Goal 3 Ensure healthy lives and promote well-being for all at all ages

(Updated on 11 May 2016)

Table of Contents

Target 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.

Indicator 3.1.1: Maternal mortality ratio

From WHO:

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).

Indicator 3.1.2:   Proportion of births attended by skilled health personnel

From WHO:

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).

Target 3.2   By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

Indicator 3.2.1: Under-five mortality rate

From UNICEF:

Abbreviated name	**Under-five mortality rate**
Indicator name	Under-five mortality rate (probability of dying before 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.
Disaggregation/ additional dimension	Place of residence, sex, socioeconomic status *Also: by cause, including pneumonia, diarrhoea, and malaria*
Method of measurement	The most frequently used methods using the above-mentioned data sources are as follows: Civil registration: Number of deaths at age 0-5 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 under-five and infant mortality rates. Census often includes questions on household deaths in the last 12 months, which can be used to calculate mortality estimates. 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. Neonatal, post-neonatal, infant, child and under-five mortality estimates can be derived from full birth history module.
Method of estimation	The United Nation Inter-agency Group for Child Mortality Estimation (UN-IGME) produces trends of under-five mortality with a standardized methodology depending on the type and quality of source of data available. The UN IGME applies the Bayesian B-splines bias-reduction model to empirical data to derive trend estimates of under-five mortality for all countries. See the UN IGME link for details. The UN GME estimates are not necessarily the same as the official national data. Predominant type of statistics: adjusted and estimated.
Measurement frequency	Annual if based on registration system; otherwise, less frequent (3–5 years based on surveys). UN-IGME releases annual estimates for 195 countries.
Monitoring and evaluation framework	Impact; outcome
Preferred data sources	Civil registration with high coverage

Other possible data sources	Household surveys, population censuses, sample registration systems
Further information and related links	UN Inter-agency Group for Child Mortality Estimation. Levels & trends in child mortality. Report 2015. New York: UNICEF, 2015. (Available at: http://www.childmortality.org/files_v20/download/IGME%20report%202015%20child%20mortality%20final.pdf, accessed 6 October 2015)
	http://www.data.unicef.org/child-mortality/under-five.html
	http://www.childmortality.org/

Indicator 3.2.2:   Neonatal mortality rate

From UNICEF:

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.
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	The United Nation Inter-agency Group for Child Mortality Estimation (UN-IGME) produces neonatal mortality rate estimates with a Bayesian spline regression model which models the ratio of neonatal mortality rate / (under-five mortality rate - neonatal mortality rate). Estimates of NMR are obtained by recombining the estimates of the ratio with UN IGME-estimated under-five mortality rate. See UN IGME for more details. Predominant type of statistics: adjusted and estimated. These neonatal 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.
Measurement frequency	Annual if based on registration system; otherwise, less frequent (3−5 years based on surveys). UN-IGME releases annual estimates for 195 countries.
Monitoring and evaluation framework	Impact; outcome

Preferred data sources	Civil registration with high coverage
Other possible data sources	Household surveys, sample registration systems
Further information and related links	UN Inter-agency Group for Child Mortality Estimation. Levels & trends in child mortality. Report 2015. New York: UNICEF, 2015. (Available at: http://www.childmortality.org/files_v20/download/IGME%20report%202015%20child%20mortality%20final.pdf, accessed 6 October 2015)
	http://www.data.unicef.org/child-mortality/neonatal.html
	http://www.childmortality.org/

Target 3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

Indicator 3.3.1: Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations

From WHO/UNAIDS:

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 person-years among the uninfected population. The incidence rate is the number of new cases per population at risk in a given time period.
Numerator	Number of people who are newly infected in a specific time period x 1000.
Denominator	Total uninfected person-years of exposure.
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 (including mother-to-child transmission), place of residence, 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.
	HIV incidence can also be modelled using the Spectrum software.
Method of estimation	Modelling is currently used to estimate new infections and incidence. Prevalence data inform these models.
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	UNAIDS Global AIDS response progress reporting 2015: construction of core indicators for monitoring the 2011 United Nations political declaration on HIV/AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2015 http://www.unaids.org/sites/default/files/media_asset/JC2702_GARPR2015guidelines_en.pdf accessed 7 October

2015.

UNAIDS website for relevant data and national Spectrum files http://aidsinfo.unaids.org/

Consolidated Strategic Information Guidelines for HIV in the Health Sector. Geneva: World Health Organization; 2015.http://www.who.int/hiv/pub/guidelines/strategic-information-guidelines/en/ accessed on 7 October 2015.

Indicator 3.3.2: Tuberculosis incidence per 1,000 population

From WHO:

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 under-diagnosis.
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: (i) incidence = case notifications/estimated proportion of cases detected; (ii) incidence = prevalence/duration of condition; (iii) 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).

Indicator 3.3.3: Malaria incidence per 1,000 population

From WHO:

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 malaria cases per 1000 persons per year.
Numerator	Number of malaria cases.
Denominator	Population at risk (number of people living in areas where malaria transmission occurs).
Disaggregation/ additional dimension	Age, sex, place of residence, season (year and month)
Method of measurement	Complete data on malaria cases reported through surveillance systems are the best source of data but are rarely available for large populations. Reported data on malaria cases generally need to be corrected for extent of health service use, incompleteness of reporting and lack of case confirmation. In high transmission areas with limited health service data but with good data on parasite prevalence the number of cases can be estimated from parasite prevalence. The denominator is estimated, using risk mapping and population data.
Method of estimation	WHO compiles data on reported confirmed cases of malaria, submitted by national malaria control programmes and estimates the extent of underreporting. Where necessary the number of cases are inferred from parasite prevalence surveys.
Measurement frequency	Annual
Monitoring and evaluation framework	Impact
Preferred data sources	Surveillance systems
Other possible data sources	

Further information and related links	World Malaria Report 2014. Geneva: World Health Organization; 2014. http://www.who.int/malaria/publications/world_malaria_report_2014/en/ 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). 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. World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).
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).
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).

Indicator 3.3.4: Hepatitis B incidence per 100,000 population

From WHO:

Abbreviated name	**Hepatitis B incidence**
Indicator name	**Estimated number of new hepatitis B infections per 100,000 population in a given year**
Domain	
Subdomain	
Associated terms	
Definition	The number of new hepatitis B infections per 100,000 population in a given year is estimated from the prevalence of total antibodies against hepatitis B core antigen (Total anti-HBc) and hepatitis B surface antigen (HBsAg) positive among children 5 years of age, adjusted for sampling design.
Numerator	Number of survey participants with Total anti-HBc and HBsAg positive test
Denominator	Number in survey with Total anti-Hc/HBsAg result
Disaggregation/ additional dimension	Dependent on sampling methodology. Place of residence, exposure to the birth dose hepatitis B vaccine (official records), exposure to three doses of hepatitis B vaccine
Method of measurement	Total anti-HBc reflect cumulated incidence in the first five years of life while HBsAg reflect chronic infections that may evolve towards chronic liver diseases
	The sample of the serological survey must be drawn from the specific geographic region to be verified. For example if the purpose is to estimate national transmission of HBV (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 are 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	
Measurement frequency	Intermittent, dependent on population seroprevalence of HBsAg before hepatitis B immunization and infant hepatitis B vaccination coverage.
Monitoring and evaluation framework	Outcome
Preferred data sources	Serosurvey

Other possible data sources	Routinely collected hepatitis B vaccine administrative coverage data including the proportion 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	Hepatitis B Control Through Immunization: a Reference Guide
	http://iris.wpro.who.int/bitstream/10665.1/10820/3/9789290616696_eng.pdf
	Documenting the Impact of Hepatitis B Immunization: best practices for conducting a serosurvey
	http://whqlibdoc.who.int/hq/2011/WHO_IVB_11.08_eng.pdf
	Sample design and procedures for Hepatitis B immunization surveys: A companion to the WHO cluster survey reference manual
	http://whqlibdoc.who.int/hq/2011/WHO_IVB_11.12_eng.pdf

