or key population survey with HIV incidence-testing, Spectrum modelling
Other possible data sources	Regular surveillance system among key populations
Further information and related links	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, accessed 10 June 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Global AIDS response progress reporting 2014: construction of core indicators for monitoring the 2011 United Nations political declaration on HIV/AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2014 (http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf, accessed 29 March 2015). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). Next generation indicators reference guide: planning and reporting. Version 1.2. Washington (DC): The President's Emergency Plan for AIDS Relief; 2013 (http://www.pepfar.gov/documents/organization/206097.pdf, accessed 29 March 2014). Spectrum software. Glastonbury (CT): Avenir Health. (http://www.avenirhealth.org/software-spectrum.php, accessed 29 March 2015). The UNFPA Strategic Plan, 2014–2017. Report of the Executive Director. New York (NY): United Nations Population Fund; 2013. World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

HIV prevalence rate

Abbreviated name	HIV prevalence rate
Indicator name	HIV prevalence (per 1000 population)
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Percentage of people living with HIV. Prevalence measures the frequency of existing disease in a defined population at a specific time.
Numerator	Total number of infections.
Denominator	Total population.
Disaggregation/ additional dimension	General population age groups: 0–14 years (< 1, 1–4, 5–14 years), > 15 years (15–24, 15–49, 50+ years) Key population: age groups 15–24 years, 25+ years; men who have sex with men, sex workers, people who inject drugs, transgender people, prisoners New and relapse TB cases, ART eligibility, location, pregnancy status, sex, socioeconomic status HIV prevalence among TB patients
Method of measurement	General population surveys with HIV-testing, sample surveys with HIV-testing in key populations, surveillance systems among key populations, key population subnational estimates. HIV prevalence can also be modelled using the Spectrum software.
Method of estimation	Modelling is often needed for both numerator and denominator, using data from surveys, surveillance and research studies.
Measurement frequency	Survey schedule; Spectrum model estimates updated every year
Monitoring and evaluation framework	Impact
Preferred data sources	Key population surveys, national population surveys in generalized epidemics, surveillance systems
Other possible data sources	Active facility-based surveillance system with key population estimates
Further information and related links	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, accessed 10 June 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Global AIDS response progress reporting 2014: construction of core indicators for monitoring the 2011 United Nations political declaration on HIV/AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2014 (http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf, accessed 29 March 2015). Next generation indicators reference guide: planning and reporting. Version 1.2. Washington (DC): The President's Emergency Plan for AIDS Relief; 2013 (http://www.pepfar.gov/documents/organization/206097.pdf, accessed 29 March 2014). Spectrum software. Glastonbury (CT): Avenir Health. (http://www.avenirhealth.org/software-spectrum.php, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Hepatitis B surface antigen prevalence

Abbreviated name	Hepatitis B surface antigen prevalence
Indicator name	Prevalence of hepatitis B surface antigen
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Prevalence of hepatitis B surface antigen (HBsAg)-positive, adjusted for sampling design.
Numerator	Number of survey participants with HBsAg positive test, adjusted for sampling design.
Denominator	Number in survey with HBsAg result.
Disaggregation/ additional dimension	Dependent on sampling methodology Place of residence, exposure to hepatitis B virus (HBV) birth dose (official records), exposure to HBV B3
Method of measurement	The serosurvey sample should be drawn from the specific geographic region to be verified. For example if the purpose is to estimate national childhood HBV transmission (including mother-to-child transmission) then the sampling should be geographically representative of the population. Convenience sampling is not appropriate. The sample size should be adequate to show with 95% confidence HBsAg prevalence of less than 1% with a precision of ± 0.5%. The target age is 5-years-old. Sampling 4–6 year olds may be appropriate. The serosurvey is cross sectional and therefore a point estimate time. The shorter time periods of data collection are therefore preferred. Data on HBV birth dose exposure and B3 completion should be drawn from official records. Where these are not available testing for HBsAb may be considered for the serosurvey. This is less preferable as it is more costly, but can also be done in addition. Specimen collection and transportation should be appropriate to minimize bias though specimen degradation in rural and remote areas. Where possible, it is advantageous to collect blood specimens for ELISA laboratory testing because the accuracy (sensitivity and specificity) is higher than for rapid tests. However in some locations only rapid tests will be available hence test selection is resource dependent. This should be considered in designing overall study methodology. When an appropriate sampling strategy and size are used and quality testing assays and laboratory procedures are employed, the HBsAg prevalence in the serosurvey should be representative of the incidence of childhood HBV transmission in the specific geographic region (or country) in this age group.
Method of estimation	HBsAg is the most important input into estimation of Hepatitis B incidence which is defined as number of new hepatitis B infections per 100 000 population in a given year. Statistical modelling is used to make such estimates.
Measurement frequency	Intermittent, dependent on population seroprevalence and infant HBV vaccination coverage
Monitoring and evaluation framework	Outcome
Preferred data sources	Serosurvey
Other possible data sources	Routinely collected HBV vaccine administrative coverage data including the percentage of newborn infants given the first dose within 24 hours of birth (HepB0%) and the percentage of infants having received three doses of hepatitis B vaccine (HepB3 %)
Further information and related links	Documenting the Impact of Hepatitis B Immunization: best practices for conducting a serosurvey. Geneva: World Health Organization; 2011 (http://whqlibdoc.who.int/hq/2011/WHO_IVB_11.08_eng.pdf, accessed 28 May 2015). Hepatitis B Control Through Immunization: a Reference Guide. Regional Office for the Western Pacific: World Health Organization; 2014 (http://iris.wpro.who.int/bitstream/10665.1/10820/3/9789290616696_eng.pdf, accessed 28 May 2015). Sample design and procedures for Hepatitis B immunization surveys: A companion to the WHO cluster survey reference manual. Geneva: World Health Organization; 2012 (http://whqlibdoc.who.int/hq/2011/WHO_IVB_11.12_eng.pdf, accessed 28 May 2015).

Sexually transmitted infections (STIs) incidence rate

Abbreviated name	Sexually transmitted infections (STIs) incidence rate
Indicator name	Sexually transmitted infections (STIs) incidence rate
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Number of new cases of reported STIs (syndromic or etiological reporting) in a specified time period (year).
Numerator	Number of new cases.
Denominator	Total population.
Disaggregation/ additional dimension	Age, key populations, sex, syndrome/pathogen (gonorrhoea, syphilis [including congenital], urethral discharge, and genital ulcer disease)
Method of measurement	Laboratory confirmation is essential. If not available, the syndromic approach is used to estimate incidence, but data are much less reliable.
Method of estimation	Annual
Measurement frequency	
Monitoring and evaluation framework	Impact
Preferred data sources	Health facilities
Other possible data sources	
Further information and related links	Global strategy for the prevention and control of sexually transmitted infections: 2006–2015. Geneva: World Health Organization; 2007 (http://whqlibdoc.who.int/publications/2007/9789241563475_eng.pdf?ua=1, accessed 29 March 2015). UN. Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development (ICPD) beyond 2014 (Feb 2014). Accessed on 19 August 2014. from https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf

TB incidence rate

Abbreviated name	TB incidence rate
Indicator name	Tuberculosis (TB) incidence (per 100 000 population)
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Estimated number of new and relapse TB cases (all forms of TB, including cases in people living with HIV) arising in a given year, expressed as a rate per 100 000 population.
Numerator	Number of new and relapse TB cases arising in a specified time period.
Denominator	Number of person-years of exposure.
Disaggregation/ additional dimension	Age, HIV status, sex
Method of measurement	Direct measurement requires high-quality surveillance systems in which underreporting is negligible, and strong health systems so that underdiagnosis is also negligible; otherwise indirect estimates based on notification data and estimates of levels of underreporting and underdiagnosis.
Method of estimation	Estimates of TB incidence are produced through a consultative and analytical process led by WHO and are published annually. These estimates are based on annual case notifications, assessments of the quality and coverage of TB notification data, national surveys of the prevalence of TB disease and information from death (vital) registration systems. Estimates of incidence for each country are derived, using one or more of the following approaches depending on available data: 1. incidence = case notifications/estimated proportion of cases detected; 2. incidence = prevalence/duration of condition; 3. incidence = deaths/proportion of incident cases that die. Uncertainty bounds are provided in addition to best estimates. Details are available from *TB impact measurement: policy and recommendations for how to assess the epidemiological burden of TB and the impact of TB control* and from the online technical appendix to the *WHO global tuberculosis report 2014*.
Measurement frequency	Annual
Monitoring and evaluation framework	Impact
Preferred data sources	High quality TB surveillance system (linked to routine facility information system)
Other possible data sources	Population-based health surveys with TB diagnostic testing
Further information and related links	Definitions and reporting framework for tuberculosis – 2013 revision (WHO/HTM/TB/2013.2). Geneva: World Health Organization; 2013 (http://www.who.int/tb/publications/definitions/en/, accessed 29 March 2015). Global tuberculosis report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/global_report/en/, accessed 29 March 2015). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

TB notification rate

Abbreviated name	TB notification rate
Indicator name	Tuberculosis (TB) notification rate (per 100 000 population)
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Number of new and relapse TB cases notified in a given year, per 100 000 population. The term "notification" means that TB is diagnosed in a patient and is reported within the national surveillance system, and then on to WHO. From 2013 onwards, the numbers of cases are reported to WHO in the following categories: New pulmonary bacteriologically confirmed TB cases; New pulmonary clinically diagnosed TB cases ; New extrapulmonary TB cases, bacteriologically confirmed or clinically diagnosed; Relapse pulmonary bacteriologically confirmed TB cases; Relapse pulmonary clinically diagnosed TB cases; Relapse extrapulmonary TB cases, bacteriologically confirmed or clinically diagnosed; Previously treated cases, excluding relapse cases, bacteriologically confirmed or clinically diagnosed. Note that "New" in the first three categories above also includes cases with unknown previous TB treatment history. Prior to 2013, the numbers of cases were reported to WHO in the following categories: New TB case: pulmonary smear-positive; New TB case: pulmonary smear-negative; New TB case: pulmonary smear unknown/not done; New TB case: extrapulmonary; New TB case: other; Retreatment TB case: relapse (pulmonary smear and/or culture positive); Retreatment TB case: treatment after failure (pulmonary smear and/or culture positive); Retreatment TB case: treatment after default (pulmonary smear and/or culture positive); Retreatment TB case: other; Other TB cases (treatment history unknown).
Numerator	Number of new and relapse cases of TB in a specified time period.
Denominator	Number of persons/total population.
Disaggregation/ additional dimension	Type of TB (bacteriologically confirmed/clinically diagnosed, pulmonary/extrapulmonary) Age, health-care workers, place of residence, prisons, sex, treatment history
Method of measurement	The number of cases detected by national TB control programmes is collected as part of routine surveillance. Annual case notifications are reported by countries to WHO using a web-based data collection system. See *WHO global tuberculosis report*. The TB case notifications reported by countries follow the WHO recommendations on case definitions and recording and reporting; they are internationally comparable and there is no need for any adjustment.
Method of estimation	Reported by countries.
Measurement frequency	Annual
Monitoring and evaluation framework	Impact
Preferred data sources	TB surveillance system linked to routine facility information system
Other possible data sources	
Further information and related links	Definitions and reporting framework for tuberculosis – 2013 revision (WHO/HTM/TB/2013.2). Geneva: World Health Organization; 2013 (http://www.who.int/tb/publications/definitions/en/, accessed 29 March 2015). Global tuberculosis report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/global_report/en/, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

TB prevalence rate

Abbreviated name	TB prevalence rate
Indicator name	Tuberculosis (TB) prevalence rate (per 100 000 population)
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Number of cases of tuberculosis (all forms) in a population at a given point in time (the middle of the calendar year), expressed as a rate per 100 000 population.
Numerator	Number of TB cases.
Denominator	Number of persons/population.
Disaggregation/ additional dimension	Bacteriologically confirmed TB, all forms of TB Age, HIV status, sex
Method of measurement	Prevalence can be estimated in national population-based surveys. Where survey data are not available, estimates of prevalence are derived from estimates of incidence and the duration of disease.
Method of estimation	Estimates of TB prevalence are based on a consultative and analytical process led by WHO and are published annually. Uncertainty bounds are provided in addition to best estimates. Where available, TB prevalence surveys are used to estimate prevalence. In most instances, survey data are not available, and country-specific estimates of prevalence are derived from estimates of incidence (for additional details, please refer to the TB incidence indicator metadata), combined with assumptions about the duration of disease. The prevalence of TB is calculated from the product of incidence and duration of disease: prevalence = incidence x duration of the condition. The duration of disease is very difficult to measure directly. It is assumed to vary according to whether the individual receives treatment in a programme following the internationally recommended TB strategy or not, and whether the individual is infected with HIV. Further, durations are assumed to follow distributions with a large variance to account for differences between countries. Further details are available from *Tuberculosis prevalence surveys handbook* (2nd edition), *TB impact measurement: policy and recommendations for how to assess the epidemiological burden of TB and the impact of TB control* and in the online technical appendix to the *WHO global tuberculosis report*.
Measurement frequency	Annual
Monitoring and evaluation framework	Impact
Preferred data sources	Population-based TB prevalence surveys/specific population surveys, TB surveillance routine facility information systems
Other possible data sources	Special studies
Further information and related links	Definitions and reporting framework for tuberculosis – 2013 revision (WHO/HTM/TB/2013.2). Geneva: World Health Organization; 2013 (http://www.who.int/tb/publications/definitions/en/, accessed 29 March 2015). Global tuberculosis report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/global_report/en/, accessed 29 March 2015). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Malaria parasite prevalence among children aged 6–59 months

Abbreviated name	Malaria parasite prevalence among children aged 6–59 months
Indicator name	Malaria parasite prevalence among children aged 6–59 months
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Percentage of children aged 6–59 months in the population with malaria parasites in blood.
Numerator	Number of children aged 6—59 months in the population with malaria parasites in blood.
Denominator	Total number of children aged 6—59 months tested for malaria parasites by rapid diagnostic test or microscopy.
Disaggregation/ additional dimension	Age, place of residence, season (year and month), sex
Method of measurement	Household survey with rapid diagnostic test or microscopy applied to all children aged 6—59 months.
Method of estimation	
Measurement frequency	Every 2—5 years depending on epidemiology and intervention intensity
Monitoring and evaluation framework	Impact
Preferred data sources	Population-based surveys with parasite prevalence testing in blood
Other possible data sources	Routine facility information systems with laboratory confirmation
Further information and related links	Household Survey Indicators for Malaria Control. Measure Evaluation/Measure DHS/President's Malaria Initiative/Roll Back Malaria Partnership/ UNICEF/WHO. 2013 (http://www.malariasurveys.org/documents/Household%20Survey%20Indicators%20for%20Malaria%20Control.pdf, accessed 15 April 2015. Roll Back Malaria Partnership/WHO. Disease surveillance for malaria control: an operations manual. Geneva: World Health Organization; 2012 (http://www.who.int/malaria/publications/atoz/9789241503341/en/, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Malaria incidence rate

Abbreviated name	Malaria incidence rate
Indicator name	Malaria incidence rate (per 1000 population)
Domain	Health status
Subdomain	Infectious disease
Associated terms	Morbidity
Definition	Number of confirmed reported malaria cases per 1000 persons per year.
Numerator	Number of suspected malaria cases confirmed by either microscopy or rapid diagnostic test.
Denominator	Population at risk (number of people living in areas where malaria transmission occurs).
Disaggregation/ additional dimension	Age, place of residence, season (year and month)
Method of measurement	Confirmed by microscopy or rapid diagnostics test. Microscopy: The number of cases confirmed by microscopy, including both inpatients and outpatients of all ages. Also includes cases detected by both active and passive case detection, but excludes cases detected in the community. Rapid diagnostic tests: The number of cases confirmed by rapid diagnostic tests, including both inpatients and outpatients of all ages. Also includes cases detected by both active and passive case detection, but excludes cases that are also confirmed by microscopy or that are detected and confirmed by community-based programmes.
Method of estimation	WHO compiles data on reported confirmed cases of malaria, submitted by the national malaria control programmes. The denominator is estimated, using risk mapping and population data.
Measurement frequency	Annual
Monitoring and evaluation framework	Impact
Preferred data sources	Surveillance systems
Other possible data sources	
Further information and related links	Household Survey Indicators for Malaria Control. Measure Evaluation/Measure DHS/President's Malaria Initiative/Roll Back Malaria Partnership/ UNICEF/WHO. 2013 (http://www.malariasurveys.org/documents/Household%20Survey%20Indicators%20for%20Malaria%20Control.pdf, accessed 15 April 2015. Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). Roll Back Malaria Partnership/WHO. Disease surveillance for malaria control: an operations manual. Geneva: World Health Organization; 2012 (http://www.who.int/malaria/publications/atoz/9789241503341/en/, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Cancer incidence, by type of cancer

Abbreviated name	Cancer incidence, by type of cancer
Indicator name	Cancer incidence rate, by type of cancer (per 100 000 population)
Domain	Health status
Subdomain	NCDs and nutrition
Associated terms	Morbidity
Definition	Number of new cancers of a specific site/type occurring per 100 000 population.
Numerator	Number of new cancer cases diagnosed in a specific year. This may include multiple primary cancers occurring in one patient. The primary site reported is the site of origin and not the metastatic site. In general, the incidence rate would not include recurrences.
Denominator	The at-risk population for the given category of cancer. The population used depends on the rate to be calculated. For cancer sites that occur only in one sex, the sex-specific population (e.g. females for cervical cancer) is used.
Disaggregation/ additional dimension	Type (leading cancers) – e.g. breast, cervix, colon, liver, lung, prostate, stomach Age, place of residence, sex, socioeconomic status
Method of measurement	Cancer registries.
Method of estimation	(Number of new cancer cases diagnosed in a specific year)/(at-risk population for that category) × 100 000. If cancer registries are incomplete, adjustments need to be made.
Measurement frequency	Annual
Monitoring and evaluation framework	Impact
Preferred data sources	Population-based cancer registries which collect and classify information on all new cases of cancer in a defined population
Other possible data sources	
Further information and related links	Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015). WHO guidelines for screening and treatment of precancerous lesions of cervical cancer prevention. Geneva: World Health Organization; 2013. World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Risk factors indicators

Nutrition

- Exclusive breastfeeding rate 0–5 months of age
- Early initiation of breastfeeding
- Incidence of low birth weight among newborns
- Children under 5 years who are stunted
- Children under 5 years who are wasted
- Anaemia prevalence in children
- Anaemia prevalence in women of reproductive age

Infections

- Condom use at last sex with high-risk partner

Environmental risk factors

- Population using safely managed drinking-water services
- Population using safely managed sanitation services
- Population using modern fuels for cooking/heating/lighting
- Air pollution level in cities

Noncommunicable diseases

- Total alcohol per capita (age 15+ years) consumption
- Tobacco use among persons aged 18+ years
- Children aged under 5 years who are overweight
- Overweight and obesity in adults *(Also: adolescents)*
- Raised blood pressure among adults
- Raised blood glucose/diabetes among adults
- Salt intake
- Insufficient physical activity in adults *(Also: adolescents)*

Injuries

- Intimate partner violence prevalence

Exclusive breastfeeding rate 0–5 months of age

Abbreviated name	Exclusive breastfeeding rate 0–5 months of age
Indicator name	Exclusive breastfeeding rate in infants 0–5 months of age
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Nutrition
Definition	Percentage of infants 0–5 months of age (<6 months) who are fed exclusively with breast milk.
Numerator	Number of infants 0—5 months of age who are exclusively breastfed.
Denominator	Total number of infants 0—5 months of age surveyed.
Disaggregation/ additional dimension	Place of residence, sex, socio-economic status
Method of measurement	Percentage of infants 0–5 months of age who received only breast milk on the previous day = (infants 0–5 months of age who received only breast milk during the previous day/infants 0–5 months of age) x 100. Current status data are used. Vitamins and minerals drops or medicines are not counted. DHS and MICS include questions on liquids and foods given the previous day to find out if the child is being exclusively breastfed.
Method of estimation	WHO and UNICEF jointly collect data on infant and young child feeding, pooling information from national surveys. The WHO Programme of Nutrition, Physical Activity and Obesity, at the Regional Office for Europe compiles country information on exclusive breastfeeding independently. Note, many developed country data refer to exclusive breastfeeding at 6 months, which provides lower estimates than the standard measure of exclusive breastfeeding averaged over the first six months. The two sources have been combined to display all available data on exclusive breastfeeding. Predominant type of statistics: adjusted.
Measurement frequency	Every 3—5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys, specific population based surveys
Other possible data sources	
Further information and related links	A draft framework for the global monitoring of the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. Informal Consultation with Member States and UN Agencies on a Proposed Set of Indicators for the Global Monitoring Framework for Maternal, Infant and Young Child Nutrition, 30 September to 1 October 2013. Geneva: World Health Organization; 2013 (http://www.who.int/nutrition/events/2013_consultation_indicators_globalmonitoringframework_WHO_MIYCN.pdf, accessed 29 March 2015). Countdown to 2015. Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44770/1/9789241502818_eng.pdf, accessed 29 March 2015). Every newborn: an action plan to end preventable deaths. Geneva: World Health Organization; 2014 (http://www.everynewborn.org/Documents/Full-action-plan-EN.pdf, accessed 29 March 2015). Indicators for assessing infant and young child feeding practices. Geneva: World Health Organization; 2008 (http://whqlibdoc.who.int/publications/2008/9789241596664_eng.pdf, accessed 29 March 2015). Keeping promises, measuring results. Commission on information and accountability for Women's and Children's Health. Geneva: World Health Organization; 2011 (http://www.who.int/topics/millennium_development_goals/accountability_commission/Commission_Report_advance_copy.pdf, accessed 29 March 2015). PEPFAR. Next Generation Indicators Reference Guide - Planning and Reporting. Version 1.2. The President's Emergency Plan for AIDS Relief, Feb. 2013. (http://www.pepfar.gov/documents/organization/81097.pdf). Standard foreign assistance indicators/standard foreign assistance master indicator list (MIL). Washington (DC): United States Agency for International Development (http://www.state.gov/f/indicators/index.htm, accessed 26 June 2014). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Abbreviated name	Early initiation of breastfeeding
Indicator name	Early initiation of breastfeeding
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Nutrition
Definition	Percentage of infants breastfed within 1 hour of birth in a specified time period.
Numerator	Number of newborns breastfed within 1 hour of birth.
Denominator	Number of live births in a specified time period.
Disaggregation/ additional dimension	Place of residence, sex, socioeconomic status
Method of measurement	DHS and MICS include questions on the timing of the initiation of breastfeeding.
Method of estimation	UNICEF maintains a global database (http://data.unicef.org/nutrition/iycf).
Measurement frequency	Every 3–5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based health surveys
Other possible data sources	
Further information and related links	Indicators for assessing infant and young child feeding practices. Geneva: World Health Organization; 2008 (http://whqlibdoc.who.int/publications/2008/9789241596664_eng.pdf, accessed 29 March 2015).