Indicator 3.3.5: Number of people requiring interventions against neglected tropical diseases

From WHO:

Target	3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
Abbreviated indicator name	**People requiring interventions against neglected tropical diseases (NTDs)**
Indicator name	Number of people requiring interventions against neglected tropical diseases (NTDs)
Domain	Health status
Subdomain	Infectious disease
Associated terms	Neglected tropical diseases; eradication; elimination; control
Definition	Number of people requiring treatment and care for any one of the NTDs targeted by the WHO NTD Roadmap and World Health Assembly resolutions and reported to WHO. Treatment and care is broadly defined to allow for preventive, curative, surgical or rehabilitative treatment and care. Other interventions (e.g. vector management, veterinary public health, water, sanitation and hygiene, disease surveillance, morbidity management and disability prevention) are to be addressed in the context of targets and indicators for Universal Health Coverage (UHC) and universal access to water and sanitation.
Numerator	1) Average annual number of people requiring preventive chemotherapy (PC) for at least one PC-NTD; and 2) Number of new cases requiring individual treatment and care for other NTDs.
Denominator	Not applicable.
Disaggregation/ additional dimension	Disaggregation by disease is required; ending the epidemic of NTDs requires a reduction in the number of people requiring interventions for each NTD. Disaggregation by age is required for preventive chemotherapy: pre-school-aged children (1-4 years), school-aged (5-14 years) and adults (≥ 15 years). Based on current reporting systems, disaggregation by sex and urban/rural is optional

	or depends on which diseases are co-endemic.
Method of measurement	The number of people requiring treatment and care for NTDs is measured by existing country systems, and reported through joint request and reporting forms for donated medicines, and the integrated NTD database.
Method of estimation	Some estimation is required to aggregate data across interventions and diseases. There is an established methodology that has been tested and an agreed international standard. 1) Average annual number of people requiring PC for at least one PC-NTD: People may require PC for more than one PC-NTD. The number of people requiring PC is compared across the PC-NTDs, by age group and implementation unit (e.g. district). The largest number of people requiring PC is retained for each age group in each implementation unit. The total is considered to be a conservative estimate of the number of people requiring PC for at least one PC-NTD. Prevalence surveys (e.g. transmission assessment surveys) determine when an NTD has been eliminated or controlled and PC can be stopped or reduced in frequency, such that the average annual number of people requiring PC is reduced. 2) Number of new cases requiring individual treatment and care for other NTDs: The number of new cases is based on country reports, whenever available, of new and known cases of Buruli ulcer, Chagas disease, cysticercosis, dengue, guinea-worm disease, echinococcosis, human African trypanosomiasis (HAT), leprosy, the leishmaniases, rabies and yaws. Where the number of people requiring and requesting surgery for PC-NTDs (e.g. trichiasis or hydrocele surgery) is reported, it can be added here. Similarly, new cases requiring and requesting rehabilitation (e.g. leprosy or lymphoedema) can be added whenever available. Case reports may not be comparable over time; some further estimation may be required to adjust for changes in case-finding and reporting. Populations referred to under 1) and 2) may overlap; the sum would overestimate the total number of people requiring treatment. The maximum of 1) or 2) is therefore retained at the lowest common implementation unit and summed to get conservative country, regional and global aggregates. By 2030, improved co-endemicity data and models will validate the trends obtained using this simplified approach.
Measurement frequency	Annual
Monitoring and evaluation framework	Impact
Preferred data sources	Country data are published via the Global Health Observatory and Preventive chemotherapy databank.
Other possible data sources	Atlas of human African trypanosomiasis. Weekly epidemiological record (Chagas disease). Regional databases (dengue).
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). Accelerating work to overcome the global impact of neglected tropical diseases: A

	Roadmap for Implementation. Geneva: World Health Organization; 2012 (http://www.who.int/neglected_diseases/NTD_RoadMap_2012_Fullversion.pdf, accessed 29 March 2015). Investing to overcome the global impact of neglected tropical diseases. Geneva: World Health Organization; 2015 (http://www.who.int/neglected_diseases/9789241564861/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).

Target 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

Indicator 3.4.1: Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

From WHO:

Indicator name	Mortality between 30 and 70 years of age from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
Abbreviated name	Mortality rate from the four main NCDs
Domain	Health status
Subdomain	NCDs
Associated terms	NCD mortality 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, defined as the per cent of 30-year-old-people who would die before their 70th birthday from any of cardiovascular disease, cancer, diabetes, or chronic respiratory disease, assuming that s/he would experience current mortality rates at every age and s/he would not die from any other cause of death (e.g., injuries or HIV/AIDS).
Numerator	Number of deaths between ages 30 and 70 years from the four causes in a synthetic life-table population.
Denominator	Population at exact age 30 in the synthetic life-table population.
Disaggregation	Place of residence, sex
Method of measurement	Death registration with medical certification of cause of death, coded using the international classification of diseases (ICD). The ICD-10 codes for cardiovascular disease, cancer, diabetes or chronic respiratory disease are: I00–I99, COO–C97, E10–E14 and J30–J98
Method of estimation	Modelling, using multiple inputs, is often used if no complete and accurate data are available. The latest country comparable statistics are from the WHO Global Health Estimates for the year 2012. These estimates represent the best estimates of WHO, computed using standard categories, definitions and methods to ensure cross-country comparability, and may not be the same as official national estimates.
Measurement frequency	Annual if death registration data are available; every 3-5 years using other sources of information.
Preferred data sources	Death registration systems with complete coverage and medical certification of the cause of death
Other possible data sources	Household surveys with verbal autopsy; sample or sentinel registration systems
Further information and	Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases, including a set of indicators. Agenda

| related links | 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).

WHO methods and data sources for global causes of death, 2000–2012 (available online at: http://www.who.int/healthinfo/global_burden_disease/GlobalCOD_method_2000_2012.pdf?ua=1)

NCD mortality rate indicator and measurement registry entry, available online at: http://apps.who.int/gho/indicatorregistry/App_Main/view_indicator.aspx?iid=3354) |

Indicator 3.4.2: Suicide mortality rate

From WHO:

Indicator name	Suicide mortality rate (per 100 000)
Abbreviated name	Suicide rate
Domain	Health status
Subdomain	Injury and violence
Associated terms	Suicide rate
Definition	Number of suicide deaths in a year, divided by the population and multiplied by 100 000.
Numerator	Number of suicide deaths multiplied by 100 000.
Denominator	Midyear resident population for the same calendar year, UN World Population Prospects, medium variant.
Disaggregation	Place of residence, sex, age
Method of measurement	Death registration with medical certification of cause of death, coded using the international classification of diseases (ICD). The ICD-10 codes for suicide are: X60-X84, Y87.0
Method of estimation	Modelling, using multiple inputs, is often used if no complete and accurate data are available. The latest country comparable statistics are from the WHO Global

	Health Estimates for the year 2012. These estimates represent the best estimates of WHO, computed using standard categories, definitions and methods to ensure cross-country comparability, and may not be the same as official national estimates.
Measurement frequency	Annual if death registration data are available, and every 3-5 years using other sources of information.
Preferred data sources	Death registration systems with complete coverage and medical certification of the cause of death
Other possible data sources	Household surveys with verbal autopsy; sample or sentinel registration systems; special studies; surveillance systems
Further information and related links	WHO methods and data sources for global causes of death, 2000–2012 (available online at: http://www.who.int/healthinfo/global_burden_disease/GlobalCOD_method_2000_2012.pdf?ua=1 Suicide mortality rate indicator and measurement registry entry, available online at: http://apps.who.int/gho/indicatorregistry/App_Main/view_indicator.aspx?iid=4664

Target 3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

Indicator 3.5.1. Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders

From UNODC:

Definition and method of computation

Number of people who have received different treatment interventions in the last year divided by the actual number of the target population (people with substance use disorders measured as the total number of problem drug users)

The target will be assessed through aggregating the information on the type of treatment interventions and extent of coverage of these for the population in need.

Rationale and interpretations

Strengthening the treatment services entails providing a comprehensive set of evidence based interventions (that have been laid down in the international standards and guidelines) that are available and accessible to all population groups in need of these interventions or services. The indicator will inform the extent to which a range of evidence based interventions for treatment of substance use disorder are available and are accessed by the population in need for these in a country, regional or globally. For instance currently UNODC estimates that globally one out of 6 people with drug use disorders have access to or provided drug treatment services (World Drug Report 2014).

Sources and data collection
The source of information will primarily be the Annual Reports Questionnaire that are submitted by the Member States to UNODC as an annual reporting cycle that can be supplemented with information collected by WHO such as the WHO ATLAS-SU: Resources for Treatment and Prevention of Substance Use Disorders and the Global Information System on Alcohol and Health (GISAH)

Disaggregation
The current reporting of ARQ allows for disaggregation by the settings, type of intervention and for the population groups. The indicators can be further modified to include disaggregation by gender and specific age groups.

Comments and limitations

The current response rate for returning the ARQ is around 60 per cent. However this is estimated to cover nearly 75 per cent of the global population. The extent of reporting also varies geographically where UNODC may have near complete responses from countries in Europe there are much less responses from Africa. The second limitation is that the indicators stresses on type, availability and coverage of services but does not necessarily provide information on the actual quality of the interventions/services provided. These could contextualised through the data generated by the information from WHO reports.

Data for global and regional monitoring

The data is available on country basis which makes it easy to aggregate at sub regional, regional and global levels. The reporting cycle is annual and therefore most recent data is available each year that can allow for monitoring the changes and trends.

DEFINITION OF THE TERMS

Treatment of substance use disorder as defined by the Political Declaration and Plan of Action on International Cooperation Towards an integrated and Balanced Strategy to Counter the World Drug Problem, High Level Segment, Commission on Narcotic Drugs, Vienna 11-12 March 2009

Comprehensive treatment system offering a wide range of integrated pharmacological (such as detoxification and opioid agonist and antagonist maintenance) and psychosocial (such as counselling, cognitive behavioural therapy and social support) interventions based on scientific evidence and focused on the process of rehabilitation, recovery and social reintegration (Plan of Action, Para 4:h)

Services for the treatment of drug disorders'' are part of clinical responses to substance-related disorders. Such services are aimed at stopping or reducing the effects of acute intoxication, managing withdrawal symptoms during detoxification, preventing relapse and dealing with long-term psychological and behavioural symptoms.. (E/NR/2014/2)[1]

Substance use disorders, occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. According to the DSM-5, a diagnosis of substance use disorder is based on evidence of impaired control, social impairment, risky use, and pharmacological criteria. (DSM V)

Pharmacological Interventions include cluster of interventions such as detoxification, , opioid antagonist therapy, and opioid maintenance therapy (E/NR/2014/2)

---

[1] All the subsequent definition of the terms included are from the Economic and Social Council (E/NR/2014/2) Commission on Narcotics Drugs, Annual Report Questionnaire; Part 2:COMPREHENSIVE APPROACH TO DRUG DEMAND AND SUPPLY REDUCTION

- Detoxification refers to a process carried out in a safe and effective manner aimed at eliminating or minimizing withdrawal symptoms that occur after drugs are no longer taken (WHO).
- Opioid maintenance therapy refers to the regular administration of a long-acting opioid agonist to stabilize the patient without applying tapering dosage schedules.
  (WHO, UNODC, UNAIDS Technical Guide for Countries to Set Targets for Universal Access to HIV Prevention, Treatment and Care for Injecting Drug Users (WHO, Geneva, 2009)
- Opioid antagonist maintenance treatment refers to the regular administration of a long-acting opioid antagonist to block opioid receptors and avoid any opioid effect (adapted from WHO, 2009).

Psychosocial cluster of interventions such as treatment planning, counselling, peer support groups, screening/brief intervention, contingency management, cognitive behavioural therapy, treatment of comorbidity, motivational interviewing.

- Treatment planning refers to the development of a written description of the treatment to be provided and its anticipated course. Such planning is done with the patient by establishing goals based on the patient's identified needs and setting interventions to meet those goals (UNODC, Principles of Drug Dependence Treatment: Discussion Paper, March 2008).
- Counselling refers to an intensive interpersonal process aimed at assisting individuals to achieve their goals or function more effectively (WHO).
- Peer support groups (self-help groups such as Narcotics Anonymous) refers to small groups of peers wishing to assist each other in their struggle with a particular problem (in the case of Narcotics Anonymous, with drug dependence) (WHO).
- Screening is aimed at detecting health problems or risk factors at an early stage before they have caused serious disease or other problems (WHO). A "brief intervention" is a structured therapy of short duration aimed at assisting an individual to cease or reduce the use of a psychoactive substance or to deal with other life issues (WHO).
- Contingency management" refers to psychosocial interventions that provide a system of incentives and disincentives designed to make drug use less attractive and abstinence more attractive (NIDA).
- Cognitive behavioural therapy refers to psychosocial interventions aimed at helping patients recognize, avoid and cope with the situations in which they are most likely to use drugs (adapted from NIDA).
- Motivational interviewing refers to a counselling and assessment technique that follows a non-confrontational approach to questioning people about difficult issues like alcohol and drug use, assisting them to make positive decisions aimed at reducing or stopping such use (ODCCP).

Social rehabilitation and aftercare include a cluster of interventions such as vocational training, social assistance, educational activities, rehabilitation and aftercare.

- Vocational training and income-generation support" refers to activities aimed at providing participants with the skills and opportunities to engage in meaningful employment and sustainably support themselves and their families.
- Social assistance refers to the many ways in which professionals and non-professionals can support the social and psychological well-being of drug users with a view to improving both the quality and duration of their lives (WHO, Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence, 2009).
- Educational activities on the risks posed by drug use refer to sessions aimed at informing and counselling people about the consequences of drug use, in other words, the ways in which such use affects physical and mental health, behavioural control and interpersonal relationships. In particular, these educational sessions should focus on providing information about overdosing, contracting infectious diseases, developing cardiovascular, metabolic and psychiatric disorders etc. and the benefit of abstaining from drug use. Treatment methods and goals are also explained in detail.
- Rehabilitation and aftercare refers to the process aimed at achieving an optimal state of health, psychological functioning and social well-being for individuals with a drug-related problem (WHO).