Incidence of low birth weight among newborns

Abbreviated name	Incidence of low birth weight among newborns
Indicator name	Incidence of low birth weight among newborns
Domain	Risk factors
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Nutrition
Definition	Percentage of live births that weigh less than 2500 g.
Numerator	Number of live-born neonates with weight less than 2500 g at birth.
Denominator	Number of live births.
Disaggregation/ additional dimension	Place of residence, preterm status, socioeconomic status
Method of measurement	Delivery registers (hospital management and information systems – HMIS). This method provides data on the incidence of low birth weight among newborns delivered in health institutions. Household surveys which collect data on birth weight (recalled by mother) and relative size of the newborn at birth allow for an adjusted value even where many infants are not weighed at birth.
Method of estimation	The relative size at birth and recalled birth-weight data are used to estimate incidence. UNICEF maintains a global database in which adjustments are made using survey data (mainly DHS and MICS) and administrative estimates are used where the percentage of weighed newborns is high.
Measurement frequency	Continuous
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based health surveys and data from administrative/information systems
Other possible data sources	Routine facility information systems
Further information and related links	A draft framework for the global monitoring of the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. Informal Consultation with Member States and UN Agencies on a Proposed Set of Indicators for the Global Monitoring Framework for Maternal, Infant and Young Child Nutrition, 30 September to 1 October 2013. Geneva: World Health Organization; 2013 (http://www.who.int/nutrition/events/2013_consultation_indicators_globalmonitoringframework_WHO_MIYCN.pdf, accessed 29 March 2015). Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). Organisation for Economic Co-operation and Development. Health at a Glance 2013: OECD Indicators, Paris: OECD Publishing; 2013 (http://dx.doi.org/10.1787/health_glance-2013-en, accessed 29 March 2014).

Abbreviated name	Children under 5 years who are stunted
Indicator name	Children under 5 years who are stunted (moderate and severe)
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Nutrition
Definition	Percentage of stunted (moderate and severe) children aged 0–59 months (moderate = height-for-age below -2 standard deviations from the WHO Child Growth Standards median; severe = height-for-age below -3 standard deviations from the WHO Child Growth Standards median).
Numerator	Number of children aged 0–59 months who are stunted.
Denominator	Total number of children aged 0–59 months who were measured.
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status
Method of measurement	Percentage of children aged < 5 years stunted for age = (number of children aged 0–59 months whose z-score falls below -2 standard deviations from the median height-for-age of the WHO Child Growth Standards/total number of children aged 0–59 months who were measured) x 100. Children's weight and height are measured using standard equipment and methods (e.g. children younger than 24 months are measured lying down, while standing height is measured in children aged 24 months and older).
Method of estimation	WHO maintains the Global Database on Child Growth and Malnutrition, which includes population-based surveys that fulfil a set of criteria. Data are checked for validity and consistency and raw data-sets are analysed according to a standard procedure to obtain comparable results. Prevalence below and above defined cut-off points for weight-for-age, height-for-age, weight-for-height and body mass index (BMI)-for-age in pre-school children are presented using z-scores based on the WHO Child Growth Standards. Predominant type of statistics: adjusted.
Measurement frequency	Every 3—5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based household surveys
Other possible data sources	Population-based health surveys with nutrition modules, national surveillance systems
Further information and related links	A draft framework for the global monitoring of the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. Informal Consultation with Member States and UN Agencies on a Proposed Set of Indicators for the Global Monitoring Framework for Maternal, Infant and Young Child Nutrition, 30 September to 1 October 2013. Geneva: World Health Organization; 2013 (http://www.who.int/nutrition/events/2013_consultation_indicators_globalmonitoringframework_WHO_MIYCN.pdf, accessed 29 March 2015). Countdown to 2015 decade report (2000—2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). Countdown to 2015. Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44770/1/9789241502818_eng.pdf, accessed 29 March 2015). Decision WHA67(9). Maternal, infant and young child nutrition. In: Sixty-seventh World Health Assembly, Geneva, 19-24 May 2014. Resolutions and decisions, annexes. Geneva: World Health Organization; 2014 (http://apps.who.int/gb/ebwha/pdf_files/WHA67-REC1/A67_2014_REC1-en.pdf, page 62, accessed 29 March 2015). Document A67/15. Maternal, infant and young child nutrition. The Global Strategy and the Comprehensive Implementation Plan. Report by the Secretariat. Sixty-seventh World Health Assembly, Geneva, 19–24 May 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_15-en.pdf, accessed 29 March 2015). Keeping promises, measuring results. Commission on information and accountability for Women's and Children's Health. Geneva: World Health Organization; 2011 (http://www.who.int/topics/millennium_development_goals/accountability_commission/Commission_Report_advance_copy.pdf, accessed 29 March 2015). Physical status: the use and interpretation of anthropometry. Report of a WHO Expert Committee. Geneva: World Health Organization; 1995 (WHO Technical Report Series, No. 854). WHO child growth standards: Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: Methods and development. Geneva: World Health Organization; 2006 (http://www.who.int/childgrowth/standards/technical_report/en/, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Children under 5 years who are wasted

Abbreviated name	Children under 5 years who are wasted
Indicator name	Children under 5 years who are wasted (moderate and severe)
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Nutrition
Definition	Percentage of wasted (moderate and severe) children aged 0–59 months (moderate = weight-for-height below -2 standard deviations of the WHO Child Growth Standards median; severe = weight-for-height below -3 standard deviations of the WHO Child Growth Standards median).
Numerator	Number of children aged 0–59 months who are wasted.
Denominator	Total number of children aged 0–59 months.
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status
Method of measurement	Percentage of children aged < 5 years wasted = (number of children aged 0–59 months whose z-score falls below -2 standard deviations from the median weight-for-height of the WHO Child Growth Standards/total number of children aged 0–59 months who were measured) x 100. Children's weight and height are measured using standard equipment and methods (e.g. children under 24 months are measured lying down, while standing height is measured in children aged 24 months and older.
Method of estimation	WHO maintains the Global Database on Child Growth and Malnutrition, which includes population-based surveys that fulfil a set of criteria. Data are checked for validity and consistency and raw data sets are analysed according to a standard procedure to obtain comparable results. Prevalence below and above defined cut-off points for weight-for-age, height-for-age, weight-for-height and BMI-for-age, in pre-school children are presented using z-scores based on the WHO Child Growth Standards. A detailed description of the methodology and procedures of the database – including data sources, criteria for inclusion, data quality control and database workflow – are described in a paper published in 2003 in the International Journal of Epidemiology (de Onis M, Blössner M).
Measurement frequency	Every 3—5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	National nutrition surveys
Other possible data sources	Population-based health surveys with nutrition modules, national surveillance systems
Further information and related links	A draft framework for the global monitoring of the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. Informal Consultation with Member States and UN Agencies on a Proposed Set of Indicators for the Global Monitoring Framework for Maternal, Infant and Young Child Nutrition, 30 September to 1 October 2013. Geneva: World Health Organization; 2013 (http://www.who.int/nutrition/events/2013_consultation_indicators_globalmonitoringframework_WHO_MIYCN.pdf, accessed 29 March 2015). Countdown to 2015 decade report (2000—2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). de Onis M, Blössner M. The World Health Organization Global Database on Child Growth and Malnutrition: methodology and applications. Int J Epidemiol 2003;32(4):518-26. Decision WHA67(9). Maternal, infant and young child nutrition. In: Sixty-seventh World Health Assembly, Geneva, 19-24 May 2014. Resolutions and decisions, annexes. Geneva: World Health Organization; 2014 (http://apps.who.int/gb/ebwha/pdf_files/WHA67-REC1/A67_2014_REC1-en.pdf, page 62, accessed 29 March 2015). Document A67/15. Maternal, infant and young child nutrition. The Global Strategy and the Comprehensive Implementation Plan. Report by the Secretariat. Sixty-seventh World Health Assembly, Geneva, 19–24 May 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_15-en.pdf, accessed 29 March 2015). Physical status: the use and interpretation of anthropometry. Report of a WHO Expert Committee. Geneva: World Health Organization; 1995 (WHO Technical Report Series, No. 854). WHO child growth standards: Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: Methods and development. Geneva: World Health Organization; 2006 (http://www.who.int/childgrowth/standards/technical_report/en/, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Abbreviated name	Anaemia prevalence in children
Indicator name	Prevalence of anaemia in children aged 6–59 months
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Nutrition
Definition	Percentage of children aged 6–59 months with a haemoglobin level of less than 110 g/L, adjusted for altitude.
Numerator	Number of children aged 6–59 months with a haemoglobin level of less than 110 g/L, adjusted for altitude.
Denominator	Total number of children aged 6–59 months who had haemoglobin levels obtained during the survey.
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status *Also: haemoglobin levels less than 70 g/L (severe anaemia)*
Method of measurement	
Method of estimation	
Measurement frequency	Every 3–5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based health surveys
Other possible data sources	
Further information and related links	A draft framework for the global monitoring of the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. Informal Consultation with Member States and UN Agencies on a Proposed Set of Indicators for the Global Monitoring Framework for Maternal, Infant and Young Child Nutrition, 30 September to 1 October 2013. Geneva: World Health Organization; 2013 (http://www.who.int/nutrition/events/2013_consultation_indicators_globalmonitoringframework_WHO_MIYCN.pdf, accessed 29 March 2015). Haemoglobin concentrations for the diagnosis of anaemia and assessment of severity. Vitamin and Mineral Nutrition Information System. Geneva: World Health Organization; 2011 (http://www.who.int/vmnis/indicators/haemoglobin.pdf, accessed 29 March 2015). Household Survey Indicators for Malaria Control. Measure Evaluation/Measure DHS/President's Malaria Initiative/Roll Back Malaria Partnership/ UNICEF/WHO. 2013 (http://www.malariasurveys.org/documents/Household%20Survey%20Indicators%20for%20Malaria%20Control.pdf, accessed 15 April 2015. Roll Back Malaria Partnership/WHO. Disease surveillance for malaria control: an operations manual. Geneva: World Health Organization; 2012 (http://www.who.int/malaria/publications/atoz/9789241503341/en/, accessed 29 March 2015).

Anaemia prevalence in women of reproductive age

Abbreviated name	Anaemia prevalence in women of reproductive age
Indicator name	Anaemia prevalence in women of reproductive age
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Nutrition
Definition	Percentage of women aged 15–49 years with a haemoglobin level less than 120 g/L for non-pregnant women and lactating women, and less than 110 g/L for pregnant women, adjusted for altitude and smoking.
Numerator	Number of women aged 15–49 years with haemoglobin levels below the indicated cut-off, adjusted for altitude and smoking.
Denominator	Total number of women aged 15–49 years with haemoglobin levels assessed during a specified period.
Disaggregation/ additional dimension	Age, place of residence, reproductive status (pregnant, lactating), socioeconomic status *Also: haemoglobin levels less than 80 g/L for non-pregnant women and lactating women, and less than 70 g/L for pregnant women (severe anaemia)*
Method of measurement	
Method of estimation	
Measurement frequency	Every 3–5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based health surveys
Other possible data sources	
Further information and related links	A draft framework for the global monitoring of the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. Informal Consultation with Member States and UN Agencies on a Proposed Set of Indicators for the Global Monitoring Framework for Maternal, Infant and Young Child Nutrition, 30 September to 1 October 2013. Geneva: World Health Organization; 2013 (http://www.who.int/nutrition/events/2013_consultation_indicators_globalmonitoringframework_WHO_MIYCN.pdf, accessed 29 March 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Haemoglobin concentrations for the diagnosis of anaemia and assessment of severity. Vitamin and Mineral Nutrition Information System. Geneva: World Health Organization; 2011 (http://www.who.int/vmnis/indicators/haemoglobin.pdf, accessed 29 March 2015).

Condom use at last sex with high-risk partner

Abbreviated name	Condom use at last sex with high-risk partner
Indicator name	Condom use at last sex with high-risk partner
Domain	Risk factors
Subdomain	Infectious disease
Associated terms	Infections
Definition	Percentage using a condom during last sexual intercourse with a higher-risk partner (women and men who have more than one sexual partner in the past 12 months; sex workers with most recent client; men who have sex with men anal sex with a male partner; people who inject drugs condom use at last sex). For people who inject drugs, also measure number of needles per person who injects drugs per year.
Numerator	
Denominator	
Disaggregation/ additional dimension	Age (15–24, 15–49 years), sex Sex workers: by sex (F/M/transgender) age (< 25/25+ years) Men who have sex with men: age (< 25/25+ years) People who inject drugs: sex, age (< 25/25+ years)
Method of measurement	Population-based surveys for general population; Surveys targeting key populations such as IBBS.
Method of estimation	
Measurement frequency	
Monitoring and evaluation framework	Outcome
Preferred data sources	Surveys
Other possible data sources	
Further information and related links	The Demographic and Health Surveys Program. Washington (DC): United States Agency for International Development (http://www.dhsprogram.com/, accessed 29 March 2015).

Population using safely managed drinking-water services

Abbreviated name	Population using safely managed drinking-water services
Indicator name	Percentage of population using safely managed drinking-water services
Domain	Risk factors
Subdomain	Environment
Associated terms	Environmental risk factors
Definition	Population using a basic drinking-water source (piped water into dwelling, yard or plot; public taps or standpipes; boreholes or tubewells; protected dug wells; protected springs and rainwater) which is located on premises and available when needed; free of faecal (and priority chemical) contamination and/or regulated by a competent authority.
Numerator	Population using safely managed drinking-water services
Denominator	Total population
Disaggregation/ additional dimension	Place of residence (urban/rural), socioeconomic status (wealth, affordability etc.)
Method of measurement	The indicator is computed as the ratio of the number of people who use a safely managed drinking-water service, urban and rural, expressed as a percentage. Data from household surveys or censuses provide information on the types of basic drinking-water sources listed above. Such data will be combined with water quality data from direct testing of water quality at the household level as well as data from administrative records or regulatory frameworks for various aspects of safe management. The percentage of the total population using a safely managed drinking-water service is the population-weighted average of the previous two numbers. Access to water and sanitation are considered core socioeconomic and health indicators and key determinants of, inter alia, child survival, maternal and children's health, family well-being and economic productivity. Additionally, the use of drinking-water sources and sanitation facilities is part of the wealth index used by household surveys to divide the population into wealth quintiles. As a result, most nationally representative household surveys include information about basic water and sanitation. The survey questions and response categories pertaining to access to basic drinking-water sources are fully harmonized between DHS and MICS and are adopted from the standard questionnaire promoted for inclusion in survey instruments by the WHO/UNICEF Joint Monitoring Programme on Water Supply and Sanitation. This can be accessed via www.wssinfo.org. Administrative data on faecal and chemical contamination, and regulation by appropriate authorities, will be collected by JMP through consultation with the government departments responsible for drinking-water supply and regulation.
Method of estimation	The Joint Monitoring Programme on Water Supply and Sanitation assembles, reviews and assesses data collected by national statistics offices and other relevant institutions through nationally representative household surveys and national censuses. For each country, data on use of basic drinking-water sources from surveys and censuses are plotted on a timescale from 1980 to the present. A linear trend line, based on the least-squares method, is drawn through these data points to provide estimates of use of basic drinking-water sources for all years between 1990 and the present year (wherever possible). This is based on the MDG baseline year of 1990, and therefore will be modified based on the agreed baseline for the SDGs. Estimates of faecal and chemical contamination, and regulation by appropriate authorities, will be collected from countries and used to adjust the data on use of basic drinking-water sources as needed. Population data used, including the proportion of the population living in urban and rural areas, are those established by the United Nations Population Division. Predominant type of statistics: adjusted and predicted.
Measurement frequency	Biennial
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys, population census, data from administrative sources or regulatory frameworks.
Other possible data sources	
Further information and related links	A post-2015 Global Goal for Water: synthesis of key findings and recommendations from UN-Water. New York (NY): United Nations; 2014 (http://www.unwater.org/fileadmin/user_upload/unwater_new/docs/Topics/UN-Water_paper_on_a_Post-2015_Global_Goal_for_Water.pdf, accessed 29 March 2015). A statistical note: proposal for indicator monitoring framework for WaSH, and wastewater targets under the SDGs. Geneva: World Health Organization; 2015 (http://unstats.un.org/unsd/post-2015/activities/egm-on-indicator-framework/docs/Statistical%20note%20on%20Water%20for%20UNSC%20final%20 25Feb2015.pdf, accessed 23 April 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20 for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Guidelines for drinking-water quality, fourth edition. Geneva: World Health Organization; 2011 (http://www.who.int/water_sanitation_health/publications/2011/dwq_guidelines/en/, accessed 29 March 2015). WASH targets and indicators post-2015: recommendations from international consultations. Geneva: Water Supply and Sanitation Collaborative Council; 2014 (http://www.wssinfo.org/fileadmin/user_upload/resources/post-2015-WASH-targets-factsheet-12pp.pdf, accessed 29 March 2015). WHO/UNICEF. Progress on drinking-water and sanitation – 2014 update. Geneva: World Health Organization; 2014 (http://www.wssinfo.org/fileadmin/user_ upload/resources/JMP_report_2014_webEng.pdf, accessed 29 March 2015).