Coverage

Coverage describes the extent to which an intervention is delivered to the target population, that is, **the proportion** of the target population in need of an intervention that actually gets it. Coverage has to be determined relative to the national estimates of people in need, e.g., people with substance use disorders, or people vulnerable to substance use.
(Economic and Social Council (E/NR/2014/2) Commission on Narcotics Drugs, Annual Report Questionnaire; Part 2:COMPREHENSIVE APPROACH TO DRUG DEMAND AND SUPPLY REDUCTION)

References

UNODC, International Standards on Drug Use Prevention, 2013.
http://www.unodc.org/documents/prevention/prevention_standards.pdf
E/CN.7/2013/CRP.4 International Standards on Drug Use Prevention, Commission on Narcotic Drugs, Fifty-sixth session, Vienna, 11-15 March 2013
UNODC, TREATNET Quality Standards For Drug Dependence Treatment And Care Services 2012
http://www.unodc.org/docs/treatment/treatnet_quality_standards.pdf
E/CN.7/2015/3 World situation with regard to drug abuse: Report of the Secretariat, Commission on Narcotic Drugs, Fifty-eighth session Vienna, 9-17 March 2015
E/NR/2014/2 Commission on Narcotics Drugs, Annual Report Questionnaire;
Part II : COMPREHENSIVE APPROACH TO DRUG DEMAND AND SUPPLY REDUCTION
E/NR/2014/3 Commission on Narcotics Drugs, Annual Report Questionnaire
Part III: Extent and patterns of and trends in drug use

Political Declaration and Plan of Action on International Cooperation Towards an integrated and Balanced Strategy to Counter the World Drug Problem, High Level Segment, Commission on Narcotic Drugs, Vienna 11-12 March 2009
http://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_52/Political-Declaration2009_V0984963_E.pdf
WHO, Global Information System on Alcohol and Health (GISAH)
http://apps.who.int/gho/data/node.main.GISAH?lang=en
WHO, ATLAS-SU: Resources for Treatment and Prevention of Substance Use Disorders
http://www.who.int/substance_abuse/activities/atlas/en/

Indicator 3.5.2: Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol

From WHO:

Indicator name	Total alcohol per capita (15+ years) consumption of pure alcohol
Abbreviated name	Total APC
Definition	Total APC is defined as the total (sum of recorded APC three-year average and unrecorded APC) amount of alcohol consumed per adult (15+ years) over a calendar year, in litres of pure alcohol. Recorded alcohol consumption refers to official statistics at country level (production, import, export, and sales or taxation data), while the unrecorded alcohol consumption refers to alcohol which is not taxed and is outside the usual system of governmental control, such as home or informally produced alcohol (legal or illegal), smuggled alcohol, surrogate alcohol (which is alcohol not intended for human consumption), or alcohol obtained through cross-border shopping (which is recorded in a different jurisdiction). In circumstances in which the number of tourists per year is at least the number of inhabitants, the tourist consumption is also taken into account and is deducted from the country's recorded APC. The data on the number of tourists is from UN Tourist Statistics.
Numerator	Numerator: The sum of the amount of recorded alcohol consumed per capita (15+ years), average during three calendar years, in litres of pure alcohol, and the amount of unrecorded alcohol per capita consumption (15+ years), during a calendar year, in litres of pure alcohol.
Denominator	Midyear resident population (15+ years) for the same calendar year, UN World Population Prospects, medium variant.
Disaggregation	Sex, age
Method of measurement	Recorded alcohol per capita (15+) 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 national statistics; second are country-specific alcohol industry statistics in the public domain based on

	interviews or fieldwork (Canadean, International Wine and Spirit Research (IWSR), Wine Institute; historically World Drink Trends) or data from the International Organisation of Vine and Wine (OIV); third is the Food and Agriculture Organization of the United Nations' statistical database (FAOSTAT), and fourth is data from alcohol industry statistics in the public domain based on desk review. For countries, where the data source is FAOSTAT the unrecorded consumption may be included in the recorded consumption. As from the introduction of the "Other" beverage-specific category, 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. For unrecorded APC, the first priority in the decision tree is given to nationally representative empirical data; these are often general population surveys in countries where alcohol is legal. Second are specific other empirical investigations, and third is expert opinion supported by periodic survey of experts at country level (50 countries with significant estimates of unrecorded alcohol consumption) using modified Delphi-technique.
Method of estimation	For recorded APC, in order to make the conversion into litres of pure alcohol, the alcohol content (% alcohol by volume) is considered to be as follows: Beer (barley beer 5%), Wine (grape wine 12%; must of grape 9%, vermouth 16%), Spirits (distilled spirits 40%; spirit-like 30%), and Other (sorghum, millet, maize beers 5%; cider 5%; fortified wine 17% and 18%; fermented wheat and fermented rice 9%; other fermented beverages 9%). Survey questions on consumption of unrecorded alcohol are converted into estimates per year of unrecorded APC. In some countries, unrecorded is estimated based on confiscated alcohol confiscated by customs or police.
Measurement frequency	Annual for passive surveillance of governmental national data and country-specific industry data, and every 3-4 years using other sources of information. All sources of information are used for constructing uninterrupted time-series that are validated with countries and published by WHO every 3-4 years.
Preferred data sources	Recorded: Government statistics; Unrecorded: Nationally representative empirical data
Other possible data sources	Recorded: Alcohol industry statistics in the public domain, FAOSTAT; Unrecorded: Specific empirical investigations, expert opinion.
Further information and related links	http://apps.who.int/gho/data/?showonly=GISAH&theme=main http://www.who.int/gho/alcohol/en/ http://www.who.int/substance_abuse/publications/global_alcohol_report/en/

Target 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.

Indicator 3.6.1: Death rate due to road traffic injuries

From WHO:

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).

Target 3.7   By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.

Indicator 3.7.1: Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods

From WHO:

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: (i) all pregnant women (married or in a consensual union) whose pregnancies were unwanted or mistimed at the time of conception; (ii) all postpartum amenorrhoeic women (married or in consensual union) who are not using family planning and whose last birth was unwanted or mistimed; (iii) 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	Countdown to 2015. Monitoring maternal, newborn and child health: understanding key progress indicators.

related links	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).

Disaggregation:

Disaggregation by disability can be obtained bv including the functioning questions included the World Health Survey (WHS; http://www.who.int/healthinfo/survey/en/), WHO Study on global AGEing and adult health (SAGE; http://www.who.int/healthinfo/sage/en/) or WHO Model Disability Survey (MDS; http://www.who.int/disabilities/data/mds/en/) in population-based health surveys.

From Population Division/DESA, United Nations:

Definition and method of computation

Percentage of women of reproductive age (15-49 years) who have their need for family planning satisfied with modern methods.

The numerator is the percentage of women of reproductive age (15-49 years old) who are currently using, or whose sexual partner is currently using, at least one modern contraceptive method. The denominator is the total demand for family planning (the sum of contraceptive prevalence (any method) and the unmet need for family planning.

Metadata on the definition, method of computation and other information for each component—contraceptive prevalence and unmet need for family planning—are included in the MDG database as each was an indicator (5.3 and 5.6) used for global monitoring of MDG target 5.B. Achieve, by 2015, universal access to reproductive health. An important limitation, though, of the indicators used in MDG monitoring is that they were only with reference to women of reproductive age who are married or in a union. The indicators missed women who are not married but who are exposed to the risk of pregnancy. See http://unstats.un.org/unsd/mdg/Metadata.aspx

The proposed indicator limits the numerator to women who are using a modern method of family planning. Women who are using a traditional method of contraception are not considered as having a met need for family planning.

In contrast, the indicator "Demand for family planning satisfied (met need for contraception)" (regardless if the method used is modern or traditional).is a key indicator under the Every Woman, Every Child initiative and is described in detail in the handbook "Monitoring maternal, newborn and child health: understanding key progress indicators" available here from WHO (2011): http://www.who.int/entity/healthmetrics/news/monitoring_maternal_newborn_child_health.pdf

Rationale and interpretation
While it is difficult to define an ideal level of contraceptive prevalence, since it is dependent, in part, on women's and men fertility preferences, the proportion of demand for family planning satisfied can be interpreted as the degree to which total demand for contraception has been met with an ideal (if improbable) target of 100 per cent demand met.