Population using safely managed sanitation services

Abbreviated name	Population using safely managed sanitation services
Indicator name	Percentage of population using safely managed sanitation services
Domain	Risk factors
Subdomain	Environment
Associated terms	Environmental risk factors
Definition	Population using a basic sanitation facility (flush or pour-flush toilets to sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with a slab, and composting toilets) which is not shared with other households and where excreta are safely disposed in situ (e.g. in a sealed latrine pit until they are safe to handle and re-use, such as an agricultural input) or transported to a designated place for safe disposal or treatment (e.g. treatment facility or hygienically collected from septic tanks or pit latrines by a suction truck or similar equipment that limits human contact and thereafter transported to a designated location such as a treatment facility or solid waste collection site).
Numerator	Population using safely managed sanitation services
Denominator	Total population
Disaggregation/ additional dimension	Place of residence (urban/rural), socioeconomic status (wealth, affordability etc.)
Method of measurement	The percentage of the population using basic sanitation facilities is computed as the ratio of the number of people who use a basic sanitation facility, urban and rural, expressed as a percentage. Data from household surveys or censuses provide information on types of basic sanitation facilities listed above. Such data will be combined with data from administrative records or regulatory frameworks for various aspects of safe management. The percentage of the total population using an improved sanitation facility is the population weighted average of the previous two numbers. Access to water and sanitation are considered core socioeconomic and health indicators and key determinants of, inter alia, child survival, maternal and children's health, family well-being and economic productivity. Additionally the use of drinking-water sources and sanitation facilities is part of the wealth index used by household surveys to divide the population into wealth quintiles. As a result, most nationally representative household surveys include information about basic water and sanitation. The survey questions and response categories pertaining to access to basic sanitation facilities are fully harmonized between DHS and MICS and are adopted from the standard questionnaire promoted for inclusion in survey instruments by the WHO/UNICEF Joint Monitoring Programme on Water Supply and Sanitation. This can be accessed via www.vwssinfo.org. The percentage of the population using different types of basic sanitation facilities will be adjusted with estimates of the proportion of faecal waste which is safely disposed in situ or transported to a designated place for safe disposal or treatment.
Method of estimation	The Joint Monitoring Programme on Water Supply and Sanitation assembles, reviews and assesses data collected by national statistics offices and other relevant institutions through nationally representative household surveys and national censuses. For each country, survey and census data are plotted on a timescale from 1980 to the present. A linear trend line, based on the least-squares method, is drawn through these data points to provide estimates for all years between 1990 and the present year (wherever possible). This is based on the MDG baseline year of 1990, and therefore will be modified based on the agreed baseline for the SDGs. Estimates of excreta management, and regulation by appropriate authorities, will be collected from countries and used to adjust the data on use of basic sanitation facilities as needed. Administrative, population (including population density) and environmental data can be combined to estimate safe disposal or transport of excreta, when no country data are available. Excreta management will initially be estimated globally and regionally, and progressively at country level. Population data used, including the proportion of the population living in urban and rural areas, are those established by the United Nations Population Division. Predominant type of statistics: estimated and predicted.
Measurement frequency	Biennial
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys, population census, data from administrative sources or regulatory frameworks.
Other possible data sources	
Further information and related links	A post-2015 Global Goal for Water: synthesis of key findings and recommendations from UN-Water. New York (NY): United Nations; 2014 (http://www.unwater.org/fileadmin/user_upload/unwater_new/docs/Topics/UN-Water_paper_on_a_Post-2015_Global_Goal_for_Water.pdf, accessed 29 March 2015). A statistical note: proposal for indicator monitoring framework for WaSH, and wastewater targets under the SDGs. Geneva: World Health Organization; 2015 (http://unstats.un.org/unsd/post-2015/activities/egm-on-indicator-framework/docs/Statistical%20note%20on%20Water%20for%20UNSC%20final%2025Feb2015.pdf, accessed 23 April 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). WASH targets and indicators post-2015: recommendations from international consultations. Geneva: Water Supply and Sanitation Collaborative Council; 2014 (http://www.wssinfo.org/fileadmin/user_upload/resources/post-2015-WASH-targets-factsheet-12pp.pdf, accessed 29 March 2015). WHO/UNICEF. Progress on drinking-water and sanitation – 2014 update. Geneva: World Health Organization; 2014 (http://www.wssinfo.org/fileadmin/user_upload/resources/JMP_report_2014_webEng.pdf, accessed 29 March 2015).

Population using modern fuels for cooking/heating/lighting

Abbreviated name	Population using modern fuels for cooking/heating/lighting
Indicator name	Population using modern fuels and technologies for cooking/heating/lighting (indoor air)
Domain	Risk factors
Subdomain	Environment
Associated terms	Environmental risk factors
Definition	Percentage of households/population using modern fuels and technologies for cooking/heating/lighting as defined by the recommendations set forth in the *WHO guidelines for indoor air quality: household fuel combustion.*
Numerator	Number of households (population) using modern fuels and technologies for cooking/heating/lighting.
Denominator	Total number of households (population).
Disaggregation/ additional dimension	Place of residence, sex, socioeconomic status Fuel type, end use (i.e. cooking, heating, lighting)
Method of measurement	The indicator is calculated as the number of people using modern fuels and technologies divided by the total population, expressed as a percentage. Data on the use of fuels and technologies for different end uses (e.g. cooking, heating, lighting) are routinely collected at national and subnational levels in most countries using censuses and surveys. Currently, modern fuels exclude solid fuels and kerosene. For the purpose of estimating the health impacts, it is recommended to monitor the use of kerosene also as a separate category.
Method of estimation	The indicator is modelled with household survey data compiled by WHO. The information on cooking fuel use and cooking practices from more than 700 nationally representative data sources, such as those listed above, is used in combination with the most recent survey data available on heating and lighting fuels and technologies. Unless stated otherwise, estimates for cooking using modern fuels and technologies for the total (urban and rural) population for a given year were obtained separately using a multilevel model. The model accounts only for regions, countries and time as a spline function, and estimates were restricted to values ranging from zero to one. All analyses were conducted using STATA software (version 12, StataCorp LP, College Station, TX, USA). Estimates for countries with no available surveys were obtained as follows: When no information on the fuels and technologies use in the home was available for the country, the regional population-weighted mean was used. Note that this approach was also applied to Equatorial Guinea instead of the one used for high-income countries (see below); Countries classified as high-income with a Gross National Income (GNI) of more than US$ 12 616 per capita (The World Bank, http://data.worldbank.org/about/country-classifications, accessed July 2013) are assumed to have made a complete transition to using modern fuels and technologies as the primary source of domestic energy for cooking and heating, and solid fuel use is reported to be less than 5%.
Measurement frequency	Every 3–5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys, population census
Other possible data sources	Other sources, including estimation and modelling
Further information and related links	Bonjour S, Adair-Rohani H, Wolf J, Bruce NG, Mehta S, Prüss-Ustün A et al. Solid fuel use for household cooking: country and regional estimates for 1980–2010. Environ Health Perspect. 2013;121(7):784–90). Indoor air quality guidelines: household fuel combustion. Geneva: World Health Organization; 2014 [in press] (http://www.who.int/indoorair/publications/household-fuel-combustion/en/, accessed 29 March 2015). Rehfuess E, Mehta S, Prüss-Üstün A. Assessing household solid fuel use: multiple implications for the Millennium Development Goals. Environ Health Perspect. 2006;114(3):373–8). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Abbreviated name	Air pollution level in cities
Indicator name	Air pollution level in cities (particulate matter [PM])
Domain	Risk factors
Subdomain	Environment
Associated terms	Environmental risk factors
Definition	Annual mean concentration of particulate matter of less than 2.5 microns of diameter (PM2.5) [ug/m3] (or of less than 10 microns [PM10] if PM2.5 is not available) in cities
Numerator	
Denominator	
Disaggregation/ additional dimension	
Method of measurement	The mean annual concentration of fine suspended particles of less than 10 or 2.5 microns in diameters is a common measure of air pollution. The mean city concentration is based on daily measurements, or data which could be aggregated into annual means. In the absence of annual means, measurements covering a more limited period of the year can exceptionally be used (provided that data are largely representative for the annual mean exposure).
Method of estimation	Annual means represent an average of the cities' monitoring stations. The average can be population-weighted if stations are representative for certain parts of the city. In order to present air quality that is largely representative for human exposure, urban measurement characterized as urban background, residential areas, commercial and mixed areas should be used. Stations characterized as particular "hot spots" or exclusively industrial areas are generally not included, unless their levels are representative for people's exposures. This selection should be in line with the aim of capturing representative values for human exposure. The location of hot spots, often measured for the purpose of capturing the cities' maximum values and industrial areas, are often deemed less likely to be representative for the mean exposure of a significant part of a city's population. "Hot spots" are either designated as such by the original reports, or are qualified as such due to their exceptional nature (e.g. exceptionally busy roads etc.). Omitting them may also lead to an underestimation of the mean air pollution levels of a city. Annual mean PM2.5 data can be estimated, when not available, on the basis of PM10. Conversion factors PM2.5/PM10 may vary according to location, and should, if possible, be taken from other stations which measure both PM2.5 and PM10 in the city or country, or by default from the region. They should be considered as approximate only. The converted value for individual cities may deviate from the actual value (generally between 0.3 and 0.8).
Measurement frequency	
Monitoring and evaluation framework	Outcome
Preferred data sources	National/subnational/monitoring reports and web sites containing measurements of PM10 or PM2.5 and relevant national agencies
Other possible data sources	Data from research projects/articles from peer reviewed journals, Development agencies, UN Agencies
Further information and related links	WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide: Global update 2005. Geneva: World Health Organization; 2014 (http://www.who.int/phe/health_topics/outdoorair/outdoorair_aqg/en/, accessed 06 May 2015).

Total alcohol per capita (age 15+ years) consumption

Abbreviated name	Total alcohol per capita (age 15+ years) consumption
Indicator name	Total alcohol per capita (age 15+ years) consumption
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Noncommunicable diseases
Definition	Total alcohol per capita is the total amount (sum of recorded alcohol per capita three-year average and unrecorded alcohol per capita) of alcohol consumed per adult (15+ years) in a calendar year, in litres of pure alcohol. Recorded alcohol consumption refers to official statistics (production, import, export, and sales or taxation data), while unrecorded alcohol consumption refers to alcohol which is not taxed and is outside the usual system of government control. In circumstances in which the number of tourists per year is at least the number of inhabitants, tourist consumption is also taken into account and is deducted from a country's recorded alcohol per capita.
Numerator	Sum of recorded and unrecorded alcohol consumed in a population during a calendar year, in litres.
Denominator	Mid-year resident population aged 15+ for the same calendar year.
Disaggregation/ additional dimension	Age, sex, other relevant sociodemographic stratifiers where available
Method of measurement	Recorded consumption: Recorded alcohol per capita (15+ years) consumption of pure alcohol is calculated as the sum of beverage-specific alcohol consumption of pure alcohol (beer, wine, spirits, other) from different sources. The first priority in the decision tree is given to government statistics, the second are country-specific alcohol industry statistics in the public domain (Canadian, IWSR-International Wine and Spirit Research, OIV-International Organisation of Vine and Wine, Wine Institute, historically World Drink Trends), and third is the Food and Agriculture Organization of the United Nations' statistical database (FAOSTAT). For countries where the data source is FAOSTAT, unrecorded consumption may be included in the recorded consumption. Unrecorded consumption: The first priority in the decision tree is given to nationally representative empirical data, often from general population surveys in countries where alcohol is legal. The second priority are specific other empirical investigations, while the third is expert opinion.
Method of estimation	Sum of recorded and unrecorded alcohol consumed in a population during a calendar year.
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Administrative reporting systems for recorded alcohol per capita, and survey data for unrecorded alcohol per capita. The priority of data sources for recorded alcohol per capita consumption should be given to government statistics on sales of alcoholic beverages during a calendar year or data on production, export and import of alcohol in different beverage categories. For countries where government data on sales or production are not available, the preferred data source would be country-specific and publicly available data from the private sector, including alcohol producers, or country-specific data from FAOSTAT which may also include estimates of unrecorded alcohol consumption. For main categories of alcoholic beverages, "beer" includes malt beers, "wine" includes wine made from grapes, "spirits" include all distilled beverages, and "other" includes one or several other alcoholic beverages – such as fermented beverages made from sorghum, maize, millet, rice, or cider, fruit wine, fortified wine, etc. Data sources for unrecorded alcohol consumption include survey data, FAOSTAT data, other data sources such as customs or police data, and expert opinion.
Other possible data sources	Data sets of FAO and United Nations Statistics Division
Further information and related links	Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015). Global health risks: mortality and burden of disease attributable to selected major risks. Geneva: World Health Organization; 2009 (http://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf, accessed 29 March 2015). Global strategy to reduce the harmful use of alcohol. Geneva: World Health Organization; 2010 (http://www.who.int/substance_abuse/alcstratenglishfinal.pdf?ua=1, accessed 29 March 2015). Rehm J, Baliunas D, Borges GL, Graham K, Irving H, Kehoe T et al. The relation between different dimensions of alcohol consumption and burden of disease - an overview. Addiction. 2010;105(5):817–43.

Tobacco use among persons aged 18+ years

Abbreviated name	Tobacco use among persons aged 18+ years
Indicator name	Age-standardized prevalence of current tobacco use among persons aged 18+ years
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Noncommunicable diseases
Definition	Age-standardized prevalence of current tobacco use among persons aged 18+ years. "Smoked tobacco products" include the consumption of cigarettes, bidis, cigars, cheroots, pipes, shisha (water pipes), fine-cut smoking articles (roll-your-own), krekets, and any other form of smoked tobacco. "Smokeless tobacco" includes moist snuff, plug, creamy snuff, dissolvables, dry snuff, gul, loose leaf, red tooth powder, snus, chimo, gutkha, khaini, gudakhu, zarda, quiwam, dohra, tuibur, nasway, naas/naswar, shammah, betel quid, toombak, pan (betel quid), iq'mik, mishri, tapkeer, tombol and any other tobacco product that is sniffed, held in the mouth, or chewed.
Numerator	Number of current tobacco users aged 18+ years. "Current users" include both daily and non-daily users of smoked or smokeless tobacco.
Denominator	All respondents of the survey aged 18+ years.
Disaggregation/ additional dimension	Age, sex, other relevant sociodemographic stratifiers where available
Method of measurement	
Method of estimation	Number of respondents aged 18+ years currently using any tobacco product (smoked or smokeless)/(number of survey respondents aged 18+ years) x 100.
Measurement frequency	At least every 5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based (preferably nationally representative) survey
Other possible data sources	
Further information and related links	Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015). Global estimate of the burden of disease from second-hand smoke. Geneva: World Health Organization; 2010.

Children aged under 5 years who are overweight

Abbreviated name	Children aged under 5 years who are overweight
Indicator name	Children aged under 5 years who are overweight
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Noncommunicable diseases
Definition	Prevalence of weight-for-height in children aged 0–59 months defined as above +2 standard deviations of the WHO Child Growth Standards median
Numerator	Number of children aged 0–59 months who are overweight.
Denominator	Total number of children aged 0–59 months who were measured.
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status
Method of measurement	Percentage of children aged < 5 years who are overweight for age = (number of children aged 0–59 months whose z-score is over two standard deviations above the median weight-for-height of the WHO Child Growth Standards/total number of children aged 0–59 months who were measured) x 100. Children's weight and height are measured using standard technology (e.g. children under 24 months are measured lying down, while standing height is measured in children 24 months and older. The data sources include national nutrition surveys, any other nationally representative population-based surveys with nutrition modules, and national surveillance systems.
Method of estimation	WHO maintains the Global Database on Child Growth and Malnutrition, which includes population-based surveys that fulfil a set of criteria. Data are checked for validity and consistency and raw data-sets are analysed according to a standard procedure to obtain comparable results. Prevalence below and above defined cut-off points for weight-for-age, height-for-age, weight-for-height and BMI-for-age in pre-school children are presented using z-scores based on the WHO Child Growth Standards. A detailed description of the methodology and procedures of the database – including data sources, criteria for inclusion, data quality control and database workflow – are described in a paper published in 2003 in the International Journal of Epidemiology (de Onis M, Blössner M). Predominant type of statistics: adjusted.
Measurement frequency	Every 3–5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	National nutrition surveys
Other possible data sources	Population-based health surveys with nutrition modules, national surveillance systems
Further information and related links	A draft framework for the global monitoring of the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. Informal Consultation with Member States and UN Agencies on a Proposed Set of Indicators for the Global Monitoring Framework for Maternal, Infant and Young Child Nutrition, 30 September to 1 October 2013. Geneva: World Health Organization; 2013 (http://www.who.int/nutrition/events/2013_consultation_indicators_globalmonitoringframework_WHO_MIYCN.pdf, accessed 29 March 2015). de Onis M, Blössner M. The World Health Organization Global Database on Child Growth and Malnutrition: methodology and applications. Int J Epidemiol 2003;32(4):518-26. Decision WHA67(9). Maternal, infant and young child nutrition. In: Sixty-seventh World Health Assembly, Geneva, 19-24 May 2014. Resolutions and decisions, annexes. Geneva: World Health Organization; 2014 (http://apps.who.int/gb/ebwha/pdf_files/WHA67-REC1/A67_2014_REC1-en.pdf, page 62, accessed 29 March 2015). Document A67/15. Maternal, infant and young child nutrition. The Global Strategy and the Comprehensive Implementation Plan. Report by the Secretariat. Sixty-seventh World Health Assembly, Geneva, 19–24 May 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_15-en.pdf, accessed 29 March 2015). Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015). Organisation for Economic Co-operation and Development. Health at a Glance 2013: OECD Indicators, Paris: OECD Publishing; 2013 (http://dx.doi.org/10.1787/health_glance-2013-en, accessed 29 March 2014). WHO child growth standards: Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: Methods and development. Geneva: World Health Organization; 2006 (http://www.who.int/childgrowth/standards/technical_report/en/, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Abbreviated name	Overweight and obesity in adults *(Also: adolescents)*
Indicator name	Age-standardized prevalence of overweight and obesity in persons aged 18+ years
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Noncommunicable diseases
Definition	Percentage of adults (18+ years) who are overweight (defined as having a BMI ≥ 25 kg/m^2) and obese (defined as having a BMI ≥ 30 kg/m^2).
Numerator	Number of respondents aged 18+ years who are overweight. Number of respondents aged 18+ years who are obese. BMI is calculated by dividing weight in kilograms by height in meters squared. Overweight is defined as having a BMI ≥ 25 kg/m^2 and obesity is defined as having a BMI ≥ 30 kg/m^2.
Denominator	All respondents of the survey aged 18+ years.
Disaggregation/ additional dimension	Age, sex, other relevant sociodemographic stratifiers where available *Also: Overweight and obesity in adolescents.* Note: In adolescents the definitions of overweight and obesity vary by age and gender. The prevalence of overweight is defined as the percentage of adolescents with sex-specific BMI-for-age above +1 SD from the WHO 2007 growth reference median, and the prevalence of obesity as the percentage of adolescents with sex-specific BMI-for-age above +2 SD from the WHO 2007 growth reference median.
Method of measurement	
Method of estimation	(Number of survey respondents aged 18+ years who are overweight)/(number of survey respondents aged 18+ years) x 100. (Number of survey respondents aged 18+ years who are obese)/(number of survey respondents aged 18+ years) x 100.
Measurement frequency	At least every five years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based (preferably nationally representative) survey in which height and weight were measured
Other possible data sources	
Further information and related links	de Onis M, Onyango AW, Borghi E, Siyam A, Nishida C, Siekmann J. Development of a WHO growth reference for school-aged children and adolescents. Bull World Health Organ. 2007;85:660–7 (http://www.who.int/growthref/growthref_who_bull/en/, accessed 29 March 2015). Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015).

Raised blood pressure among adults

Abbreviated name	Raised blood pressure among adults
Indicator name	Age-standardized prevalence of raised blood pressure among persons aged 18+ years
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Noncommunicable diseases
Definition	Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure ≥ 140 mmHg and/or diastolic blood pressure ≥ 90 mmHg), and mean systolic blood pressure.
Numerator	Number of respondents with systolic blood pressure ≥ 140mmHg or diastolic blood pressure ≥ 90mmHg. Ideally three blood pressure measurements should be taken and the average systolic and diastolic readings of the second and third measures should be used in this calculation.
Denominator	All respondents of the survey aged 18+ years.
Disaggregation/ additional dimension	Age, sex, other relevant sociodemographic stratifiers where available
Method of measurement	
Method of estimation	(Number of respondents aged 18+years with systolic blood pressure ≥ 140 mmHg or diastolic blood pressure ≥ 90 mmHg)/(number of survey respondents aged 18+ years) x 100.
Measurement frequency	At least every five years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based (preferably nationally representative) survey in which blood pressure was measured, not self-reported
Other possible data sources	
Further information and related links	Diet, nutrition and the prevention of chronic diseases: report of a Joint WHO/FAO Expert Consultation. Geneva: World Health Organization; 2003 (WHO Technical Report Series, No. 916; http://whqlibdoc.who.int/trs/WHO_TRS_916.pdf, accessed 29 March 2015). Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015).

Abbreviated name	Raised blood glucose/diabetes among adults
Indicator name	Age-standardized prevalence of raised blood glucose/diabetes among persons aged 18+ years or on medication for raised blood glucose
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Noncommunicable diseases
Definition	Age-standardized prevalence of raised blood glucose/diabetes among persons aged 18+ years or on medication for raised blood glucose (defined as fasting plasma glucose value ≥ 7.0 mmol/L (126 mg/dL) or on medication for raised blood glucose among adults aged 18+ years).
Numerator	Number of respondents aged 18+ years with fasting plasma glucose value ≥7.0 mmol/L (126 mg/dL) or on medication for raised blood glucose. Fasting blood glucose must be measured, not self-reported, and measurements must be taken after the person has fasted for at least eight hours.
Denominator	All respondents of the survey aged 18+ years.
Disaggregation/ additional dimension	Age, sex, other relevant sociodemographic stratifiers where available
Method of measurement	
Method of estimation	(Number of respondents aged 18+ years with fasting plasma glucose value ≥ 7.0 mmol/L [126 mg/dL] or on medication for raised blood glucose)/ (number of survey respondents aged 18+ years) x 100.
Measurement frequency	At least every 5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based (preferably nationally representative) survey. There are two main blood chemistry screening methods – dry and wet chemistry. Dry chemistry uses capillary blood taken from a finger and is used in a rapid diagnostic test. Wet chemistry uses a venous blood sample with a laboratory-based test. Either method is acceptable.
Other possible data sources	
Further information and related links	Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015). Levitan EB, Song Y, Ford ES, Liu S. Is nondiabetic hyperglycemia a risk factor for cardiovascular disease? A meta-analysis of prospective studies. Arch Intern Med. 2004;164(19):2147–55.

Salt intake

Abbreviated name	Salt intake
Indicator name	Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Noncommunicable diseases
Definition	Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years.
Numerator	The sum of sodium excretion in urine samples from all respondents aged 18+ years. The gold standard for estimating salt intake is through 24-hour urine collection. However, other methods such as spot urine and food frequency surveys may be more feasible to administer at the population level.
Denominator	All respondents of the survey aged 18+ years.
Disaggregation/ additional dimension	Age, sex, other relevant sociodemographic stratifiers where available
Method of measurement	
Method of estimation	Sum of sodium excretion in urine samples from all respondents aged 18+ years/number of survey respondents aged 18+ years.
Measurement frequency	At least every 5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based (preferably nationally representative) survey
Other possible data sources	
Further information and related links	Brown IJ, Tzoulaki I, Candelas V, Elliott P. Salt intakes around the world: implications for public health. Int J Epidemiol. 2009;38:791–813. Cappuccio F, Capewell S, Lincoln P, McPherson K. Policy options to reduce population salt intake. BMJ. 2011;343:d4995. Creating an enabling environment for population-based salt reduction strategies: report of a joint technical meeting held by WHO and the Food Standards Agency, United Kingdom, July 2010. Geneva: World Health Organization; 2010. Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015). Prevention of cardiovascular disease: pocket guidelines for assessment and management of cardiovascular risk. Geneva: World Health Organization; 2007.

Abbreviated name	Insufficient physical activity in adults *(Also: adolescents)*
Indicator name	Age-standardized prevalence of insufficiently physically active persons aged 18+ years
Domain	Risk factors
Subdomain	NCDs and nutrition
Associated terms	Noncommunicable diseases
Definition	Age-standardized prevalence of insufficiently physically active persons aged 18+ years (percentage of adults aged 18+ years not meeting any of the following criteria: 150 minutes of moderate-intensity physical activity per week; 75 minutes of vigorous-intensity physical activity per week; an equivalent combination of moderate- and vigorous-intensity physical activity accumulating at least 600 metabolic equivalent minutes per week (minutes of physical activity can be accumulated over the course of a week but must be of a duration of at least 10 minutes). *Metabolic equivalent (MET) is the ratio of a person's working metabolic rate relative to the resting metabolic rate. One metabolic equivalent is defined as the energy cost of sitting quietly and is equivalent to a caloric consumption of 1 kcal/kg per hour. Physical activities are frequently classified by their intensity, using the metabolic equivalent as a reference.
Numerator	Number of respondents where all three of the following criteria are true: weekly minutes* of vigorous activity < 75 minutes; weekly minutes* of moderate activity < 150 minutes; weekly metabolic equivalent minutes** < 600. * Weekly minutes are calculated by multiplying the number of days on which vigorous/moderate activity is done by the number of minutes of vigorous/moderate activity per day. ** Weekly metabolic equivalent minutes are calculated by multiplying the weekly minutes of vigorous activity by 8 and the number of weekly minutes of moderate activity by 4 and then adding these two results together.
Denominator	All respondents of the survey aged 18+ years.
Disaggregation/ additional dimension	Age, sex, other relevant sociodemographic stratifiers where available *Also: Prevalence of insufficiently physically active adolescents (defined as less than 60 minutes of moderate to vigorous intensity activity daily)*
Method of measurement	
Method of estimation	(Number of respondents aged 18+ years not meeting the aforementioned criteria for physical activity)/(number of survey respondents aged 18+ years) x 100.
Measurement frequency	At least every 5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based (preferably nationally representative) survey
Other possible data sources	
Further information and related links	Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015). Global recommendations on physical activity for health. Geneva: World Health Organization; 2010. Physical Activity Guidelines Advisory Committee (PAGAC). Physical Activity Guidelines Advisory Committee Report, 2008. Washington (DC): Department of Health and Human Services; 2008.

Intimate partner violence prevalence

Abbreviated name	Intimate partner violence prevalence
Indicator name	Intimate partner violence prevalence
Domain	Risk factors
Subdomain	Injury and violence
Associated terms	Injuries
Definition	Percentage of currently partnered girls and women aged 15–49 years who have experienced physical and/or sexual violence by their current intimate partner in the last 12 months.
Numerator	Number of girls and women who currently have an intimate partner, and who report experiencing physical or sexual violence by their current intimate partner in the past 12 months.
Denominator	Total number of girls and women aged 15–49 years surveyed who currently have or had an intimate partner.
Disaggregation/ additional dimension	Age (15–19, 20–24 and 25–49 years), HIV status
Method of measurement	Household surveys with a special module on violence.
Method of estimation	
Measurement frequency	5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys
Other possible data sources	
Further information and related links	Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Global AIDS response progress reporting 2014: construction of core indicators for monitoring the 2011 United Nations political declaration on HIV/AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2014 (http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf, accessed 29 March 2015). Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence. Geneva: World Health Organization; 2013.

Service coverage indicators

Reproductive, maternal, newborn, child and adolescent

- Demand for family planning satisfied with modern methods
- Contraceptive prevalence rate
- Antenatal care coverage
- Births attended by skilled health personnel
- Postpartum care coverage
- Care-seeking for symptoms of pneumonia
- Children with diarrhoea receiving oral rehydration solution (ORS)
- Vitamin A supplementation coverage

Immunization

- Immunization coverage rate by vaccine for each vaccine in the national schedule

HIV

- People living with HIV who have been diagnosed
- Prevention of mother-to-child transmission
- HIV care coverage
- Antiretroviral therapy (ART) coverage
- HIV viral load suppression

HIV/TB

- TB preventive therapy for HIV-positive people newly enrolled in HIV care
- HIV test results for registered new and relapse TB patients
- HIV-positive new and relapse TB patients on ART during TB treatment

Tuberculosis

- TB patients with results for drug susceptibility testing
- TB case detection rate
- Second-line treatment coverage among multidrug-resistant tuberculosis (MDR-TB) cases

Malaria

- Intermittent preventive therapy for malaria during pregnancy (IPTp)
- Use of insecticide treated nets (ITNs)
- Treatment of confirmed malaria cases
- Indoor residual spraying (IRS) coverage

Neglected tropical diseases

- Coverage of preventive chemotherapy for selected neglected tropical diseases

Screening and preventive care

- Cervical cancer screening

Mental Health

- Coverage of services for severe mental health disorders

Demand for family planning satisfied with modern methods

Abbreviated name	Demand for family planning satisfied with modern methods
Indicator name	Demand for family planning satisfied with modern methods
Domain	Service coverage
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Reproductive, maternal, newborn, child and adolescent
Definition	Percentage of women of reproductive age (15–49 years) who are sexually active and who have their need for family planning satisfied with modern methods.
Numerator	Number of women with family planning demand who use modern methods
Denominator	Total number of women in need of family planning.
Disaggregation/ additional dimension	Age, marital status, place of residence, socioeconomic status
Method of measurement	Household surveys include a series of questions to measure modern contraceptive prevalence rate and demand for family planning. Total demand for family planning is defined as the sum of the number of women of reproductive age (15–49 years) who are married or in a union and who are currently using, or whose sexual partner is currently using, at least one contraceptive method, and the unmet need for family planning. Unmet need for family planning is the proportion of women of reproductive age (15–49 years) either married or in a consensual union, who are fecund and sexually active but who are not using any method of contraception (modern or traditional), and report not wanting any more children or wanting to delay the birth of their next child for at least two years. Included are: 1. all pregnant women (married or in a consensual union) whose pregnancies were unwanted or mistimed at the time of conception; 2. all postpartum amenorrhoeic women (married or in consensual union) who are not using family planning and whose last birth was unwanted or mistimed; 3. all fecund women (married or in consensual union) who are neither pregnant nor postpartum amenorrhoeic, and who either do not want any more children (want to limit family size), or who wish to postpone the birth of a child for at least two years or do not know when or if they want another child (want to space births), but are not using any contraceptive method.
Method of estimation	
Measurement frequency	Every 3–5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based health surveys
Other possible data sources	
Further information and related links	Countdown to 2015. Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44770/1/9789241502818_eng.pdf, accessed 29 March 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Keeping promises, measuring results. Commission on information and accountability for Women's and Children's Health. Geneva: World Health Organization; 2011 (http://www.who.int/topics/millennium_development_goals/accountability_commission/Commission_Report_advance_copy.pdf, accessed 29 March 2015). Monitoring progress in family planning. FP2020 core indicators. Glastonbury (CT): Track20 (http://www.track20.org/pages/data/indicators, 21 March 2014). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Abbreviated name	Contraceptive prevalence rate
Indicator name	Contraceptive prevalence rate
Domain	Service coverage
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Reproductive, maternal, newborn, child and adolescent
Definition	Percentage of women aged 15–49 years, married or in union, who are currently using, or whose sexual partner is using, at least one method of contraception, regardless of the method used.
Numerator	Number of women using or partner using a contraceptive method.
Denominator	Number of women married or in a union.
Disaggregation/ additional dimension	Age, method (short, long, permanent), place of residence, sexually active (irrespective of marital status or whether in a union), socioeconomic status
Method of measurement	Contraceptive prevalence = (women of reproductive age [15–49 years] who are married or in a union and who are currently using any method of contraception)/(total number of women of reproductive age [15–49 years] who are married or in a union) x 100. Household surveys that can generate this indicator include DHS, MICS, Fertility and Family Surveys (FFS), Reproductive Health Surveys (RHS) and other surveys based on similar methodologies.
Method of estimation	The United Nations Population Division compiles data from nationally representative surveys, including the DHS, MICS, FFS, the CDC-assisted RHS and national family planning, or health, or household, or socioeconomic surveys. In general, all nationally representative surveys with comparable questions on current use of contraception are included. There is no attempt to provide estimates when country data are not available. The results are published regularly in the World Contraceptive Use report. Predominant type of statistics: adjusted.
Measurement frequency	Biennial
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys
Other possible data sources	Routine facility information systems/health facility assessments and surveys
Further information and related links	Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). Keeping promises, measuring results. Commission on information and accountability for Women's and Children's Health. Geneva: World Health Organization; 2011 (http://www.who.int/topics/millennium_development_goals/accountability_commission/Commission_Report_advance_copy.pdf, accessed 29 March 2015). Monitoring progress in family planning. FP2020 core indicators. Glastonbury (CT): Track20 (http://www.track20.org/pages/data/indicators, 21 March 2014). Standard foreign assistance indicators/standard foreign assistance master indicator list (MIL). Washington (DC): United States Agency for International Development (http://www.state.gov/f/indicators/index.htm, accessed 26 June 2014). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Antenatal care coverage

Abbreviated name	Antenatal care coverage
Indicator name	Antenatal care coverage – at least four visits (%)
Domain	Service coverage
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Reproductive, maternal, newborn, child and adolescent
Definition	Percentage of women aged 15–49 years with a live birth in a given time period who received antenatal care, four times or more.
Numerator	Number of women aged 15–49 years with a live birth in a given time period who received antenatal care four or more times.
Denominator	Total number of women aged 15–49 years with a live birth in the same period.
Disaggregation/ additional dimension	Age, place of residence, socioeconomic status, type of provider *Also: at least one visit*
Method of measurement	The number of women aged 15–49 years with a live birth in a given time period who received antenatal care four or more times during pregnancy is expressed as a percentage of women aged 15–49 with a live birth in the same period. (Number of women aged 15–49 years attended at least four times during pregnancy by any provider for reasons related to the pregnancy/total number of women aged 15–49 years with a live birth) x 100. The indicators of antenatal care (at least one visit and at least four visits) are based on standard questions that ask if and how many times the health of the woman was checked during pregnancy. This is because the key national-level household surveys do not collect information on type of provider for each visit. The indicators of antenatal care (at least one visit and at least four visits) are based on standard questions that ask if, how many times, and by whom the health of the woman was checked during pregnancy. Household surveys that can generate this indicator include DHS, MICS, FFS, RHS and other surveys based on similar methodologies. Service/facility reporting systems can be used where the coverage is high, usually in industrialized countries.
Method of estimation	
Measurement frequency	Annual from routine facility reports; every 3–5 years from survey
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys
Other possible data sources	Routine facility information systems
Further information and related links	Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). Keeping promises, measuring results. Commission on information and accountability for Women's and Children's Health. Geneva: World Health Organization; 2011 (http://www.who.int/topics/millennium_development_goals/accountability_commission/Commission_Report_advance_copy.pdf, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Abbreviated name	Births attended by skilled health personnel
Indicator name	Births attended by skilled health personnel (%)
Domain	Service coverage
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Reproductive, maternal, newborn, child and adolescent
Definition	Percentage of live births attended by skilled health personnel during a specified time period.
Numerator	Number of births attended by skilled health personnel (doctors, nurses or midwives) trained in providing life-saving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, childbirth and the postpartum period, to conduct deliveries on their own, and to care for newborns.
Denominator	The total number of live births in the same period.
Disaggregation/ additional dimension	Age, parity, place of residence, socioeconomic status, type of provider *Also: Institutional delivery coverage (women giving birth in a health institution) among all births in the population*
Method of measurement	Definition of skilled birth attendant varies between countries. The percentage of births attended by skilled health personnel is calculated as the number of births attended by skilled health personnel (doctors, nurses or midwives) expressed as a percentage of the total number of births in the same period. Births attended by skilled health personnel = (number of births attended by skilled health personnel)/(total number of live births) x 100. In household surveys, such as DHS, MICS and RHS, the respondent is asked about each live birth and who helped during delivery for a period up to five years before the interview. Service/facility records could be used where a high proportion of births occur in health facilities and are therefore recorded.
Method of estimation	Data for global monitoring are reported by UNICEF and WHO. These agencies obtain the data – both survey and registry data – from national sources. Before data can be included in the global databases, UNICEF and WHO undertake a process of data verification that includes correspondence with field offices to clarify any questions. In terms of survey data, some survey reports may present a total percentage of births attended by a type of provider that does not conform to the MDG definition (e.g. total includes providers who are not considered skilled, such as community health workers). In this case, the percentage delivered by a physician, nurse or midwife are totalled and entered into the global database as the MDG estimate. Predominant type of statistics: adjusted.
Measurement frequency	Biennial
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys
Other possible data sources	Routine facility information systems
Further information and related links	Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). Countdown to 2015. Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44770/1/9789241502818_eng.pdf, accessed 29 March 2015). Every newborn: an action plan to end preventable deaths. Geneva: World Health Organization; 2014 (http://www.everynewborn.org/Documents/Full-action-plan-EN.pdf, accessed 29 March 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). Keeping promises, measuring results. Commission on information and accountability for Women's and Children's Health. Geneva: World Health Organization; 2011 (http://www.who.int/topics/millennium_development_goals/accountability_commission/Commission_Report_advance_copy.pdf, accessed 29 March 2015).

Postpartum care coverage

Abbreviated name	Postpartum care coverage
Indicator name	Postpartum care coverage
Domain	Service coverage
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Reproductive, maternal, newborn, child and adolescent
Definition	Percentage of mothers and babies who received postpartum care within two days of childbirth (regardless of place of delivery).
Numerator	Number of women and babies who received postpartum care within two days of childbirth.
Denominator	Total number of women age 15–49 years with a live birth in the specified time period.
Disaggregation/ additional dimension	Age, facility ownership, marital status, parity, place of residence, socioeconomic status
Method of measurement	
Method of estimation	
Measurement frequency	Annual from routine facility reports; every 3–5 years from survey
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based health surveys
Other possible data sources	Routine facility information systems/health facility assessments and surveys
Further information and related links	Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). Countdown to 2015. Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44770/1/9789241502818_eng.pdf, accessed 29 March 2015). Every newborn: an action plan to end preventable deaths. Geneva: World Health Organization; 2014 (http://www.everynewborn.org/Documents/Full-action-plan-EN.pdf, accessed 29 March 2015). Keeping promises, measuring results. Commission on information and accountability for Women's and Children's Health. Geneva: World Health Organization; 2011 (http://www.who.int/topics/millennium_development_goals/accountability_commission/Commission_Report_advance_copy.pdf, accessed 29 March 2015). Standard foreign assistance indicators/standard foreign assistance master indicator list (MIL). Washington (DC): United States Agency for International Development (http://www.state.gov/f/indicators/index.htm, accessed 26 June 2014).

Abbreviated name	Care-seeking for symptoms of pneumonia
Indicator name	Percentage of children under 5 years of age with suspected pneumonia taken to a health facility
Domain	Service coverage
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Reproductive, maternal, newborn, child and adolescent
Definition	Percentage of children under 5 years of age with suspected pneumonia (cough and difficult breathing NOT due to a problem in the chest and a blocked nose) in the two weeks preceding the survey taken to an appropriate health facility or provider.
Numerator	Number of children with suspected pneumonia in the two weeks preceding the survey taken to an appropriate health provider.
Denominator	Number of children with suspected pneumonia in the two weeks preceding the survey.
Disaggregation/ additional dimension	Place of residence, provider, sex, socioeconomic status, *Also: with "receiving appropriate antibiotics"*
Method of measurement	During the UNICEF/WHO Meeting on Child Survival Survey-based Indicators, held in New York, USA, on 17–18 June 2004, it was recommended that suspected Acute Respiratory Infection (ARI) be described as "presumed pneumonia" to better reflect the probable cause and the recommended interventions. The definition of ARI used in the DHS and MICS was chosen by the group and is based on the mother's perceptions of a child who has a cough, is breathing faster than usual with short, quick breaths or is having difficulty breathing, excluding children who had only a blocked nose.
Method of estimation	
Measurement frequency	Every 3–5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys
Other possible data sources	
Further information and related links	Countdown to 2015. Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44770/1/9789241502818_eng.pdf, accessed 29 March 2015). Ending preventable child deaths from pneumonia and diarrhoea by 2025. The integrated Global Action Plan for Pneumonia and Diarrhoea (GAPPD). Geneva: World Health Organization/United Nations Children's Fund; 2013 (http://apps.who.int/iris/bitstream/10665/79200/1/9789241505239_eng.pdf?ua=1, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Children with diarrhoea receiving oral rehydration solution (ORS)

Abbreviated name	Children with diarrhoea receiving oral rehydration solution (ORS)
Indicator name	Children with diarrhoea receiving oral rehydration solution (ORS)
Domain	Service coverage
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Reproductive, maternal, newborn, child and adolescent
Definition	Percentage of children under 5 years of age with diarrhoea in the last two weeks receiving ORS (fluids made from ORS packets or pre-packaged ORS fluids).
Numerator	Number of children under 5 years of age with diarrhoea in the two weeks preceding the survey given fluid from ORS packets or pre-packaged ORS fluids.
Denominator	Number of children with diarrhoea in the two weeks preceding the survey.
Disaggregation/ additional dimension	Place of residence, sex, socioeconomic status *Also: with continued feeding, oral rehydration therapy (ORT)*
Method of measurement	According to the DHS, the term(s) used for diarrhoea should encompass the expressions used for all forms of diarrhoea, including bloody stools (consistent with dysentery), watery stools, etc. The term encompasses the mother's definition as well as locally-used term(s).
Method of estimation	
Measurement frequency	
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys
Other possible data sources	Routine facility information systems
Further information and related links	Ending preventable child deaths from pneumonia and diarrhoea by 2025. The integrated Global Action Plan for Pneumonia and Diarrhoea (GAPPD). Geneva: World Health Organization/United Nations Children's Fund; 2013 (http://apps.who.int/iris/bitstream/10665/79200/1/9789241505239_eng.pdf?ua=1, accessed 29 March 2015). Standard foreign assistance indicators/standard foreign assistance master indicator list (MIL). Washington (DC): United States Agency for International Development (http://www.state.gov/f/indicators/index.htm, accessed 26 June 2014). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Vitamin A supplementation coverage

Abbreviated name	Vitamin A supplementation coverage
Indicator name	Children aged 6–59 months who received vitamin A supplementation (% of doses)
Domain	Service coverage
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Reproductive, maternal, newborn, child and adolescent
Definition	Percentage of children aged 6–59 months who received two age-appropriate doses of vitamin A in the past 12 months.
Numerator	Number of children who received two age-appropriate doses of vitamin A supplements in the last 12 months.
Denominator	Number of children aged 6–59 months in the survey.
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status
Method of measurement	In accordance with WHO's 2011 guidelines on vitamin A supplementation in infants and children aged 6–59 months.
Method of estimation	
Measurement frequency	Annual from routine facility reports; every 3–5 years from survey
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys
Other possible data sources	Routine facility information systems
Further information and related links	Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). Ending preventable child deaths from pneumonia and diarrhoea by 2025. The integrated Global Action Plan for Pneumonia and Diarrhoea (GAPPD). Geneva: World Health Organization/United Nations Children's Fund; 2013 (http://apps.who.int/iris/bitstream/10665/79200/1/9789241505239_eng.pdf?ua=1, accessed 29 March 2015). Guideline: Vitamin A supplementation in infants and children 6–59 months of age. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44664/1/9789241501767_eng.pdf?ua=1&ua=1, accessed 24 April 2015). Standard foreign assistance indicators/standard foreign assistance master indicator list (MIL). Washington (DC): United States Agency for International Development (http://www.state.gov/f/indicators/index.htm, accessed 26 June 2014). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Immunization coverage rate by vaccine for each vaccine in the national schedule

Abbreviated name	Immunization coverage rate by vaccine for each vaccine in the national schedule
Indicator name	Immunization coverage rate by vaccine for each vaccine in the national schedule
Domain	Service coverage
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Immunization
Definition	Percentage of the target population that has received the last recommended dose for each vaccine recommended in the national schedule by vaccine. This should include all vaccines within a country's routine immunization schedule (e.g., Bacillus Calmette–Guérin (BCG); polio; pneumococcal conjugate vaccine (PCV); rotavirus; diphtheria, tetanus, pertussis-Hepatitis B-Haemophilus influenzae type B vaccine (DTP-HepB-Hib); measles (MCV); rubella; human papilloma virus (HPV); tetanus toxoid (TT); influenza; and others as determined by the national schedule).
Numerator	The number of individuals in the target group for each vaccine that has received the last recommended dose in the series. For vaccines in the infant immunization schedule, this would be the number of children aged 12–23 months who have received the specified vaccinations before their first birthday.
Denominator	The total number of individuals in the target group for each vaccine. For vaccines in the infant immunization schedule, this would be the total number of infants surviving to age one.
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status DTP1-DTP3 dropout rate, MCV1-MCV2 dropout, full immunization coverage where possible
Method of measurement	Example of a national schedule is: At birth: BCG, HepB, oral polio vaccine At 6, 10 and 14 weeks: DTP-HepB-Hib, PCV, rotavirus, oral polio vaccine (with one dose of inactivated polio vaccine) At 9 months: measles At 18 months measles For adolescents: HPV TT: multiple For persons aged over 60 years: influenza.
Method of estimation	For survey data, the vaccination status of children aged 12–23 months is used for vaccines included in the infant immunization schedule, collected from child health cards or, if there is no card, from recall by the care-taker.
Measurement frequency	Annual tracking through facility information systems, supplemented by periodic estimation through household surveys
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys, facility information systems
Other possible data sources	
Further information and related links	Countdown to 2015. Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44770/1/9789241502818_eng.pdf, accessed 29 March 2015).