"The proportion of demand for family planning satisfied (met need for contraception) indicator enables assessment of family planning programmes and progress in providing contraceptive services to women who wish to avoid getting pregnant. Access to family planning provides women and their partners opportunities to make decisions about family size and timing of pregnancies. This contributes to maternal and child health by preventing unintended pregnancies and pregnancies that are too closely spaced, which are at higher risk for poor obstetrical outcomes. Unmet need for family planning shows the gap between women's reproductive intentions and their access to or use of contraceptives. The CPR provides an estimate of contraceptive use in a population. Both the unmet need for family planning and CPR indicators are used for tracking progress towards the MDG 5 target 5B of achieving universal access to reproductive health." (WHO, 2011)

Sources and data collection
Data are from household surveys that are internationally-coordinated, such as the Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), Reproductive Health Surveys (RHS) and national surveys based on similar methodologies. These surveys tend to be undertaken every three to five years. Other survey programmes, like the Pan-Arab Project for Family Health (PAPFAM) and the European Fertility and Family Surveys (FFS) may be considered as well.

Data are available for 138 countries and territories for the period 1990-2014; 90 countries and territories have at least two available data points.

183 countries and territories have data on contraceptive prevalence (one component of this indicator); 156 countries and territories have at least two data points.

Data for regional and global monitoring
Country-specific data from surveys are used for regional and global monitoring (as noted above).

In order to generate regional and global estimates for any given reference year, the Population Division/DESA uses a Bayesian hierarchical model. Country-level, model-based estimates are only used for computing the regional and global averages and are not used for global monitoring of trends at the country level. Country-specific estimates are generated by using the general relationship between contraceptive prevalence and unmet need, a quadratic function to summarize the "world pattern", country-specific intercepts to capture the different levels within countries (estimated using a hierarchical model based on sub-regional information) and non-parametric changes over time to capture fluctuations around the expected trend. The fewer the number of observations for the country of interest, the more its estimates are driven by the experience of other countries, whereas for countries with many observations the results are determined to a greater extent by those observations.

Regional and global estimates are weighted averages of the model-based country estimates, using the number of married or in-union women aged 15-49 for the reference year in each country (for MDG monitoring purposes). Regional averages are provided only if data are available for at least 50 per cent of the women of reproductive age who are married or in union in the region.

Supplementary information

References
Alkema, LA and others (2013). National, regional, and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: A systematic and comprehensive analysis. *The Lancet*, Volume 381, Issue 9878, pp. 1642-1652.

World Health Organization (2011). Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: WHO.

From UNFPA:

We note that contraceptive prevalence rate (CPR) and the unmet need for contraception rate (UNR) are the building blocks of proportion of demand satisfied (PDS), namely as follows:

PDS = CPR / (CPR + UNR).

In this light, we enclose herewith the metadata prepared in the context of the MDG Goal 5, Target 5.B, for CPR and UNR.

Contraceptive prevalence rate:

DEFINITION AND METHOD OF COMPUTATION

Definition

The contraceptive prevalence rate is the percentage of *women of reproductive age* who are currently using, or whose sexual partner is currently using, at least one *contraceptive method,* regardless of the method used.

Concepts

Women of reproductive age include all women of reproductive age (15-49) who are married or in consensual union.

Contraceptive methods include modern and traditional methods. Modern methods of contraception include female and male sterilization, oral hormonal pills, intra-uterine devices (IUD), male condoms, injectables, implants (including Norplant), vaginal barrier methods, female condoms, and emergency contraception. Traditional methods of contraception include the rhythm method (periodic abstinence), withdrawal, lactational amenorrhea method (LAM) and folk methods.

Method of computation

$$\text{Contraceptive prevalence rate} = \frac{\text{Women using a contraceptive method}}{\text{Women of reproductive age}} \times 100$$

RATIONALE AND INTERPRETATION

The contraceptive prevalence rate, which serves as a proxy measure of access to reproductive health services, is useful for tracking progress towards the target of achieving universal access to reproductive health, especially when the indicator is considered in conjunction with information about women's knowledge of family planning or accessibility, and the quality of family planning services. Information on contraceptive prevalence complements the indicator of unmet need for family planning. The sum of contraceptive prevalence and unmet need determines the total demand for contraception. Unlike the unmet need indicator, contraceptive prevalence does not take into account whether women or couples do or do not desire additional children. This makes the indicator more difficult to interpret than unmet need because contraceptive prevalence rates vary across societies with vastly different preferred family sizes. For the same reason, it is difficult to specify the desired target for contraceptive prevalence rates.

SOURCES AND DATA COLLECTION

Contraceptive prevalence rates are calculated from nationally representative surveys with questions on current use of contraception. Surveys that commonly include this information are: Demographic and Health Surveys (DHS), Fertility and Family Surveys (FFS), Reproductive Health Surveys (RHS) conducted with assistance of the United States Centers for Disease Control and Prevention, Multiple Indicator Cluster Surveys (MICS) and other national surveys.

Surveys gather information on contraceptive prevalence through direct questions to women. These questions often include two parts: a general question asking women if they are currently using a method of contraception and a follow-up question regarding the type of contraceptive method currently used. In order to obtain an accurate measure of contraceptive prevalence, it is desirable for the survey interviewer to provide a description or a list of the specific methods of family planning. If this is not done, the level of contraceptive use may be significantly underreported, especially where the use of traditional methods such as withdrawal or calendar rhythm, or use of contraceptive sterilization, is common. In some surveys, such as the DHS, the methods are described in a series of "probe" questions about methods the respondent has heard about, before the respondent is asked about current use of contraception. In highly literate populations, the interviewer might provide the respondent with a printed list of the methods.

In recording data on the type of contraceptive method used, it is important to keep in mind that some respondents may use more than one method at a time. In such cases, a selection is either made a posteriori by the survey enumerator based on the effectiveness of the methods used or by respondents based on their own assessment of the method they used most frequently. Identifying only one method or combination of methods per respondent allows contraceptive prevalence to be computed as the sum of levels of use of each method. If more than one method or combination of methods is recorded per respondent and no selection criteria are employed, the sum of the various methods used may exceed the overall level of contraceptive prevalence.

It is also important to note that contraceptive prevalence is measured at the time of interview. There is, however, a lag, generally between one and two years, between the date of an interview and the diffusion of the survey report. On average, the surveys are undertaken every three to five years.

DISAGGREGATION

Contraceptive use may vary significantly across socioeconomic groups and regional and geographical areas. For policy purposes, information on contraceptive prevalence should be disaggregated, at a minimum, by age and current marital status. This information is important because it allows monitoring of differences in access to contraceptive methods for more vulnerable groups such as adolescents and unmarried women.

Contraceptive use can be disaggregated by other social or economic characteristics, such as the woman's level of educational attainment, urban or rural residence, and number of own children as relevant for the policy needs of each country or area.

COMMENTS AND LIMITATIONS

Differences in survey design and implementation, as well as differences in the way survey questionnaires are formulated and administered can affect the comparability of data over time, and between countries. Some of the most common differences are the range of contraceptive methods included in the surveys, and whether or not probe questions are included on the types of methods used. The lack of probe questions can result in an underestimation of contraceptive prevalence.

The characteristics (age, sex, marital or union status) of the persons for whom contraceptive prevalence is measured (base population) also affects the comparability of data on contraceptive prevalence. Although the standard definition of the contraceptive prevalence rate refers only to women who are married or in union, alternative base populations are sometimes presented including sexually active women (irrespective of marital status), ever-married women, or men and women who are married or in union.

The time frame used to assess contraceptive prevalence can also vary. Often it is left to the respondent to determine what is meant by "currently using" a method of contraception. Some surveys ask about use within the past month. Occasionally, when information on current use is not collected, data on use of contraceptive methods at last sexual intercourse or during the previous year has been utilized to estimate current contraceptive prevalence. Any differences between the data presented and the standard definition of contraceptive prevalence should be clearly indicated.

Sampling variability can also be an issue in data collection, especially when contraceptive prevalence is measured for a specific subgroup (according to method, age-group, level of educational attainment, place of residence, etc) or when analyzing trends over time.