Abbreviated name	People living with HIV who have been diagnosed
Indicator name	People living with HIV who have been diagnosed (%)
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	HIV
Definition	Percentage of people living with HIV who have been diagnosed.
Numerator	Number of people living with HIV who have been diagnosed.
Denominator	Estimated number of people living with HIV.
Disaggregation/ additional dimension	Age (<1, 1–4, 5–9, 10–19, 20–24, 25–49, 50+ years), sex, key populations, other target populations
Method of measurement	The denominator is the estimated total number of people living with HIV based on HIV estimation models, such as Spectrum. If an HIV case report registry that is regularly updated is available, the numerator can be calculated by taking the number of cases reported in the registry and subtracting any deaths that may have occurred. Case report data can provide cumulative information on the overall number of people living with HIV who have been diagnosed since the beginning of record-keeping. Household surveys with HIV testing and questions to assess whether respondents know their positive status is another means of measurement.
Method of estimation	If death records are not widely available for counting the number of people living with HIV who know their HIV status and are alive, other proxy data could be reviewed in order to estimate the indicator value. For example, the number of HIV-related deaths may be estimated from other sources (e.g. cause-specific death registries, modelling). Survey data on the percentage of people living with HIV who know their HIV status (ever, and in the past 12 months) can also be used to triangulate estimates.
Measurement frequency	
Monitoring and evaluation framework	Outcome
Preferred data sources	Case registry
Other possible data sources	Surveys and models for estimates
Further information and related links	Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Next generation indicators reference guide: planning and reporting. Version 1.2. Washington (DC): The President's Emergency Plan for AIDS Relief; 2013 (http://www.pepfar.gov/documents/organization/206097.pdf, accessed 29 March 2014).

Prevention of mother-to-child transmission

Abbreviated name	Prevention of mother-to-child transmission
Indicator name	Prevention of mother-to-child transmission
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	HIV
Definition	Percentage of HIV-positive pregnant women provided with ART to reduce the risk of mother-to-child transmission during pregnancy.
Numerator	Number of HIV-positive pregnant women who received ART as recommended by WHO.
Denominator	Estimated number of HIV-positive pregnant women.
Disaggregation/ additional dimension	Already on ART Newly on ART Other regimen categories specific to setting
Method of measurement	Numerator: national programme records aggregated from programme monitoring tools, such as patient registers and summary reporting forms. Denominator: estimation models such as Spectrum or antenatal clinic surveillance surveys, in combination with demographic data and appropriate adjustments related to coverage of antenatal care surveys.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Routine facility information systems
Other possible data sources	
Further information and related links	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, accessed 10 June 2015). Countdown to 2015. Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44770/1/9789241502818_eng.pdf, accessed 29 March 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Global AIDS response progress reporting 2014: construction of core indicators for monitoring the 2011 United Nations political declaration on HIV/AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2014 (http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf, accessed 29 March 2015). Keeping promises, measuring results. Commission on information and accountability for Women's and Children's Health. Geneva: World Health Organization; 2011 (http://www.who.int/topics/millennium_development_goals/accountability_commission/Commission_Report_advance_copy.pdf, accessed 29 March 2015). Next generation indicators reference guide: planning and reporting. Version 1.2. Washington (DC): The President's Emergency Plan for AIDS Relief; 2013 (http://www.pepfar.gov/documents/organization/206097.pdf, accessed 29 March 2014).

Abbreviated name	HIV care coverage
Indicator name	HIV care coverage
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	HIV
Definition	Number and percentage of people living with HIV who are receiving HIV care, as proxied by receipt of at least one of the following during the reporting period: clinical assessment (WHO staging) or CD4 count or viral load or on ART.
Numerator	Number of HIV-positive adults and children who received HIV care (as proxied by receipt of at least one of the following during the reporting period: clinical assessment (WHO staging) or CD4 count or viral load).
Denominator	Estimated number of people living with HIV.
Disaggregation/ additional dimension	Age (< 5, 5–14, 15–19, 20–49, 50+ years), key populations,[8] treatment status (i.e. pre-ART or ART), pregnancy status, sex
Method of measurement	General populations: 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. Key populations: surveys.
Method of estimation	
Measurement frequency	Annual, or more frequently depending on frequency of data use at various levels
Monitoring and evaluation framework	Outcome
Preferred data sources	
Other possible data sources	
Further information and related links	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, accessed 10 June 2015). Spectrum software. Glastonbury (CT): Avenir Health. (http://www.avenirhealth.org/software-spectrum.php, accessed 29 March 2015).

[8] In many settings data on key populations cannot be collected from routine programme monitoring and require surveys.

Antiretroviral therapy (ART) coverage

Abbreviated name	Antiretroviral therapy (ART) coverage
Indicator name	Antiretroviral therapy (ART) coverage (%)
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	HIV
Definition	Percentage of people living with HIV currently receiving ART among the estimated number of adults and children living with HIV.
Numerator	Number of adults and children who are currently receiving ART at the end of the reporting period.
Denominator	Estimated number of adults and children living with HIV.
Disaggregation/ additional dimension	Age: 1. Minimum for paper-based (routine): <15, 15+; 2. Annual data extraction of disaggregated data if not reported routinely: <5, 5–9, 10–14, 15–19, 20–24, 25–49, 50+; 3. Electronic system: 5-year age groups Key populations[9], provider type (public/private), regimen type (e.g. first line, second line), sex
Method of measurement	Numerator: The numerator can be generated by counting the number of adults and children who received antiretroviral combination therapy at the end of the reporting period. Data can be collected from facility-based ART registers or drug supply management systems. These are then tallied and transferred to cross-sectional monthly or quarterly reports which can then be aggregated for national totals. Patients receiving ART in the private sector and public sector should be included in the numerator where data are available. Denominator: The denominator is generated by estimating the number of people with advanced HIV infection requiring (in need of/eligible for) ART. This estimation must take into consideration a variety of factors, including, but not limited to, the current number of people with HIV, the current number of patients on ART and the natural history of HIV from infection to enrolment on ART. A standard modelling HIV estimation method, such as in the Spectrum model, is recommended.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Facility reporting system
Other possible data sources	
Further information and related links	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, accessed 10 June 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Global AIDS response progress reporting 2014: construction of core indicators for monitoring the 2011 United Nations political declaration on HIV/AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2014 (http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf, accessed 29 March 2015). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). Next generation indicators reference guide: planning and reporting. Version 1.2. Washington (DC): The President's Emergency Plan for AIDS Relief; 2013 (http://www.pepfar.gov/documents/organization/206097.pdf, accessed 29 March 2014). Spectrum software. Glastonbury (CT): Avenir Health. (http://www.avenirhealth.org/software-spectrum.php, accessed 29 March 2015).

[9] In many settings data on key populations cannot be collected from routine programme monitoring and require surveys.

Abbreviated name	HIV viral load suppression
Indicator name	HIV viral load suppression
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	HIV
Definition	Percentage of people on ART who are virologically suppressed (VL level ≤ 1000 copies/mL).
Numerator	Number of adults and children living with HIV and on ART who have a suppressed viral load (< 1000 copies/mL).
Denominator	Total number of adults on ART in the past 12 months.
Disaggregation/ additional dimension	Age: 1. Minimum for paper-based (routine): <15, 15+; 2. Annual data extraction of disaggregated data if not reported routinely: <5, 5–9, 10–14, 15–19, 20–24, 25–49, 50+; 3. Electronic system: 5-year age groups Sex
Method of measurement	Viral load data recorded in patient records and reported through facilities. If there are representative surveys collecting viral load data among people living with HIV and those on ART, the survey values can be used. Nationally representative surveys of acquired drug resistance also provide information on viral suppression.[10]
Method of estimation	If a viral load measure is not available from a sufficiently representative sample of people living with HIV who are on ART, the level of viral load suppression among those on ART but without a viral load measurement in the past 12 months needs to be estimated. Estimates can be derived on the basis of characteristics among those without a viral load measure and their expected viral load suppression.
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Routine facility information systems
Other possible data sources	Cross-sectional population-based survey
Further information and related links	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, accessed 10 June 2015). Global AIDS response progress reporting 2014: construction of core indicators for monitoring the 2011 United Nations political declaration on HIV/AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2014 (http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf, accessed 29 March 2015).

[10] Acquired HIVDR Survey (http://www.who.int/hiv/pub/drugresistance/acquired_drugresistance/en/).

TB preventive therapy for HIV-positive people newly enrolled in HIV care

Abbreviated name	TB preventive therapy for HIV-positive people newly enrolled in HIV care
Indicator name	TB preventive therapy for HIV-positive people newly enrolled in HIV care
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	HIV/TB
Definition	Number of patients who are started on treatment for latent TB infection expressed as a percentage of the total number newly enrolled in HIV care in a specified time period.
Numerator	Total number of people living with HIV newly enrolled in HIV care who are started on treatment for latent TB infection in a specified time period.
Denominator	Total number of persons newly enrolled in HIV care – i.e. registered in the pre-ART or ART register during the specified time period.
Disaggregation/ additional dimension	Adults (aged ≥ 15 years) and children (aged 0–4 and 5–14 years), sex
Method of measurement	TB preventive therapy should be started in all eligible persons, and the date of starting treatment should be recorded on an HIV care/ART card (encounter section). Those who accept treatment and receive at least the first dose should then be recorded in pre-ART and ART registers (INH 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 – i.e. who are given at least one dose of anti-TB drugs (e.g. isoniazid). Denominator: Count the total number of people living with HIV newly registered in the pre-ART register plus those registered in the ART register during the reporting period. For accurate planning and drug management, additional information should be collected. A pharmacy-based register may be used to record attendance of clients and collection of drugs. Alternatively, the ART facility may maintain a latent TB infection treatment register in parallel with the ART register. Such a record may facilitate understanding of the number of new and continuing patients on latent TB infection treatment, as well as the treatment completion rate and the frequency and type of adverse events.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Routine facility information systems
Other possible data sources	
Further information and related links	A guide to monitoring and evaluation for collaborative TB/HIV activities (2015 revision). Geneva: World Health Organization; 2015. Global AIDS response progress reporting 2014: construction of core indicators for monitoring the 2011 United Nations political declaration on HIV/AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2014 (http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf, accessed 29 March 2015).

HIV test results for registered new and relapse TB patients

Abbreviated name	HIV test results for registered new and relapse TB patients
Indicator name	HIV test results for registered new and relapse TB patients
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	HIV/TB
Definition	Number of new and relapse TB patients who had an HIV test result recorded in the TB register, expressed as a percentage of the number registered in a specified time period.
Numerator	Number of new and relapse TB patients registered during the specified time period who had an HIV test result recorded in the TB register.
Denominator	Total number of new and relapse TB patients registered in the TB register in the specified time period.
Disaggregation/ additional dimension	Adults (aged ≥ 15 years) and children (aged 0–4 and 5–14 years), HIV status (positive, negative, unknown), sex
Method of measurement	TB treatment cards and TB registers at the basic management unit should document the HIV status of TB patients. The history of previous TB treatment should also be documented systematically to identify new and relapse TB patients. Numerator: Count the total number of new and relapse TB patients registered in a specified time period who had their HIV status documented as positive or negative, including those previously documented to be HIV-positive (e.g. documented evidence of enrolment in HIV care). HIV-negative TB patients are those who had a negative HIV test result at the time of current TB diagnosis. Denominator: Count the total number of new and relapse TB patients registered during the specified time period. Disaggregation of HIV status is documented using HIV test results. This may include TB patients previously documented to be HIV-positive (documented evidence of enrolment in HIV care), those newly detected positive or those having a negative HIV test result at the time of TB diagnosis. The HIV status of all TB patients should be recorded in TB registers at the basic management unit as soon as possible and preferably at the time of TB diagnosis, along with information on past history of TB treatment. This information should be accessible only to the staff directly responsible for the health care of the individual. Maintaining confidentiality is their prime responsibility. Numerator: The total number of new and relapse TB patients registered in a specified time period who had their HIV status documented as positive, including those previously documented to be HIV-positive (e.g. documented evidence of enrolment in HIV care). Denominator: The total number of new and relapse TB patients added to the TB register during the specified time period who had their HIV status documented as positive or negative, including those previously documented to be HIV-positive (e.g. documented evidence of enrolment in HIV care). HIV-negative TB patients include those having a negative test result at the time of TB diagnosis.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Routine facility information systems
Other possible data sources	
Further information and related links	A guide to monitoring and evaluation for collaborative TB/HIV activities (2015 revision). Geneva: World Health Organization; 2015. Definitions and reporting framework for tuberculosis – 2013 revision (WHO/HTM/TB/2013.2). Geneva: World Health Organization; 2013 (http://www.who.int/tb/publications/definitions/en/, accessed 29 March 2015). Global AIDS response progress reporting 2014: construction of core indicators for monitoring the 2011 United Nations political declaration on HIV/AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2014 (http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf, accessed 29 March 2015). Global tuberculosis report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/global_report/en/, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

HIV-positive new and relapse TB patients on ART during TB treatment

Abbreviated name	HIV-positive new and relapse TB patients on ART during TB treatment
Indicator name	HIV-positive new and relapse TB patients on antiretroviral therapy (ART) during TB treatment
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	HIV/TB
Definition	Number of HIV-positive new and relapse TB patients who received ART during TB treatment, expressed as a percentage of those registered in a specified time period.
Numerator	Total number of HIV-positive new and relapse TB patients started on TB treatment during the specified time period who are already on ART or started on ART during TB treatment.
Denominator	Total number of HIV-positive new and relapse TB patients registered during the specified time period.
Disaggregation/ additional dimension	Adults (aged ≥ 15 years) and children (aged 0–4 and 5–14 years), sex
Method of measurement	All HIV-positive new and relapse TB patients detected in a specified time period should be counted for measurement of the proportion receiving ART during TB treatment. Numerator: Count the total number of HIV-positive new and relapse TB patients who were started on TB treatment (as recorded in the TB register) and ART, or who were already on ART (as recorded in the ART register). Denominator: In countries with national web-based data systems with individual case records routinely updated by health facilities, the total number of HIV-positive new and relapse TB patients detected during a specified reporting period can be easily computed. With paper-based systems, the National Tuberculosis Control Programme and National AIDS Control Programme should refer to both the TB and HIV registers to obtain the complete number of patients detected. This can be done by counting the total number of new and relapse TB patients added to the TB register during in a specified time period who had their HIV status documented as positive, including patients previously known to be HIV-positive (e.g. documented evidence of enrolment in HIV care). Cases with undocumented TB treatment history should be counted as new cases. The National Tuberculosis Control Programme and National AIDS Control Programme should ensure that the TB register is updated and that all people living with HIV in pre-ART care or on ART who have a recorded TB diagnosis during the reporting period are also registered. Information in the TB and ART registers at facility level should be reconciled monthly or quarterly, taking into account the possibility of time lags in updating TB information in the ART register and ART information in the TB register. Efforts should be made to update such missing data so that both registers are consistent. Care should be taken to avoid double counting of patients across these registers.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Routine facility information systems
Other possible data sources	
Further information and related links	A guide to monitoring and evaluation for collaborative TB/HIV activities (2015 revision). Geneva: World Health Organization; 2015. Global AIDS response progress reporting 2014: construction of core indicators for monitoring the 2011 United Nations political declaration on HIV/AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2014 (http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf, accessed 29 March 2015). Global tuberculosis report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/global_report/en/, accessed 29 March 2015).

TB patients with results for drug susceptibility testing

Abbreviated name	TB patients with results for drug susceptibility testing
Indicator name	Percentage of TB patients with test results for isoniazid and rifampicin drug susceptibility
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	Tuberculosis
Definition	Percentage of TB cases with results for diagnostic drug susceptibility testing for resistance to isoniazid and rifampicinin a specified time period.
Numerator	Number of TB cases with drug susceptibility testing results for both isoniazid and rifampicin resistance in a specified time period.
Denominator	Number of TB cases identified during the specified time period.
Disaggregation/ additional dimension	Risk factors specified in the national policy, treatment history (new, previously treated)
Method of measurement	Numerator: Laboratory register. Denominator: Basic TB register and treatment card. For some risk categories (e.g. contacts of MDR-TB) the information may have to be traced from elsewhere in the medical records.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Routine facility information systems
Other possible data sources	
Further information and related links	Companion handbook to the WHO guidelines for the programmatic management of drug-resistant tuberculosis. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/pmdt_companionhandbook/en/, accessed 29 March 2015). Definitions and reporting framework for tuberculosis – 2013 revision (WHO/HTM/TB/2013.2). Geneva: World Health Organization; 2013 (http://www.who.int/tb/publications/definitions/en/, accessed 29 March 2015). Global tuberculosis report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/global_report/en/, accessed 29 March 2015).

TB case detection rate

Abbreviated name	TB case detection rate
Indicator name	Case detection rate for all forms of tuberculosis
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	Tuberculosis
Definition	Percentage of estimated new and relapse TB cases detected in a given year under the internationally recommended tuberculosis control strategy. The term "case detection", as used here, means that TB is diagnosed in a patient and is reported within the national surveillance system and then to WHO. The term "rate" is used for historical reasons. The indicator is actually a ratio (expressed as a percentage) and not a rate.
Numerator	Number of new and relapse cases notified in a given year.
Denominator	Number of estimated incident cases in the same year.
Disaggregation/ additional dimension	
Method of measurement	Notification data reported by national TB programmes or national surveillance systems (TB notification rate indicator). For methods used for TB incidence, see methods described for that indicator.
Method of estimation	The number of new and relapse TB cases diagnosed and treated in national TB control programmes and notified to WHO, divided by WHO's estimate of the number of incident TB cases for the same year, expressed as a percentage. Uncertainty bounds are provided in addition to best estimates. For more information, see Chapter 4 of WHO's *Global tuberculosis report 2014* and the online technical appendix.
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Facility information systems, surveillance systems
Other possible data sources	Routine facility information systems/health facility assessments and surveys
Further information and related links	Global tuberculosis report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/global_report/en/, accessed 29 March 2015). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Second-line treatment coverage among multidrug-resistant tuberculosis (MDR-TB) cases

Abbreviated name	Second-line treatment coverage among multidrug-resistant tuberculosis (MDR-TB) cases
Indicator name	Second-line treatment coverage among multidrug-resistant tuberculosis (MDR-TB) cases
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	Tuberculosis
Definition	Percentage of notified TB patients estimated to have MDR-TB who were detected with MDR-TB and enrolled on second-line anti-TB treatment in a specified time period.
Numerator	Number of rifampicin-resistant MDR-TB cases (presumptive or confirmed) registered and started on a prescribed MDR-TB treatment regimen in a specified time period.
Denominator	Estimated number of notified TB patients with MDR-TB.
Disaggregation/ additional dimension	Treatment history (new, previously treated)
Method of measurement	Number of cases started on treatment is counted from the second-line TB treatment register. Number of notified TB patients with MDR-TB is estimated by combining the number of notifications with evidence about the proportion of cases that have MDR-TB from drug resistance surveys or continuous surveillance systems with high coverage of diagnostic testing for drug resistance.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Continuous surveillance systems with drug resistance surveys
Other possible data sources	
Further information and related links	Companion handbook to the WHO guidelines for the programmatic management of drug-resistant tuberculosis. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/pmdt_companionhandbook/en/, accessed 29 March 2015). Definitions and reporting framework for tuberculosis – 2013 revision (WHO/HTM/TB/2013.2). Geneva: World Health Organization; 2013 (http://www.who.int/tb/publications/definitions/en/, accessed 29 March 2015). Global tuberculosis report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/global_report/en/, accessed 29 March 2015). Standard foreign assistance indicators/standard foreign assistance master indicator list (MIL). Washington (DC): United States Agency for International Development (http://www.state.gov/f/indicators/index.htm, accessed 26 June 2014).

Intermittent preventive therapy for malaria during pregnancy (IPTp)

Abbreviated name	Intermittent preventive therapy for malaria during pregnancy (IPTp)
Indicator name	Intermittent preventive therapy for malaria during pregnancy (IPTp)
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	Malaria
Definition	Percentage of women who received three or more doses of intermittent preventive treatment during antenatal care visits during their last pregnancy.
Numerator	Number of women receiving three or more doses of recommended treatment.
Denominator	Total number of pregnant women/surveyed with a live birth in the last 2 years.
Disaggregation/ additional dimension	Age, place of residence, socioeconomic status
Method of measurement	
Method of estimation	
Measurement frequency	
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys, facility information systems
Other possible data sources	
Further information and related links	Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). Household Survey Indicators for Malaria Control. Measure Evaluation/Measure DHS/President's Malaria Initiative/Roll Back Malaria Partnership/ UNICEF/WHO. 2013 (http://www.malariasurveys.org/documents/Household%20Survey%20Indicators%20for%20Malaria%20Control.pdf, accessed 15 April 2015. Roll Back Malaria Partnership/WHO. Disease surveillance for malaria control: an operations manual. Geneva: World Health Organization; 2012 (http://www.who.int/malaria/publications/atoz/9789241503341/en/, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Use of insecticide treated nets (ITNs)

Abbreviated name	Use of insecticide treated nets (ITNs)
Indicator name	Percentage of population sleeping under insecticide-treated nets (%)
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	Malaria
Definition	Percentage population in malaria-endemic areas who slept under an ITN the previous night.
Numerator	Number of people in malaria endemic areas who slept under an ITN.
Denominator	Total number of people in malaria endemic areas.
Disaggregation/ additional dimension	Age (children under 5 years), place of residence, pregnant women, socioeconomic status
Method of measurement	Data are principally derived from nationally representative household surveys such as Demographic and Health Surveys, Multiple Indicator Surveys, Malaria Indicator Surveys and other representative population based surveys.
Method of estimation	Household survey results may be supplemented with information on ITN deliveries from manufacturers and distribution by malaria programmes to model annual estimates of this indicator.
Measurement frequency	Surveys: every 3—5 years; modelled estimates: annually
Monitoring and evaluation framework	Outcome
Preferred data sources	
Other possible data sources	
Further information and related links	Global technical strategy for malaria. Geneva: World Health Organization (http://www.who.int/malaria/areas/global_technical_strategy/draft_strategy/en/, accessed 21 May 2015) Household Survey Indicators for Malaria Control. Measure Evaluation/Measure DHS/President's Malaria Initiative/Roll Back Malaria Partnership/ UNICEF/WHO; 2013 (http://www.rollbackmalaria.org/files/files/toolbox/docs/rbmtoolbox/tool_HouseholdSurveyIndicatorsForMalariaControl.pdf, accessed 15 April 2015. World Malaria Report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/malaria/publications/world_malaria_report_2014/en/, accessed 21 May 2015).

Treatment of confirmed malaria cases

Abbreviated name	Treatment of confirmed malaria cases
Indicator name	Treatment of confirmed malaria cases (%)
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	Malaria
Definition	Percentage of confirmed malaria cases that receive first-line antimalarial treatment
Numerator	Number of confirmed malaria cases that receive first line antimalarial treatment
Denominator	Number of confirmed malaria cases
Disaggregation/ additional dimension	Age (children under 5 years), place of residence, socioeconomic status
Method of measurement	Data may be obtained through routine facility reports, health facility-based surveys and nationally representative household surveys.
Method of estimation	Survey results, information from manufacturers on number of treatment courses sold and from malaria programmes on number of treatment courses distributed can be combined to model annual estimates of this indicator.
Measurement frequency	Routine facility reports and modelled estimates: annually; surveys: every 3–5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	
Other possible data sources	
Further information and related links	Global technical strategy for malaria. Geneva: World Health Organization (http://www.who.int/malaria/areas/global_technical_strategy/draft_strategy/en/, accessed 21 May 2015) Household Survey Indicators for Malaria Control. Measure Evaluation/Measure DHS/President's Malaria Initiative/Roll Back Malaria Partnership/ UNICEF/WHO; 2013 (http://www.rollbackmalaria.org/files/files/toolbox/docs/rbmtoolbox/tool_HouseholdSurveyIndicatorsForMalariaControl.pdf, accessed 15 April 2015. World Malaria Report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/malaria/publications/world_malaria_report_2014/en/, accessed 21 May 2015).

Indoor residual spraying (IRS) coverage

Abbreviated name	Indoor residual spraying (IRS) coverage
Indicator name	Indoor residual spraying (IRS) coverage (%)
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	Malaria
Definition	Percentage of population at risk protected by IRS during a specified time period.
Numerator	Number of persons protected by IRS.
Denominator	Population at risk.
Disaggregation/ additional dimension	
Method of measurement	Often targeted districts
Method of estimation	
Measurement frequency	
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based health surveys
Other possible data sources	Administrative reporting systems
Further information and related links	Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). Household Survey Indicators for Malaria Control. Measure Evaluation/Measure DHS/President's Malaria Initiative/Roll Back Malaria Partnership/ UNICEF/WHO. 2013 (http://www.malariasurveys.org/documents/Household%20Survey%20Indicators%20for%20Malaria%20Control.pdf, accessed 15 April 2015. Roll Back Malaria Partnership/WHO. Disease surveillance for malaria control: an operations manual. Geneva: World Health Organization; 2012 (http://www.who.int/malaria/publications/atoz/9789241503341/en/, accessed 29 March 2015). Standard foreign assistance indicators/standard foreign assistance master indicator list (MIL). Washington (DC): United States Agency for International Development (http://www.state.gov/f/indicators/index.htm, accessed 26 June 2014). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Coverage of preventive chemotherapy for selected neglected tropical diseases

Abbreviated name	Coverage of preventive chemotherapy for selected neglected tropical diseases
Indicator name	Coverage of preventive chemotherapy for selected neglected tropical diseases
Domain	Service coverage
Subdomain	Infectious disease
Associated terms	Neglected tropical diseases
Definition	Proportion of the population living in endemic areas requiring preventive chemotherapy that received treatment for at least one of the selected neglected tropical diseases (schistosomiasis, soil-transmitted helminthiases, lymphatic filariasis , onchocerciasis).
Numerator	Number of people requiring and receiving preventive chemotherapy for at least one of the selected neglected tropical diseases (schistosomiasis, soil-transmitted helminthiases, lymphatic filariasis , onchocerciasis).
Denominator	Number of people requiring preventive chemotherapy for at least one of the selected neglected tropical diseases (schistosomiasis, soil-transmitted helminthiases, lymphatic filariasis , onchocerciasis).
Disaggregation/ additional dimension	Age group (pre-school-aged children [1–4 years], school-aged [5–14 years] and adults [≥ 15 years]) Disaggregation by sex and district is optional or depends on which diseases are co-endemic
Method of measurement	Country reporting systems
Method of estimation	The number of people requiring/receiving preventive chemotherapy through each disease-specific control or elimination programme is reported by national programme managers from ministries of health to WHO. The number of people requiring preventive chemotherapy for each disease was compared among the different age groups in each country, and the largest population in each age group for any of the diseases was selected as the conservative estimate of the number of people requiring preventive chemotherapy for at least one disease in that particular age group. Finally, the largest populations requiring preventive chemotherapy in each age group were summed, and this total was considered to be a conservative estimate of the number of individuals needing preventive chemotherapy for at least one disease. The same principle was used to estimate the number of people who had received integrated preventive chemotherapy. When subnational data on treatment coverage were available, the analysis was conducted at the subnational level.
Measurement frequency	Annual
Monitoring and evaluation framework	Outcome
Preferred data sources	Administrative reporting systems, in particular the Joint Application Package for donated medicines.
Other possible data sources	Other sources, including estimation and modelling
Further information and related links	Global plan to combat neglected tropical diseases, 2008–2015. Geneva: World Health Organization; 2007 (http://whqlibdoc.who.int/hq/2007/who_cds_ntd_2007.3_eng.pdf, accessed 29 March 2015). Integrated preventive chemotherapy for neglected tropical diseases: estimation of the number of interventions required and delivered, 2009–2010. Wkly Epidemiol Rec. 2012;87:17-28 (http://www.who.int/wer/2012/wer8702.pdf, accessed 28 April 2015). Neglected tropical diseases: planning, requesting medicines and reporting (WHO webpage). Geneva: World Health Organization; 2015 (http://www.who.int/neglected_diseases/preventive_chemotherapy/reporting/en/, accessed 28 April 2015). Standard foreign assistance indicators/standard foreign assistance master indicator list (MIL). Washington (DC): United States Agency for International Development (http://www.state.gov/f/indicators/index.htm, accessed 26 June 2014). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Abbreviated name	Cervical cancer screening
Indicator name	Cervical cancer screening
Domain	Service coverage
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Screening and preventive care
Definition	Proportion of women aged 30–49 years who report they were screened for cervical cancer using any of the following methods: visual Inspection with acetic acid/vinegar (VIA), pap smear, human papilloma virus (HPV) test.
Numerator	Number of women aged 30–49 years who report ever having had a screening test for cervical cancer using any of these methods: VIA, pap smear and HPV test.
Denominator	All female respondents aged 30–49 years.
Disaggregation/ additional dimension	Age, sex, other relevant sociodemographic stratifiers where available
Method of measurement	
Method of estimation	(Number of female respondents aged 30–49 years who report ever having had a screening test for cervical cancer)/(number of female respondents aged 30–49 years) x 100.
Measurement frequency	At least every 5 years
Monitoring and evaluation framework	Outcome
Preferred data sources	Population-based (preferably nationally representative) surveys
Other possible data sources	Facility-based data
Further information and related links	Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015). Ferlay J, Soerjomataram I, Ervik M, Dikshit R, Eser S, Mathers C et al. Globocan 2012. Estimated cancer incidence, mortality and prevalence worldwide in 2012. Lyon: International Agency for Research on Cancer; IARC CancerBase No. 11 (http://globocan.iarc.fr, accessed 29 March 2015). WHO guidelines for screening and treatment of precancerous lesions of cervical cancer prevention. Geneva: World Health Organization; 2013.

Coverage of services for severe mental health disorders

Abbreviated name	Coverage of services for severe mental health disorders
Indicator name	Coverage of services for severe mental health disorders
Domain	Service coverage
Subdomain	NCDs and nutrition
Associated terms	Mental health
Definition	Percentage of persons with a severe mental disorder (psychosis, bipolar affective disorder, moderate-severe depression) who are using services.
Numerator	Number of people receiving services.
Denominator	Total number of people in need.
Disaggregation/ additional dimension	Age, sex
Method of measurement	
Method of estimation	
Measurement frequency	
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys
Other possible data sources	Facility information systems
Further information and related links	World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Health systems indicators

Quality and safety of care

- Perioperative mortality rate
- Obstetric and gynaecological admissions owing to abortion
- Institutional maternal mortality ratio
- Maternal death reviews
- ART retention rate
- TB treatment success rate
- Service-specific availability and readiness

Access

- Service utilization
- Health service access
- Hospital bed density
- Availability of essential medicines and commodities

Health workforce

- Health worker density and distribution
- Output training institutions

Health information

- Birth registration coverage
- Death registration coverage
- Completeness of reporting by facilities

Health financing

- Total current expenditure on health (% of gross domestic product)
- Current expenditure on health by general government and compulsory schemes (% of current expenditure on health)
- Out-of-pocket payment for health (% of current expenditure on health)
- Externally sourced funding (% of current expenditure on health)
- Total capital expenditure on health (% current + capital expenditure on health)
- Headcount ratio of catastrophic health expenditure
- Headcount ratio of impoverishing health expenditure

Health security

- International Health Regulations (IHR) core capacity index

Perioperative mortality rate

Abbreviated name	Perioperative mortality rate
Indicator name	Perioperative mortality rate
Domain	Health systems
Subdomain	Health system strengthening (HSS)
Associated terms	Quality and safety of care
Definition	All-cause death rate prior to discharge among patients having one or more procedures in an operating theatre during the relevant admission.
Numerator	Number of deaths among patients having one or more procedures in an operating theatre during the relevant admission.
Denominator	Total number of surgical procedures.
Disaggregation/ additional dimension	By region/health facility, age, emergency and elective surgery *Also: surgical volume per 100 000 population*
Method of measurement	Requires a register of operations (major surgery only) in hospitals and of survival status at discharge after operation. The indicator also generates information on the surgical volume (procedures performed in an operating theatre per 100 000 population per year). This is a rough indicator of access.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Output
Preferred data sources	Hospital registers linked to routine facility information systems
Other possible data sources	
Further information and related links	Organisation for Economic Co-operation and Development. Health at a Glance 2013: OECD Indicators, Paris: OECD Publishing; 2013 (http://dx.doi.org/10.1787/health_glance-2013-en, accessed 29 March 2014).

Obstetric and gynaecological admissions owing to abortion

Abbreviated name	Obstetric and gynaecological admissions owing to abortion
Indicator name	Obstetric and gynaecological admissions owing to abortion
Domain	Health systems
Subdomain	Health system strengthening (HSS)
Associated terms	Quality and safety of care
Definition	Percentage of admissions for (spontaneous or induced) abortion-related complications to service delivery points providing inpatient obstetric and gynaecological services, among all admissions (except those for planned termination of pregnancy). Abortion is the termination of a pregnancy before the fetus has attained viability – i.e. become capable of independent extra-uterine life. Induced abortion is the deliberate termination of a pregnancy before the fetus has attained viability – i.e. become capable of independent extra-uterine life. Spontaneous abortion is the spontaneous termination of a pregnancy before the fetus has attained viability – i.e. become capable of independent extra-uterine life – and is often referred to as a miscarriage.
Numerator	Admissions for abortion-related complications.
Denominator	All admissions, except those for planned termination of pregnancy.
Disaggregation/ additional dimension	
Method of measurement	
Method of estimation	
Measurement frequency	No specific frequency is recommended
Monitoring and evaluation framework	Output
Preferred data sources	Hospital registers linked to routine facility information systems
Other possible data sources	
Further information and related links	Reproductive health indicators. Guidelines for their generation, interpretation and analysis for global monitoring. Geneva: World Health Organization; 2006 (http://www.who.int/reproductivehealth/publications/monitoring/924156315x/en/, accessed 29 March 2015).

Institutional maternal mortality ratio

Abbreviated name	Institutional maternal mortality ratio
Indicator name	Institutional maternal mortality ratio (per 100 000 deliveries)
Domain	Health systems
Subdomain	Reproductive, maternal, newborn, child and adolescent health
Associated terms	Quality and safety of care
Definition	Number of maternal deaths among 100 000 deliveries in health facilities/institutions.
Numerator	Number of maternal deaths in institutions.
Denominator	Total number of deliveries in institutions.
Disaggregation/ additional dimension	Age, cause of death, geographic location, parity
Method of measurement	Labour ward registers, emergency admission registers, specialist ward registers. Regular quality control for completeness, assessment and misclassification.
Method of estimation	Number of maternal deaths among 100 000 deliveries in health facilities/institutions.
Measurement frequency	Annual
Monitoring and evaluation framework	Output
Preferred data sources	Routine facility information systems, maternal deaths surveillance and response systems
Other possible data sources	
Further information and related links	Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva and New York (NY): World Health Organization/United Nations Children's Fund; 2010 (http://www.countdown2015mnch.org/reports-and-articles/previous-reports/2010-decade-report, accessed 29 March 2014). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). Keeping promises, measuring results. Commission on information and accountability for Women's and Children's Health. Geneva: World Health Organization; 2011 (http://www.who.int/topics/millennium_development_goals/accountability_commission/Commission_Report_advance_copy.pdf, accessed 29 March 2015). Next generation indicators reference guide: planning and reporting. Version 1.2. Washington (DC): The President's Emergency Plan for AIDS Relief; 2013 (http://www.pepfar.gov/documents/organization/206097.pdf, accessed 29 March 2014). The UNFPA Strategic Plan, 2014–2017. Report of the Executive Director. New York (NY): United Nations Population Fund; 2013. World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Abbreviated name	Maternal death reviews
Indicator name	Maternal death review coverage (%)
Domain	Health systems
Subdomain	Health system strengthening (HSS)
Associated terms	Quality and safety of care
Definition	Percentage of maternal deaths occurring in the facility that were audited.
Numerator	Number of health facility maternal deaths reviewed.
Denominator	All maternal deaths in facilities.
Disaggregation/ additional dimension	Community deaths, facilities, major administrative regions
Method of measurement	Need for a clear definition of what qualifies as a "review". This may or may not include actions taken, if these can be measured objectively.
Method of estimation	
Measurement frequency	Annual (or more frequently)
Monitoring and evaluation framework	Output
Preferred data sources	Specific monitoring with routine facility information systems
Other possible data sources	
Further information and related links	Consultation on Improving measurement of the quality of maternal, newborn and child care in health facilities. Geneva: World Health Organization/ Partnership for Maternal, Newborn and Child Health; 2013. Keeping promises, measuring results. Commission on information and accountability for Women's and Children's Health. Geneva: World Health Organization; 2011 (http://www.who.int/topics/millennium_development_goals/accountability_commission/Commission_Report_advance_copy.pdf, accessed 29 March 2015).

ART retention rate

Abbreviated name	ART retention rate
Indicator name	ART retention rate
Domain	Health systems
Subdomain	Infectious disease
Associated terms	Quality and safety of care
Definition	Percentage of adults and children with HIV alive and on ART 12, 24, 36 (etc.) months after initiating treatment among patients initiating ART during a specified time period.
Numerator	Number of people on ART at 12, 24 and 60 months.
Denominator	Total number of people who initiated treatment and should have completed 12, 24, 36 (etc.) months.
Disaggregation/ additional dimension	Age: 1. Minimum for paper-based (routine): <15, 15+; 2. Annual data extraction of disaggregated data if not reported routinely: <5, 5–9, 10–14, 15–19, 20–24, 25–49, 50+; 3. Electronic system: 5-year age groups Breastfeeding, pregnancy, sex
Method of measurement	A cohort analysis can be used to estimate ART retention at specific points in time after initiation of treatment.
Method of estimation	
Measurement frequency	Annual (or more frequently)
Monitoring and evaluation framework	Output
Preferred data sources	ART register
Other possible data sources	
Further information and related links	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, accessed 10 June 2015). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). PEPFAR. Next Generation Indicators Reference Guide - Planning and Reporting. Version 1.2. The President's Emergency Plan for AIDS Relief, Feb. 2013. (http://www.pepfar.gov/documents/organization/81097.pdf). UNAIDS. Global AIDS Response Progress Reporting 2014: construction of core indicators for monitoring the 2011 UN political declaration on HIV/AIDS. Geneva, UNAIDS, 2014. (http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf).