GENDER ISSUES

Statistics on contraception prevalence rates are based primarily on women. This is mostly for pragmatic reasons, because the majority of contraceptive methods are female-based. But it can also be argued that the degree to which women control their reproduction is an indicator of the degree to which they control their own lives in general, thereby converting the contraceptive prevalence rate into an indicator of women's empowerment. Recent surveys have also interviewed samples of men about contraceptive use.

REFERENCES

ORC MACRO (2003). *Online Guide to DHS Statistics.* Calverton. Internet site
http://www.measuredhs.com/help/Datasets/index.htm

UNITED NATIONS (2008). *World Contraceptive Use 2007.* New York. Available from
http://www.un.org/esa/population/publications/contraceptive2007/contraceptive2007.htm

UNITED NATIONS (2004). *Levels and Trends of Contraceptive Use as Assessed in 2002.* New York. Available from http://www.un.org/esa/population/publications/wcu2002/WCU2002_Report.pdf

UNITED NATIONS (2002). *World Contraceptive Use 2001.* New York. Available from http://www.un.org/esa/population/publications/contraceptive2001/contraception01.htm

UNITED NATIONS (2001). *Levels and Trends of Contraceptive Use as Assessed in 1998.* New York. Available from http://www.un.org/esa/population/unpop.htm

UNITED NATIONS (1958). *Multilingual Demographic Dictionary, English Section.* Population Studies, No. 29. New York.

WORLD HEALTH ORGANIZATION (2006). *Reproductive Health Indicators - Guidelines for their generation, interpretation and analysis for global monitoring, 2006.* Geneva. Available from http://www.who.int/reproductive-health/publications/rh_indicators/index.html

DATA FOR GLOBAL AND REGIONAL MONITORING

Data for this indicator are reported at the global level by the United Nations Population Division. Data are obtained from national repositories or from published survey reports. In exceptional cases, data are taken from other published analytic reports. If clarification is needed, contact is made with the survey sponsors or authoring organization, which may supply corrected or adjusted estimates in response.

Regional estimates are weighted averages of the country data, using the number of married or in-union women aged 15-49 for the reference year in each country as the weight. Global estimates are weighted averages of the regional estimates, using the number of married or in-union women aged 15-49 in each region as the weight. No figures are reported if less than 50 per cent of the married or in-union women in the region are covered.

Unmet need for contraception rate:

DEFINITION AND METHOD OF COMPUTATION

Definition

This indicator is defined as the percentage of *women of reproductive age,* either married or in a consensual union, who have *an unmet need for family planning.*

Antenatal care coverage (at least four visits) is the percentage of women aged 15-49 with a *live birth* in a given time period that received *antenatal care* four or more times during their pregnancy.

Concepts

Women of reproductive age are women of age 15 to 49.

Women with an unmet need for family planning are women who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the birth of their next child for at least two years. Included are:

- all pregnant women (married or in consensual union) whose pregnancies were unwanted or mistimed at the time of conception;
- all postpartum amenorrheic women (married or in consensual union) who are not using family planning and whose last birth was unwanted or mistimed;
- and all fecund women (married or in consensual union) who are neither pregnant nor postpartum amenorrheic, 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.

Infecund women as well as pregnant and postpartum amenorrheic women who became pregnant unintentionally due to contraceptive method failure are not included as *women with an unmet need for family planning*.

Infecund women are women who have been married for five or more years, have not had a birth in the past five years, are not currently pregnant, and have not used contraception within the preceding five years (or, if the timing of the last contraceptive use is not known, if they have never used any kind of contraceptive method). Also included are women who self-report that they are infecund, menopausal or have had a hysterectomy, or (for women who are not pregnant or in postpartum amenorrhea) if the last menstrual period occurred more than six months prior to the survey.

The *methods of contraception* considered for the calculation of this indicator do not include traditional methods of contraception. Modern methods of contraception include female and male sterilization, oral hormonal pills, intra-uterine devices (IUD), male condoms, injectables, implants (including Norplant), vaginal barrier methods, female condoms, and emergency contraception. Traditional methods of contraception include the rhythm method (periodic abstinence), withdrawal, lactational amenorrhea method (LAM) and folk methods.

Method of computation

Unmet need for family planning is calculated using the following formula:

$$\frac{\text{Women of reproductive age either married or in a consensual union who have an unmet need for family planning}}{\text{Women of reproductive age who are married or in a consensual union}} \times 100$$

The diagram below indicates the procedure for the computation of the number of women of reproductive age, either married or in a consensual union, who have an unmet need for family planning.

Women who are currently married or in union

- Using for spacing
- Using for limiting
- Not using any method

Not using any method →
- Pregnant or amenorrheic
- Not pregnant or amenorrheic

Pregnant or amenorrheic →
- Intended
- Method failure
- Mistimed
- Unwanted

Not pregnant or amenorrheic →
- Fecund
- Infecund

- Unsure if want later
- Want later
- Want no more
- Want soon

Need for spacing

Need for limiting

Total unmet need
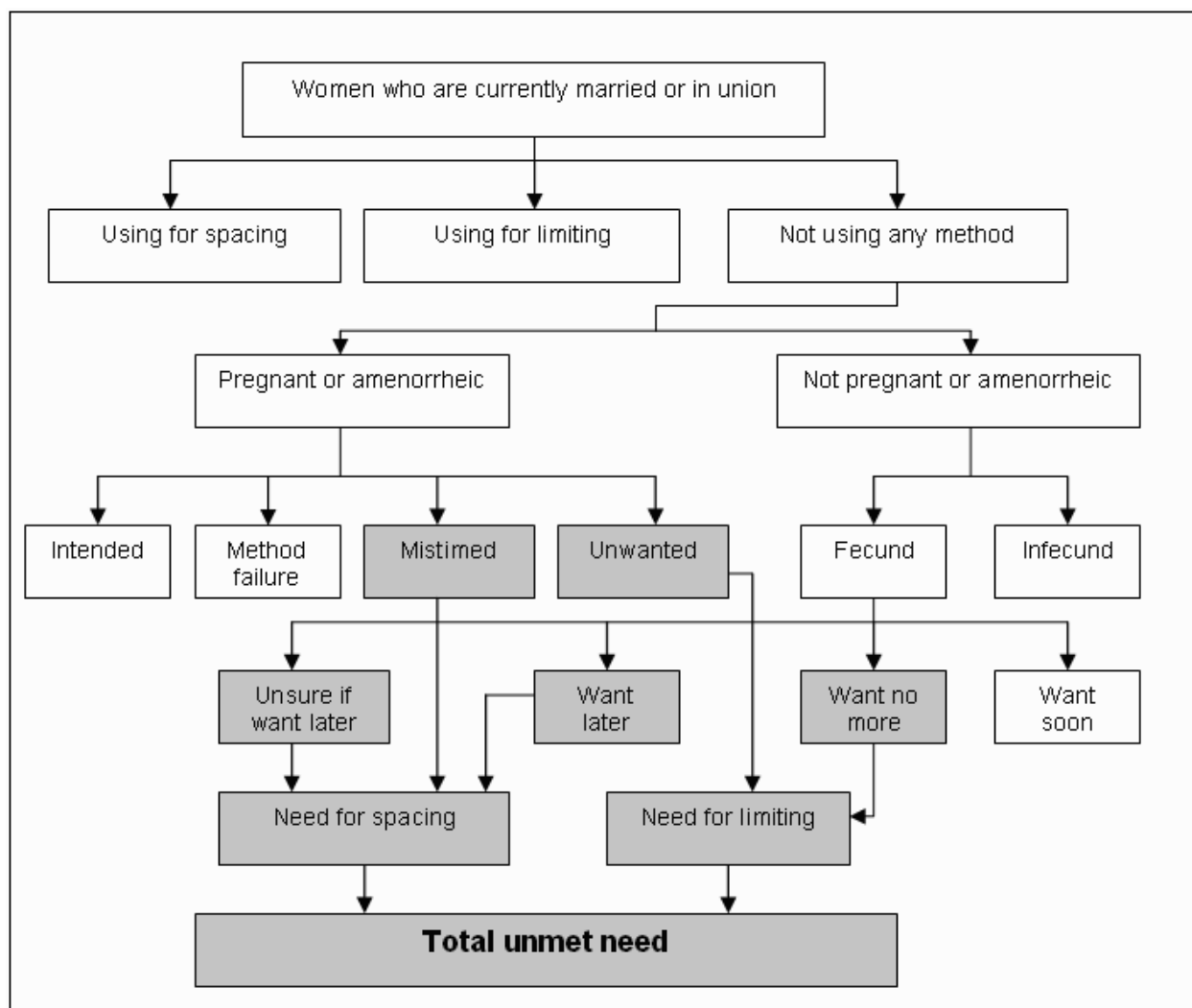
RATIONALE AND INTERPRETATION