TB treatment success rate

Abbreviated name	TB treatment success rate
Indicator name	TB treatment success rate
Domain	Health systems
Subdomain	Infectious disease
Associated terms	Quality and safety of care
Definition	Percentage of TB cases successfully treated (cured plus treatment completed) among TB cases notified to the national health authorities during a specified period.
Numerator	Number of TB cases registered in a specified period which were successfully treated.
Denominator	Total number of TB cases registered in the same period.
Disaggregation/ additional dimension	Age, bacteriological confirmation status, drug resistance status (drug-susceptible and treated with first-line drugs, drug-resistant and treated with a second-line regimen), HIV-status, previous treatment history (new and relapse, previously treated excluding relapse), sex
Method of measurement	
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Output
Preferred data sources	TB register and related quarterly reporting system (or electronic TB registers)
Other possible data sources	
Further information and related links	Definitions and reporting framework for tuberculosis – 2013 revision (WHO/HTM/TB/2013.2). Geneva: World Health Organization; 2013 (http://www.who.int/tb/publications/definitions/en/, accessed 29 March 2015). Global tuberculosis report 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/publications/global_report/en/, accessed 29 March 2015). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Service-specific availability and readiness

Abbreviated name	Service-specific availability and readiness
Indicator name	Service-specific availability and readiness
Domain	Health systems
Subdomain	HSS
Associated terms	Quality and safety of care
Definition	Number of health facilities offering specific services per 10 000 population and meeting minimum service standards on the basis of a set of tracer criteria for specific services, etc.
Numerator	Number of facilities that offer and meet tracer criteria for specific services: Family planning Antenatal care Basic emergency obstetric and neonatal care (BEmONC) Comprehensive emergency obstetric and neonatal care (CEmONC), post-abortion care Essential newborn care Immunization Child health preventative and curative care Adolescent health services Life-saving commodities for women and children Malaria diagnosis or treatment Tuberculosis services HIV counselling and testing HIV/AIDS care and support services Antiretroviral prescription and client management Prevention of mother-to-child transmission of HIV Sexually transmitted infections diagnosis or treatment NCDs diagnosis or management: diabetes, cardiovascular disease, chronic respiratory disease, cervical cancer screening Basic and comprehensive surgical care, including caesarean section, laparotomy and open fracture Blood transfusion Laboratory capacity.
Denominator	Total number of health facilities and total number of facilities offering specific services.
Disaggregation/ additional dimension	Facility type, managing authority *Also: general service availability and readiness*
Method of measurement	Facility assessment.
Method of estimation	
Measurement frequency	Annual or biannual
Monitoring and evaluation framework	Output
Preferred data sources	Health facility assessments
Other possible data sources	
Further information and related links	Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf?ua=1, accessed 29 March 2015). PEPFAR. Next Generation Indicators Reference Guide - Planning and Reporting. Version 1.2. The President's Emergency Plan for AIDS Relief, Feb. 2013. (http://www.pepfar.gov/documents/organization/81097.pdf).

Abbreviated name	Service utilization
Indicator name	Service utilization
Domain	Health systems
Subdomain	HSS
Associated terms	Access
Definition	Number of outpatient department visits per person per year.
Numerator	Total number of outpatient department visits per year.
Denominator	Total population.
Disaggregation/ additional dimension	Age, place of residence, sex *Also: hospital (inpatient) admissions per 100 population per year*
Method of measurement	
Method of estimation	Requires complete and reliable recording and reporting of the number of outpatient department visits by public and private facilities. Recall in population surveys can also be used.
Measurement frequency	
Monitoring and evaluation framework	Output
Preferred data sources	Routine facility information systems, population-based health surveys
Other possible data sources	
Further information and related links	Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf?ua=1, accessed 29 March 2015).

Health service access

Abbreviated name	Health service access
Indicator name	Health service access
Domain	Health systems
Subdomain	HSS
Associated terms	Access
Definition	Percentage of population living within 5 km of a health facility (total number of health facilities per 10 000 population).
Numerator	Number of facilities in public and private sectors.
Denominator	Total population.
Disaggregation/ additional dimension	Access to emergency surgery (% of the population that can access, within 2 hours, a facility that can perform emergency caesarean section, laparotomy and open fracture fixation), density of specific services, facility ownership, location (district, province, national), type
Method of measurement	Availability (health facility assessment, census, master facility list). Geographical accessibility is the preferred indicator and is often measured by distance or travel time to a static health facility. A more objective and easier indicator uses facility databases to assess density and distribution.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Input
Preferred data sources	Facility database, geospatial modelling
Other possible data sources	Surveys
Further information and related links	Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf?ua=1, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Hospital bed density

Abbreviated name	Hospital bed density
Indicator name	Hospital bed density (per 10 000 population)
Domain	Health systems
Subdomain	Health system strengthening (HSS)
Associated terms	Access
Definition	Total number of hospital beds per 10 000 population.
Numerator	Number of hospital beds (excluding labour and delivery beds).
Denominator	Total population.
Disaggregation/ additional dimension	Distribution (by province/district), ownership (public/private), type of bed
Method of measurement	A national database is usually maintained. Regular updates through surveys or facility censuses are needed.
Method of estimation	
Measurement frequency	Annual or biannual
Monitoring and evaluation framework	Input
Preferred data sources	Routine facility information systems/national database
Other possible data sources	Health facility census.
Further information and related links	Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf?ua=1, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Availability of essential medicines and commodities

Abbreviated name	Availability of essential medicines and commodities
Indicator name	Availability of essential medicines and commodities
Domain	Health systems
Subdomain	HSS
Associated terms	Access
Definition	Percentage of health facilities with essential medicines and life-saving commodities
Numerator	Number of facilities with essential medicines in stock.
Denominator	Total number of health facilities.
Disaggregation/ additional dimension	Facility type, facility managing authority (public/private), specific type of medicine/commodity (e.g. priority medicines for women and children, vaccines, ART, family planning, essential NCD medicines) WHO-recommended essential core list of medicines: bronchodilator inhaler, steroid inhaler, glibenclamide, metformin, insulin, angiotensin-converting-enzyme (ACE) inhibitor, calcium channel blocker, statin, aspirin, thiazide diuretic, beta-blocker, omeprazole tablet, diazepam injection, fluoxetine tablet, haloperidol tablet, carbamazepine tablet, amoxicillin tablet/capsule, amoxicillin suspension, ampicillin injection, ceftriaxone injection, gentamicin injection, oral rehydration salts, zinc sulfate. Essential NCD medicines: at least aspirin, a statin, an ACE inhibitor, thiazide diuretic, a long-acting calcium channel blocker, metformin, insulin, a bronchodilator and a steroid inhalant. Priority medicines for women and children: amoxicillin tablet/capsule, amoxicillin suspension, ampicillin injection, ceftriaxone injection, gentamicin injection, oral rehydration salts, zinc sulphate, oxytocin injection, magnesium sulphate injection. Suggested core list of medicines for pricing/affordability surveys: Salbutamol inhaler 100 mcg per dose (200 doses); beclometasone inhaler 100 mcg/dose (200 doses); glibenclamide 5 mg tablet; metformin 500 mg tablet; insulin regular 100 IU/ml, 10 ml vial; enalapril 5 mg tablet; amlodipine 5 mg tablet; simvastatin 20 mg tablet; aspirin 100 mg tablet; hydrochlorothiazide 25 mg tablet; carvedilol 12.5 mg tablet; omeprazole 20 mg tablet; diazepam 10 mg/2 ml injection; fluoxetine 20 mg tablet; haloperidol 5 mg tablet; carbamazepine 200 mg tablet; amoxicillin 500 mg capsule/tablet; amoxicillin 250 mg/5 ml suspension; ampicillin 500 mg injection; ceftriaxone 1 G vial; gentamicin 80 mg/2 ml injection; oral rehydration salts (sachet for 1 litre); zinc sulfate 2 0mg tablet; oxytocin injection (5 or 10 iu); magnesium sulfate 50% injection 10 ml vial.
Method of measurement	Stock out data may also refer to specific time period (1 month, 3 months). Data on the availability of a specific list of medicines are collected from a survey of a sample of facilities. Availability is reported as the percentage of medicine outlets where a particular medicine was found on the day of the survey. Health facility reports may also include stockouts indicators but require regular independent verification.
Method of estimation	
Measurement frequency	Annual or biannual
Monitoring and evaluation framework	Output
Preferred data sources	Special facility surveys
Other possible data sources	Routine facility information systems
Further information and related links	Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda item A66/8, Sixty-sixth World Health Assembly, 20–28 May 2013. Geneva: World Health Organization; 2013 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_8-en.pdf?ua=1, accessed 29 March 2015). Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts and sources. New York (NY): United Nations; 2012 (http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx, accessed 29 March 2015). Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf?ua=1, accessed 29 March 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014).

Abbreviated name	Health worker density and distribution
Indicator name	Health worker density and distribution (per 1000 population)
Domain	Health systems
Subdomain	HSS
Associated terms	Health workforce
Definition	Number of health workers per 1000 population.
Numerator	Number of health workers by cadre.
Denominator	Total population.
Disaggregation/ additional dimension	By cadre, including generalist medical practitioners, specialist medical practitioners (surgeons, anaesthetists, obstetricians, emergency medicine specialists, cardiologists, paediatricians, psychiatrists, ophthalmologists, gynaecologists, etc.), nursing and midwifery professionals, traditional and complementary medicine professionals, among others. Distribution: place of employment (urban/rural), subnational (district)
Method of measurement	National database or registry of health workers, preferably at individual level.
Method of estimation	If there is a national database or registry, there should be regular assessment of completeness using census data, professional association registers, facility censuses, etc. Health worker concentration: percentage of all health workers working in urban areas divided by percentage of total population in urban areas.
Measurement frequency	Annual
Monitoring and evaluation framework	Input
Preferred data sources	Health worker registry
Other possible data sources	National health workforce database (aggregate)
Further information and related links	Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014). Handbook on monitoring and evaluation of human resources for health with special focus on low- and middle-income countries. Geneva: World Health Organization; 2009. Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf?ua=1, accessed 29 March 2015). World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 29 March 2015).

Output training institutions

Abbreviated name	Output training institutions
Indicator name	Output training institutions
Domain	Health systems
Subdomain	Health system strengthening (HSS)
Associated terms	Health workforce
Definition	Number of graduates from health workforce educational institutions (including schools of dentistry, medicine, midwifery, nursing, pharmacy) during the last academic year per 1000 population.
Numerator	Number of graduates of health professions educational institutions in the past academic year.
Denominator	Total population.
Disaggregation/ additional dimension	Level and field of education *Also: age at graduation, home postcode on entry to educational institution, sex*
Method of measurement	Database with training school data.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Input
Preferred data sources	Administrative reporting systems
Other possible data sources	
Further information and related links	Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf?ua=1, accessed 29 March 2015). Standard foreign assistance indicators/standard foreign assistance master indicator list (MIL). Washington (DC): United States Agency for International Development (http://www.state.gov/f/indicators/index.htm, accessed 26 June 2014). WHO. Handbook on monitoring and Evaluation of Human Resources for Health with special focus on low and middle income countries.

Abbreviated name	Birth registration coverage
Indicator name	Birth registration coverage
Domain	Health systems
Subdomain	HSS
Associated terms	Health information
Definition	Percentage of births that are registered within one month of age in a civil registration system.
Numerator	Number of births registered.
Denominator	Total number of births.
Disaggregation/ additional dimension	Place of residence, sex, socioeconomic status
Method of measurement	Questions are asked about registration status in household surveys. The numerator of this indicator includes children whose birth certificate was seen by the interviewer or whose mother or care-taker says the birth has been registered. Data are also often presented for other age groups such as infants or children under 5 years of age. Civil registration administrative data are another source of data that could be linked to estimates of the expected number of newborns.
Method of estimation	Estimates of coverage are taken from two sources: (i) the United Nations Demographic Yearbook and (ii) United Nations statistics and UNICEF.
Measurement frequency	Annual
Monitoring and evaluation framework	Input
Preferred data sources	Household surveys
Other possible data sources	Civil registration and vital statistics systems
Further information and related links	Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf?ua=1, accessed 29 March 2015).

Death registration coverage

Abbreviated name	Death registration coverage
Indicator name	Death registration coverage
Domain	Health systems
Subdomain	HSS
Associated terms	Health information
Definition	Percentage of deaths that are registered (with age and sex).
Numerator	Number of deaths registered.
Denominator	Total number of deaths.
Disaggregation/ additional dimension	Place of residence *Also: registered with cause (ICD)*
Method of measurement	Questions about presence of a death certificate are asked for all recent deaths (e.g. in the last year).
Method of estimation	WHO estimates coverage by taking the total number of deaths that have been registered with cause-of-death information in the vital registration system for a country and year and then dividing it by the total estimated deaths for that year for the national population. Administrative data sources could be used to obtain the number of death certificates issued and link those to the estimated number of deaths in a given time period.
Measurement frequency	
Monitoring and evaluation framework	Input
Preferred data sources	Household surveys
Other possible data sources	Civil registration and vital statistics systems
Further information and related links	Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf?ua=1, accessed 29 March 2015).

Completeness of reporting by facilities

Abbreviated name	Completeness of reporting by facilities
Indicator name	Completeness of reporting by facilities
Domain	Health systems
Subdomain	HSS
Associated terms	Health information
Definition	Percentage of facilities that submit reports within the required deadline.
Numerator	Number of facilities reporting monthly within a given time period.
Denominator	Total facilities.
Disaggregation/ additional dimension	Facility type, geographic location, managing authority, programme
Method of measurement	The number of reports received from facilities (usually monthly) is divided by the expected number of reports from facilities. Districts also report on a monthly or quarterly basis to national levels, and the received number of reports can be related to the expected number in order to assess completeness.
Method of estimation	
Measurement frequency	Annual (monthly)
Monitoring and evaluation framework	Input
Preferred data sources	Routine facility information systems
Other possible data sources	
Further information and related links	Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf?ua=1, accessed 29 March 2015). Standard foreign assistance indicators/standard foreign assistance master indicator list (MIL). Washington (DC): United States Agency for International Development (http://www.state.gov/f/indicators/index.htm, accessed 26 June 2014).

Total current expenditure on health (% of gross domestic product)

Abbreviated name	Total current expenditure on health (% of gross domestic product)
Indicator name	Total current expenditure on health as percentage of gross domestic product
Domain	Health systems
Subdomain	HSS
Associated terms	Health financing
Definition	Total current expenditure on health as a percentage of gross domestic product.
Numerator	Sum of all current expenditure on health (12-month period).
Denominator	Gross domestic product.
Disaggregation/ additional dimension	Financing source institutional unit, disease, main type of care, main type of provider, socioeconomic status, subnational level
Method of measurement	This includes all current expenditure, regardless of the source (domestic and donor funding).
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Input
Preferred data sources	Administrative reporting systems
Other possible data sources	Other sources, including estimation and modelling
Further information and related links	A system of health accounts – 2011 edition. Geneva: Organisation for Economic Co-operation and Development/Eurostat/World Health Organization; 2011 (http://who.int/health-accounts/methodology/sha2011.pdf?ua=1, accessed 29 March 2015).

Current expenditure on health by general government and compulsory schemes (% of current expenditure on health)

Abbreviated name	Current expenditure on health by general government and compulsory schemes (% of current expenditure on health)
Indicator name	Current expenditure on health by general government and compulsory schemes as a percentage of current expenditure on health
Domain	Health systems
Subdomain	HSS
Associated terms	Health financing
Definition	Current expenditure on health by general government and compulsory schemes as a share of total current expenditure on health (expressed as a % of total current expenditure on health). This is the sum of current health outlays paid for in cash or supplied in kind by government entities such as the Ministry of Health, other ministries, parastatal organizations or social security agencies, or by entities running health schemes that are compulsory by law.
Numerator	Sum of all current expenditure on health by the government sector and compulsory schemes by law (12-month period).
Denominator	Total current expenditure on health.
Disaggregation/ additional dimension	Financing source institutional unit, disease, main type of care, main type of provider, socioeconomic status, subnational level
Method of measurement	Includes any donor funding passing through government and compulsory entities.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Input
Preferred data sources	Administrative reporting systems
Other possible data sources	Other sources, including estimation and modelling
Further information and related links	A system of health accounts – 2011 edition. Geneva: Organisation for Economic Co-operation and Development/Eurostat/World Health Organization; 2011 (http://who.int/health-accounts/methodology/sha2011.pdf?ua=1, accessed 29 March 2015). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014. Report of the Secretary-General. New York (NY): United Nations; 2014 (https://www.unfpa.org/webdav/site/global/shared/documents/ICPD/Framework%20of%20action%20for%20the%20follow-up%20to%20the%20PoA%20of%20the%20ICPD.pdf, accessed 19 August 2014).

Out-of-pocket payment for health (% of current expenditure on health)

Abbreviated name	Out-of-pocket payment for health (% of current expenditure on health)
Indicator name	Out-of-pocket payment on health as a percentage of current expenditure on health
Domain	Health systems
Subdomain	HSS
Associated terms	Health financing
Definition	Share of total current expenditure on health paid by households out-of-pocket, expressed as a percentage of total current expenditure on health (this is the households' out-of-pocket expenditure).
Numerator	Total household out-of-pocket expenditure for health (12-month period).
Denominator	Total current expenditure on health.
Disaggregation/ additional dimension	Financing source institutional unit, disease, main type of care, main type of provider, socioeconomic status, subnational level
Method of measurement	
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Input
Preferred data sources	Administrative reporting systems
Other possible data sources	Households consumption survey and National Accounts
Further information and related links	A system of health accounts – 2011 edition. Geneva: Organisation for Economic Co-operation and Development/Eurostat/World Health Organization; 2011 (http://who.int/health-accounts/methodology/sha2011.pdf?ua=1, accessed 29 March 2015).

Externally sourced funding (% of current expenditure on health)

Abbreviated name	Externally sourced funding (% of current expenditure on health)
Indicator name	Externally sourced funding as a percentage of current expenditure on health
Domain	Health systems
Subdomain	HSS
Associated terms	Health financing
Definition	Share of total current expenditure on health funded by external (rest of the world) institutional units providing revenues to financing schemes.
Numerator	Total external (rest of the world) funding (12-month period).
Denominator	Total current expenditure on health.
Disaggregation/ additional dimension	Disease, main type of care, main type of provider, socioeconomic status, subnational level
Method of measurement	This indicator traces the financing flows from external sources that provide the funds to public and private financing schemes. It includes resources in cash and in kind provided as loans and grants. Health accounts track records of transactions without double counting in order to reach a comprehensive coverage. Resources are accounted for in the same period as when they are used by financing schemes.
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Input
Preferred data sources	Survey and administrative reporting systems
Other possible data sources	Other sources, including estimation and modelling
Further information and related links	A system of health accounts – 2011 edition. Geneva: Organisation for Economic Co-operation and Development/Eurostat/World Health Organization; 2011 (http://who.int/health-accounts/methodology/sha2011.pdf?ua=1, accessed 29 March 2015).

Total capital expenditure on health (% current + capital expenditure on health)

Abbreviated name	Total capital expenditure on health (% current + capital expenditure on health)
Indicator name	Total capital expenditure on health as a share of current + capital expenditure on health
Domain	Health systems
Subdomain	HSS
Associated terms	Health financing
Definition	Total capital expenditure on health as a percentage of current + capital expenditure on health.
Numerator	Sum of all capital expenditure on health (HK) – (12-month period).
Denominator	Current + capital expenditure on health (12 month).
Disaggregation/ additional dimension	Disease, financing source institutional unit, financing agent, provider
Method of measurement	Includes capital expenditures funded by donor (in kind or cash).
Method of estimation	
Measurement frequency	Annual
Monitoring and evaluation framework	Input
Preferred data sources	Administrative reporting systems
Other possible data sources	Other sources, including estimation and modelling
Further information and related links	A system of health accounts – 2011 edition. Geneva: Organisation for Economic Co-operation and Development/Eurostat/World Health Organization; 2011 (http://who.int/health-accounts/methodology/sha2011.pdf?ua=1, accessed 29 March 2015).

Headcount ratio of catastrophic health expenditure

Abbreviated name	Headcount ratio of catastrophic health expenditure
Indicator name	Headcount ratio of catastrophic health expenditure
Domain	Health systems
Subdomain	HSS
Associated terms	Health financing
Definition	Proportion of the population (or sub-population) facing catastrophic health expenditures.
Numerator	Total number of households with catastrophic health expenditure.
Denominator	Total number of households.
Disaggregation/ additional dimension	Subnational variables available in survey data
Method of measurement	Financial protection indicators are based on information collected from population-based household expenditure surveys implemented by or in close collaboration with national statistical bureaus. Datasets from these surveys are typically obtained through technical contacts in-country but may also be available publically or for direct purchase. The two most common surveys are Household Budget Surveys and Living Standards Measurement Surveys. Such surveys include questions that elicit information on a household's total consumption expenditure (i.e. monetary and in-kind payments on all goods and services, plus the monetary value of the consumption of home-made products). The main components of the consumption aggregate include expenses on food, non-food (clothing, household articles etc.), utilities (gas, telephone, electricity, etc.), education, health, and housing. Survey data allows for construction of the three key variables (i.e. total expenditure, food expenditure and out-of-pocket health expenditure) needed for the calculation of the headcount ratio of catastrophic health expenditure.
Method of estimation	Headcount ratios are the estimated total number of households facing catastrophic health expenditures over the total number of households. A household is identified as facing catastrophic health expenditures when its out-of-pocket health expenditures represent 40% or more of its capacity-to-pay. Capacity-to-pay is estimated as total expenditure net of a subsistence level of food expenditure. The latter is calculated as the average food expenditure per equivalent adults of households in the 45th–55th food budget share distribution. When actual food spending falls below this amount, capacity-to-pay is defined as total expenditures net of actual food spending.
Measurement frequency	Every 1–5 years depending on implementation of population-based household expenditure surveys led by national statistics offices
Monitoring and evaluation framework	Impact
Preferred data sources	Population-based household expenditure surveys
Other possible data sources	Health surveys with a module collecting expenditure data
Further information and related links	Analyzing health equity using household survey data. Washington, DC: World Bank Group; 2008 (http://www.worldbank.org/en/topic/health/publication/analyzing-health-equity-using-household-survey-data, accessed 06 May 2015). Ke Xu, David B Evans, Kei Kawabata, Riadh Zeramdini, Jan Klavus, Christopher J L Murray. Household catastrophic health expenditure: a multicountry analysis. Lancet. 2003;362:111–7 (http://www.who.int/entity/health_financing/documents/lancet-catastrophic_expenditure.pdf, accessed 06 May 2015) Ke Xu. Distribution of health payments and catastrophic expenditures: methodology (discussion paper EIP/HSF/DP.05.2). Geneva: World Health Organization; 2005 (http://www.who.int/entity/health_financing/documents/dp_e_05_2-distribution_of_health_payments.pdf, accessed 06 May 2015).

Headcount ratio of impoverishing health expenditure

Abbreviated name	Headcount ratio of impoverishing health expenditure
Indicator name	Headcount ratio of impoverishing health expenditure
Domain	Health systems
Subdomain	HSS
Associated terms	Health financing
Definition	Proportion of the population (or sub-population) facing impoverishing health expenditures.
Numerator	Total number of households with impoverishing health expenditure.
Denominator	Total number of households.
Disaggregation/ additional dimension	Subnational variables available in survey data
Method of measurement	Financial protection indicators are based on information collected from population-based household expenditure surveys implemented by or in close collaboration with national statistical bureaus. Datasets from these surveys are typically obtained through technical contacts in-country but may also be available publically or for direct purchase. The two most common surveys are Household Budget Surveys and Living Standards Measurement Surveys. Such surveys include questions that elicit information on a household's total consumption expenditure (i.e. monetary and in-kind payments on all goods and services, plus the monetary value of the consumption of home-made products). The main components of the consumption aggregate include expenses on food, non-food (clothing, household articles etc.), utilities (gas, telephone, electricity, etc.), education, health, and housing. Survey data allows for construction of the three key variables (i.e. total expenditure, food expenditure and out-of-pocket health expenditure) needed for the calculation of the headcount ratio of impoverishing health expenditure.
Method of estimation	Headcount ratios are the estimated total number of households facing impoverishing health expenditures over the total number of households. A household is identified as facing impoverishing health expenditures when its out-of-pocket health expenditures push it below a poverty line (i.e. a household is above the poverty line when taking its total expenditure gross of out-of-pocket payments but below the poverty line when taking total expenditure net of out-of-pocket payments). The poverty line is defined as subsistence level food expenditure estimated as the average food expenditure per equivalent adults of households in the 45th–55th food budget share distribution. When actual food spending falls below this amount, then capacity-to-pay is defined as total expenditures net of actual food spending.
Measurement frequency	Every 1–5 years depending on implementation of population-based household expenditure surveys led by national statistics offices
Monitoring and evaluation framework	Impact
Preferred data sources	Population-based household expenditure surveys
Other possible data sources	Health surveys with a module collecting expenditure data
Further information and related links	Analyzing health equity using household survey data. Washington, DC: World Bank Group; 2008 (http://www.worldbank.org/en/topic/health/publication/analyzing-health-equity-using-household-survey-data, accessed 06 May 2015). Ke Xu, David B Evans, Kei Kawabata, Riadh Zeramdini, Jan Klavus, Christopher J L Murray. Household catastrophic health expenditure: a multicountry analysis. Lancet. 2003;362:111–7 (http://www.who.int/entity/health_financing/documents/lancet-catastrophic_expenditure.pdf, accessed 06 May 2015) Ke Xu. Distribution of health payments and catastrophic expenditures: methodology (discussion paper EIP/HSF/DP.05.2). Geneva: World Health Organization; 2005 (http://www.who.int/entity/health_financing/documents/dp_e_05_2-distribution_of_health_payments.pdf, accessed 06 May 2015).

International Health Regulations (IHR) core capacity index

Abbreviated name	International Health Regulations (IHR) core capacity index
Indicator name	International Health Regulations (IHR) core capacity index
Domain	Health systems
Subdomain	HSS
Associated terms	Health security
Definition	Percentage of attributes of 13 core capacities that have been attained at a specific point in time. The 13 core capacities are: (1) National legislation, policy and financing; (2) Coordination and National Focal Point communications; (3) Surveillance; (4) Response; (5) Preparedness; (6) Risk communication; (7) Human resources; (8) Laboratory; (9) Points of entry; (10) Zoonotic events; (11) Food safety; (12) Chemical events; (13) Radionuclear emergencies.
Numerator	Number of attributes attained.
Denominator	Total number of attributes.
Disaggregation/ additional dimension	
Method of measurement	Based on a set of attributes of 13 core capacities from a standard WHO instrument.
Method of estimation	
Measurement frequency	Biannual
Monitoring and evaluation framework	Output
Preferred data sources	Key informant survey
Other possible data sources	
Further information and related links	IHR core capacity monitoring framework: checklist and indicators for monitoring progress in the development of IHR core capacities in States Parties. Geneva: World Health Organization; 2013 (http://apps.who.int/iris/bitstream/10665/84933/1/WHO_HSE_GCR_2013.2_eng.pdf, accessed 29 March 2015). World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).

Annex 2

Additional indicators

The additional indicators are indicators which are considered relevant and desirable but did not meet all the criteria mentioned above or currently have serious measurement challenges.

Indicator name	Definition	Disaggregation / additional dimensions
Health status		
Mortality by age and sex		
Life expectancy at age 60 years	The average number of years that a person of 60 years of age could expect to live if exposed to the sex- and age-specific death rates prevailing at the time of his/her 60th birthday	Sex
Healthy life expectancy at birth	The average number of years that a person can expect to live in "full health" by taking into account years lived in less than full health due to disease and/or injury	Sex
Mortality by cause		
Distribution of causes of death in health facilities	Percentage distribution of main causes of death in health facilities, expressed as a percentage of total deaths in health facilities	Age (under 5, 5+ years), vaccine-preventable diseases
Morbidity		
Leading outpatient diagnosis (morbidity)	Rate per 1000 population and percentage distribution of the main diagnostic categories	Age (under 5, 5+ years), sex
Leading inpatient admissions by diagnosis	Number, rate per 1000 population and percentage distribution of the main diagnostic categories	Age (under 5, 5+ years), sex
Prevalence rate of neglected tropical diseases	Number of prevalent cases of neglected tropical diseases per 100 000 population	Age group, disease, sex
Prevalence of severe mental disorders	Number of cases of severe mental disorders per 100 000 population	Age, sex, type of disorder
Prevalence of visual impairment	Number of persons living with severe visual impairment per 100 000 population	By cause, age, sex
Risk factors		
Nutrition		
Children aged under 5 years who are underweight	Percentage of children aged under 5 years whose weight-for-age is below -2 standard deviations of the WHO Child Growth Standards median	Place of residence, sex, socioeconomic status
Percentage of women of reproductive age who are underweight	Percentage of women aged 15–49 years with low BMI (< 18.5 kg/m2)	Place of residence, socioeconomic status
Minimum acceptable diet	Percentage of children aged 6–23 months of age who receive a minimum acceptable diet	

Indicator name	Definition	Disaggregation / additional dimensions
Urinary iodine concentration in children aged 6–12 years	Median urinary iodine concentration (µg/L) in children aged 6–12 years	Place of residence, sex, socioeconomic status
Households that have iodized salt	Percentage of households that have iodized salt (> 15 ppm)	Place of residence, socioeconomic status *Also: compute by children aged < 5 years living in households with iodized salt*
Lifestyle		
Prevalence of heavy episodic drinking	Percentage of adults (15+ years) who have had at least 60 grams or more of pure alcohol on at least one occasion weekly (approximately equivalent to standard alcoholic drinks)	Place of residence, sex, socioeconomic status *Also: adolescents (5 or more standard drinks)*
Abstainers	Percentage of adults (15+ years) in a given population who have not consumed any alcohol during their lifetime	Age, place of residence, sex, socioeconomic status *Also: not in last 12 months*
Low consumption of fruit and vegetables among adults	Percentage of adults (aged 18+ years) who eat less than five servings of fruit and/or vegetables (400 grams) on average per day (age-standardized)	Place of residence, sex, socioeconomic status
Total energy intake from saturated fatty acids	Age-standardized mean percentage of total energy intake from saturated fatty acids in persons aged 18+ years	Place of residence, sex, socioeconomic status
Raised cholesterol among adults	Age-standardized prevalence of raised total cholesterol among persons aged 18+ years (defined as total cholesterol ≥ 5.0 mmol/L or 190 mg/dL), and mean total cholesterol	Place of residence, sex, socioeconomic status
Risk factors infections		
Safe injecting practices among injecting drug users	Needles/syringes distributed per person who injects drugs per year	Age (<25/25+ years), sex
Multiple sexual partnerships	Percentage of women and men aged 15–49 years who have had sexual intercourse with more than one partner in the last 12 months	Age (15–19, 20–24 and 25–49), sex
Discriminatory attitudes towards people living with HIV	Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV in two standard survey questions (respond "No" or "It depends" to any of two questions)	Age, HIV status, sex
Risk factors injuries		
Prevalence of female genital mutilation	Percentage of women aged 15–49 years who have undergone female genital mutilation/cutting	Age, place of residence, socioeconomic status
Non-partner sexual violence prevalence	Percentage of women aged 20–29 years who have ever experienced sexual violence by a non-partner from age 15 years	Age

Indicator name	Definition	Disaggregation / additional dimensions
Seat-belt wearing rate	Percentage of car occupants (i.e. drivers and passengers) who use seat-belts	
Helmet wearing rate	Percentage of motor occupants (i.e. drivers and passengers) who use helmets	
Environmental risk factors		
Population with basic hand-washing facilities with soap and water at home	Percentage of population with soap and water at a hand-washing facility commonly used by family members.	Place of residence (urban, rural), socioeconomic status *Also: proportion of schools providing basic drinking-water, sanitation and hygiene*

Service coverage

Reproductive, maternal, newborn, child and adolescent health		
Timing of first antenatal visit	Percentage of pregnant women aged 15–49 years who had their first antenatal visit in the first trimester (before 16 weeks)	Age, place of residence, socioeconomic status, type of provider
Zinc for treatment of diarrhoea	Percentage of children aged 0–59 months with diarrhoea receiving zinc supplementation	
HIV services		
HIV-testing in key populations	Number of people tested HIV positive linked to care in the last 12 months (disaggregated by key population)	Key population
Pregnant women counselled and tested for HIV	Percentage of women who were counselled during antenatal care for their most recent pregnancy, accepted an offer of testing and received their test results, among all women who were pregnant at any time in the two years preceding the survey	
Prevention of mother-to-child transmission during breastfeeding	Percentage of HIV-exposed breastfed infants whose mothers are receiving antiretroviral therapy at 3 months (and 12 months)	
Early infant testing coverage	Percentage of HIV-exposed infants born within the last 12 months who received an HIV test within 2 months of birth	Test result
Cotrimoxazole prophylaxis among HIV-positives who are eligible	Percentage of eligible HIV-positive individuals who receive cotrimoxazole (CTX) prophylaxis according to national guidelines	
Needles/syringes distribution	Needles/syringes distributed per person who injects drugs	
Coverage of prevention programmes among key populations	Percentage of sex workers/men who have sex with men/people who inject drugs exposed to HIV prevention programmes (respond "Yes" to two specific exposure questions in surveys)	Age, sex
Male circumcision	Percentage of men aged 15–49 years who are circumcised	Age, place of residence, sex, sociocultural variables, socioeconomic variables

Indicator name	Definition	Disaggregation / additional dimensions
HIV/TB		
TB status assessment among HIV-positive people	Percentage of adults and children enrolled in HIV care who had their TB status assessed and recorded during their last visit	
Confirmed cases of MDR-TB	Number of confirmed cases of MDR-TB detected during a specified time period	Patterns of drug resistance, treatment history
Malaria		
Household ownership of insecticide treated net (ITN)	Percentage of households with at least one ITN	Place of residence, socioeconomic status
Treatment-seeking behaviour for children with fever	Percentage of children under 5 years of age with fever in the previous two weeks for whom advice or treatment was sought	Place of care-seeking (public, private)
Access to insecticide treated net (ITN) in the household	Percentage of population at risk with access to an ITN in the household.	Each ITN is assumed to be used by two people
Appropriate treatment among children treated for malaria	Percentage receiving first-line antimalarial treatment among those children under 5 years of age with fever in the last two weeks who received any antimalarial	
Annual blood examination rate	Annual blood examination rate	
Malaria diagnostic testing rate	Percentage of suspected malaria cases that had a diagnostic test	
Malaria test positivity rate	Percentage of confirmed malaria cases (by microscopy or rapid diagnostic test) among all tested cases	
Neglected tropical diseases		
Coverage of case management for selected neglected tropical diseases	Proportion of the population requiring case management that received treatment and care	Age group, disease, sex
Coverage of preventive chemotherapy for trachoma	Proportion of the population living in endemic areas requiring preventive chemotherapy for trachoma that received treatment	Age group, sex
Coverage of preventive chemotherapy for foodborne trematode infections	Proportion of the population living in endemic areas requiring preventive chemotherapy for foodborne trematode infections that received treatment	Age group, sex
Noncommunicable diseases (NCDs)		
Drug therapy and counselling to prevent heart attacks and stroke	Percentage of eligible persons (defined as aged 40 years and older with a 10-year cardiovascular disease risk ≥ 30%, including those with existing cardiovascular disease) receiving drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes	Age, sex

Indicator name	Definition	Disaggregation / additional dimensions
Cataract surgical rate and coverage	Percentage of people who received cataract surgery among those in need in a specified time period	Age, sex
Use of assistive devices among people with disabilities	Percentage of people with disabilities who have and use appropriate assistive devices	
Health systems		
Quality and safety of care		
Cause-specific case fatality rates for major causes	Cause-specific deaths per 100 admissions for major causes and overall in health facilities	Age (under 5, 5+ years), overall and cause-specific, facility-specific
Antenatal care: blood pressure measured	Percentage of women who had blood pressure measured at the last antenatal visit	Age, place of residence, socioeconomic status, type of facility
Antenatal care: tested for syphilis	Percentage of women attending antenatal care services who were tested for syphilis	Age, place of residence, socioeconomic status, type of facility
Antenatal care: treated for syphilis	Percentage of women attending antenatal care services who tested positive for syphilis and received treatment	Age, first/any visit, place of residence, socioeconomic status *Also: add whose sexual contacts were traced*
Antenatal corticosteroid use	Percentage of newborns with confirmed ultrasound gestational age of less than 34 weeks whose mothers received antenatal corticosteroids	
Prevention of postpartum haemorrhage in health facilities	Percentage of women receiving oxytocin immediately after the birth of the baby (within 1 minute of delivery), before the birth of the placenta, irrespective of mode of delivery	
Severe systemic infection/sepsis in the postnatal period	Percentage of women in health facilities with severe systemic infection/sepsis in the postnatal period, including readmissions (after birth in a facility)	
Newborns receiving essential newborn care	Percentage of newborns who received all four elements of essential newborn care: immediate and thorough drying, immediate skin-to-skin contact, delayed cord clamping, and initiation of breastfeeding in the first hour	
Neonatal sepsis	Newborns with suspected severe bacterial infection who receive appropriate antibiotic therapy (infant reportedly stopped feeding well and/or stopped moving on its own)	
Feeding of children born to HIV-positive mothers	Percentage of children born to HIV-positive women who are feeding in line with national guidelines on HIV and infant feeding	
Pneumonia treatment (children)	Percentage of children who are correctly prescribed an antibiotic for pneumonia	
Male partner testing for HIV among women attending antenatal care	Percentage of pregnant women attending antenatal care whose male partner was tested for HIV in the last 12 months	

Indicator name	Definition	Disaggregation / additional dimensions
Knowledge of HIV transmission among young women and men	Percentage of young women and men (15–24 years) who correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	Age (15–19, 20–24 years), place of residence, sex, socioeconomic status
Cancer survival rates	Percentage of persons with cancer who survive at least 5 years after diagnosis, after correction for background mortality in a given time period (cohort)	By cancer site
30-day hospital case fatality rate – acute myocardial infarction (stroke)	Percentage of hospital inpatients with primary diagnosis of acute myocardial infarction (stroke) who died within 30 days after admission	
Postoperative sepsis	Postoperative sepsis as a percentage of all surgeries	Age, sex
Postoperative pulmonary embolism/ thrombosis rate	Percentage of cases of postoperative pulmonary embolus or deep vein thrombosis among all major surgeries	
Hospitals with systems for adverse event reporting and learning for patient safety	Percentage of hospitals with systems for adverse event reporting and learning for patient safety	
Hospital readmission rates	Percentage of unplanned and unexpected hospital readmissions for tracer conditions (acute myocardial infarction, pneumonia, asthma, diabetes)	
Waiting time to elective surgery	Average inpatient waiting time for elective (i.e. non-urgent) surgeries – cataract, coronary angioplasty, hip replacement, knee replacement)	
Patient satisfaction	Percentage of survey respondents who report to be satisfied or very satisfied with the health services	Age, place of residence, sex, socioeconomic status
Neonatal death reviews	Percentage of neonatal deaths occurring in the facility that were audited	*Also: perinatal death reviews*
General service readiness	Percentage of health facilities that have a basic set of equipment and amenities present on the day of the visit	Facility type, managing authority *Also: average number of items per facility*
Access		
Hospital admission rates	Number of hospital admissions per person per year	Age, sex
Bed occupancy rate	Percentage of available beds that have been occupied over a given period	*Also: average length of stay (for selected interventions)*
Surgery rate	Number of surgeries by type (minor/major, specifics) per 1000 population	Age, place of residence, sex, socioeconomic status
Caesarean section rate	Percentage of deliveries by caesarean section	Age, place of residence, socioeconomic status
Medical devices/essential technologies	Density of medical equipment per million population	By type (magnetic resonance imaging, computed tomography [CT] scanners)
Access to palliative care	Consumption of morphine-equivalent strong opioid analgesics (excluding methadone) per death from cancer in a given time period	

Indicator name	Definition	Disaggregation / additional dimensions
Opioid agonist pharmacotherapy used for the treatment of opioid dependence (maintenance)	Availability of opioid agonist pharmacotherapy (such as with methadone, buprenorphine or buprenorphine/naloxone) for maintenance treatment of opioid dependence.	
Health workforce		
Turnover rate	Percentage of health workers leaving public sector employment (dentists, midwifery personnel, nursing personnel, pharmacists, physicians, physician associates) in the last year	By cadre *Also: age (< 30, 30–49, 50+ years), location, (urban/rural), place of employment, sex*
National human resources for health self-sufficiency	Percentage of foreign-trained, non-national health workers (dentists, midwifery personnel, nursing personnel, pharmacists, physician generalists, physician specialists, physician associates)	By cadre *Also: age (< 30, 30–49, 50+ years), location, (urban/rural), place of employment, sex, sector (public/private/other)*
Health policy		
Policy index	Existence of a up-to-date national health strategy and national health plans linked to health needs and priorities	

The Global Reference List of 100 Core Health Indicators is a standard set of 100 indicators prioritized by the global community to provide concise information on the health situation and trends, including responses at national and global levels.

It contains indicators of relevance to country, regional and global reporting across the spectrum of global health priorities relating to the post-2015 health goals of the Sustainable Development Goals (SDGs). These include the Millennium Development Goals (MDGs) agenda, new and emerging priorities such as noncommunicable diseases, universal health coverage and other issues in the post-2015 development agenda.

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