Unmet need for family planning shows the gap between women's reproductive intentions and their contraceptive behaviour. The indicator is useful for tracking progress towards the target of achieving universal access to reproductive health. Information on contraceptive prevalence complements the indicator of unmet need for family planning. The sum of contraceptive prevalence and unmet need identifies total demand for family planning.

In principle, this indicator may range from 0 (no unmet need) to 100 (no needs met). However, values approaching 100 per cent do not occur in the general population of women, since, at any one time, some women wish to become pregnant and others are not at risk of pregnancy. Unmet needs of 25 per cent or more are considered very high, and values of 5 per cent or less are regarded as very low.

When unmet need for family planning is measured in a comparable way at different dates, the trend indicates whether there has been progress towards meeting women's needs for family planning. It should be noted that, even when contraceptive prevalence is rising, unmet need for family planning may sometimes fail to decline, or may even increase. This can happen because in many populations the demand for family planning increases because of declines in the number of children desired. Changes in the desired spacing of births or changes in the percentage of women who are at risk of pregnancy can also influence the trend in demand for family planning, independently of trends in contraceptive prevalence.

Note that there is not a direct relationship between the unmet need for family planning, desired family sizes, and the actual fertility level. For instance, it is possible for unmet need to be high even though the actual fertility level matches the desired family size. This can happen either because of individual variation in the population's desired family size, differences between the desired family size of men and women such that desired family size does not reflect the ideals of women, or because there are many mistimed births such that the number of births is desired, but the timing of births is not.

SOURCES AND DATA COLLECTION

Information on unmet need for family planning is collected through household surveys such as the Demographic and Health Surveys (DHS), Reproductive Health Surveys (RHS) and national surveys based on similar methodologies. These surveys tend to be undertaken every three to five years. Other survey programmes, like the Multiple Indicator Cluster Surveys (MICS), the Pan-Arab Project for Family Health (PAPFAM), the European Fertility and Family Surveys can also be used.

Differences in the questions included in particular surveys may sometimes affect the estimates of unmet need for family planning. For example, some surveys do not gather all the information required to estimate infecundity. In such cases the information about women's fecundity may be based on women's own perception of their ability to get pregnant. Differences in questions about contraceptive use, fertility desires and assessment of postpartum amenorrhea may also indirectly affect the measured level of unmet need for family planning.

DISAGGREGATION

This indicator may be disaggregated by geographical area, age, education, rural or urban residence, poverty status and other characteristics that are relevant in the national context. Such analysis can identify population sub-groups where levels of unmet need are highest to help guide programmes aimed at improving access to family planning and other reproductive health services.

The total level of unmet need for family planning can also be separated into two additive components: unmet need for family planning to limit family size and unmet need for purposes of birth spacing. The family planning and other reproductive health needs of women who want to limit births are likely to differ from the needs of women who want to space births to some extent. For instance, some family planning methods are more suitable for long-term than short-term use.

COMMENTS AND LIMITATIONS

Only women who are married or in a consensual union are assumed to be sexually active for the calculation of this indicator. If unmarried women are to be included in the calculation, it is necessary to determine the timing of the most recent sexual activity. Unmarried women should only be included in the numerator if they have had intercourse in the month prior to the survey interview.

Although the majority of estimates of unmet need for family planning follow the standard method of calculation, there can be differences in the precise definition or method of calculation of this indicator. For instance, some surveys do not include pregnant women with a mistimed of unwanted pregnancy in the number of women with unmet need for family planning.

Trends in the unmet need for family planning in a particular population should be based on successive data points that were calculated in a closely comparable way. In designing and monitoring programmes aimed at reducing unmet need for family planning, this indicator should be interpreted in connection with other relevant national data, including qualitative and quantitative information regarding the reasons that women who are at risk of an undesired or mistimed pregnancy are not using family planning, and assessments of the availability and quality of family planning and other reproductive health services.

According to the standard definition of family planning, women who are using a traditional method of contraception are not considered to have an unmet need for family planning. Because traditional methods can be considerably less effective than modern methods, additional analyses may be conducted to distinguish between women relying on traditional and modern methods in order to determine the unmet need for *effective contraception.*

GENDER ISSUES

This indicator highlights the degree of congruence between women's own stated preferences for number and timing of births and their family planning practice. Disaggregation of this indicator according to women's social and demographic characteristics can provide additional insight regarding the degree to which unmet need for family planning particularly affects vulnerable groups such as adolescents and poor women. In addition, the sample surveys that provide the information needed to assess unmet need usually provide additional information that is useful in understanding the reasons, including gender-based reasons, why women have an unmet need for family planning. For example, some women may not know about contraceptive methods, while others may be dissuaded from using a method because of opposition from their partner or others.

REFERENCES

ORC MACRO (2003). *Online Guide to DHS Statistics.* Calverton. Internet site
http://www.measuredhs.com/help/Datasets/index.htm

UNITED NATIONS (2009). *Report of the Secretary-General on world population monitoring, focusing on the contribution of the Programme of Action of the International Conference on Population and Development to the internationally agreed development goals, including the Millennium Development Goals*. New York. Available from http://www.un.org/esa/population/cpd/cpd2009/comm2009.htm

UNITED NATIONS CHILDREN'S FUND (2006). *Multiple Indicator Cluster Survey Manual 2005: Monitoring the Situation of Children and Women.* New York. Available from
http://www.childinfo.org/mics3_manual.html

WESTOFF, CHARLES F. (2006). *New Estimates of Unmet Need and the Demand for Family Planning.* Calverton. Available from http://www.measuredhs.com/pubs/

WESTOFF, CHARLES F. and BANKOLE A. (1995). *Unmet need: 1990-1994.* Calverton. Available from http://www.measuredhs.com/pubs/

WESTOFF, CHARLES F. and L. H. OCHOA (1991). *Unmet Need and the Demand for Family Planning*. Calverton. Available from http://www.measuredhs.com/pubs/

DATA FOR GLOBAL AND REGIONAL MONITORING

This indicator is produced at the global level by the United Nations Population Division (UNPD) in collaboration with the United Nations Population Fund (UNFPA).

The figures are generally obtained from national household surveys that are internationally coordinated— such as DHS, MICS and RHS. When DHS, MICS or RHS data are not available, data from national surveys that have incorporated the DHS methodology, but were conducted by national authorities without international technical assistance are used as inputs. Other national surveys conducted as part of the European Fertility and Family Surveys (FFS) or the Pan-Arab Project for Family Health (PAPFAM) may be considered as well.

The data are taken from published survey reports or, in exceptional cases, other published analytical reports. If clarification is needed, contact is made with the survey sponsors or authoring organization, which occasionally may supply corrected or adjusted estimates in response. The received data are not adjusted by the responsible international agencies, UNDP and UNFPA.

Regional and global estimates are calculated as weighted averages, with the weights being determined by the size, in each country, of the population of women of reproductive age who are married or in a consensual union.

Indicator 3.7.2: Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group

From WHO:

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.

From Population Division/DESA, United Nations:

Definition and method of computation

Metadata on the definition, method of computation and other information for the adolescent birth (15-19) are included in the MDG database as this was an indicator (5.4) used for global monitoring of MDG target 5.B. Achieve, by 2015, universal access to reproductive health.
Please see http://unstats.un.org/unsd/mdg/Metadata.aspx

The definition and method of computation for the birth rate among 10-14 year olds are similar to that for the birth rate among 15-19 year olds.

Rationale and interpretation

The birth rate among adolescents younger than age 15 is more meaningfully measured for ages 12-14 as births among 10-11 year olds are rare and a rate with respect to the 10-14 year old population would not correctly reflect the increased risk of early childbearing by age.

Sources and data collection
In all developed countries and in several developing countries, data on births by age of mother are obtained from civil registration systems covering 90 per cent or more of all live births, supplemented eventually by census or survey estimates for periods when registration data are not available. In developing countries lacking a civil registration system or where the coverage of that system is lower than 90 per cent of all live births, the adolescent birth rate is obtained from household survey data and census data. Registration data regarded as less than 90 per cent complete are exceptionally used for countries where the alternative sources present problems of compatibility and registration data can provide an assessment of trends. In countries with multiple survey programmes, large sample surveys conducted on an annual or biennial basis are given precedence when they exist.

Data for the adolescent birth rate (15-19) are available for 225 countries and areas, and for 2,837 data points for the 1990-2014 period. For 223 countries and areas, there are at least two available data points. For the 2015 round of MDG reporting, data on adolescent birth rate have been updated for 119 countries. The corresponding years for the updated adolescent birth rate data range from 2008 to 2014, with 2012 as the median year.

Data on births to mothers under the age of 15 are available for at least 140 countries and areas for the period 2000-2014 from vital registration data or birth history data from household surveys. The data are not uniformly standardized in terms of age groups and the majority of countries with data available are those where births to mothers under the age of 15 are uncommon.

Disaggregation

Comments and limitations
Discrepancies between the sources of data at the country level are common and the level of the adolescent birth rate depends in part on the source of the data selected since country estimates are used instead of model-based estimates. For instance, in India for the year 2004, ABR (15-19) was 52 births per 1,000 women aged 15-19 from the sample registration system compared to 90 births per 1,000 women aged 15-19 from the survey (NFHS 2005-2006).

Gender equality issues

Data for regional and global monitoring
There is frequent confusion among users of data on ABR (even including United Nations entities and other international organizations) about where they should get the estimates when data were available from the MDG database and from *World Population Prospects*.

The Population Division publishes estimates and projections of age-specific fertility rates in the *World Population Prospects* (WPP). WPP considers potentially as many types and sources of empirical estimates as possible (including retrospective birth histories, direct and indirect fertility estimates), and the final estimates are derived to ensure as much internal consistency as possible with all other demographic components and intercensal cohorts enumerated in successive censuses. The advantages are that the estimates are internally consistent within a country and with respect to other related demographic information, you have better comparability over time within a country and can compare across countries at one time period. The disadvantage is that the estimates can depart from what a country considers its official estimates of adolescent fertility. Furthermore the estimates are available only in five-year periods. Several agencies use the WPP series in their publications and on-line databases. For instance, the World Bank database uses this series for internal consistency purposes (they draw on other population measures from WPP).

Supplementary information
Results from a comparative study of very young childbearing using birth history data from 42 large, nationally representative household surveys in low resource countries showed that very small proportions of births to mothers under age 16 occurred below age 12 (less than 1 per cent in most countries) (see Neal et al. 2012. "Childbearing in adolescents aged 12–15 years in low resource countries: a neglected issue. New estimates from demographic and household surveys in 42 countries." *Acta Obstet Gynecol Scand* 2012;91:1114–1118).

Target 3.8   Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

Indicator 3.8.1: Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population)

From WHO:

Abbreviated name	**Coverage of tracer interventions**
Indicator name	Coverage of tracer interventions for prevention and treatment services
Domain	Health systems
Subdomain	HSS
Associated terms	Coverage
Definition	<u>Tracer interventions for promotion and prevention services include</u>: family planning coverage (need satisfied), antenatal care (at least four visits), vaccination, non-use of tobacco, improved water source, adequate sanitation and other locally relevant coverage indicators <u>Tracer interventions for treatment services include</u>: skilled birth attendance, antiretroviral therapy, tuberculosis treatment (case detection and treatment success), hypertension treatment, diabetes treatment, pneumonia treatment in children and other locally relevant indicators
Numerator	Number of people receiving the intervention
Denominator	Number of people who need the intervention
Disaggregation/ additional dimension	By equity stratifier: sex, age, socioeconomic position, geographic; by type of indicator (child full immunization, ARV therapy, TB treatment, hypertension treatment, skilled birth attendance, etc);
Method of measurement	Universal health coverage means that people receive the services they need, without incurring financial hardship. Countries progressively realize UHC according to their level of development, epidemiological situation, health system and people's expectations. The indicators ideally cover promotion, prevention, treatment, rehabilitation and palliation. There are a number of indicators that all countries implement such as immunization coverage or skilled attendance at birth that can be used for a summary measure of progress that can be used at lgobal and regional and country levels. Countries however will also create their own set of indicators to track progress towards UHC. The selection of indicators is based on the initial framework, and was applied in the global report published in 2015 by WHO and the World Bank. This provides a basis for further improvements working alongside countries.
Method of estimation	The indicators can be expressed as a summary measure. These can be weighted according to indicator, or intervention area. Work on incorporating an equity component in the summary measure is ongoing but is possible in a relatively simple manner.
Measurement frequency	Annual or bi-annual; some indicators may have annual data, others less frequent

Monitoring and evaluation framework	The WHO-World bank framework for monitoring progress towars UHC focuses on coverage and financial protection which must both be monitored at the same time to ensure that both the non-use of services and the use of services with financial protection are monitored.
Preferred data sources	household surveys and facility data
Other possible data sources	
Further information and related links	Monitoring Progress towards Universal Health Coverage at Country and Global Levels: Framework, Measures and Targets. Geneva: World Health Organization and International Bank for Reconstruction and Development/The World Bank; 2014 (http://apps.who.int/iris/bitstream/10665/112824/1/WHO_HIS_HIA_14.1_eng.pdf?ua=1, accessed 14 May 2015).
	Tracking universal health coverage: first global monitoring report. Geneva: World Health Organization and International Bank for Reconstruction and Development/The World Bank; 2015 (http://www.who.int/healthinfo/universal_health_coverage/report/2015/en/, accessed 17 September 2015).

Disaggregation:
Disaggregation by disability can be obtained bv including the functioning questions included the World Health Survey (http://www.who.int/healthinfo/survey/en/), WHO Study on global AGEing and adult health (http://www.who.int/healthinfo/sage/en/) or WHO Model Disability Survey (http://www.who.int/disabilities/data/mds/en/) in population-based health surveys..
Data on the percentage of persons with disabilities receiving needed health services was collected in World Health Surveys (2003-4); and it is currently being collected and will continue to be collected through the WHO Model Disability Survey (MDS) and the Study on Ageing and Adult Health (SAGE). The MDS and SAGE, as the World Health Survey, are both sample surveys with nationally representative populations.

Indicator 3.8.2: Number of people covered by health insurance or a public health system per 1,000 population

No metadata received on current indicator formulation.

Target 3.9   By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

Indicator 3.9.1: Mortality rate attributed to household and ambient air pollution

No metadata received on current indicator formulation.

Indicator 3.9.2: Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)

No metadata received on current indicator formulation.

Indicator 3.9.3: Mortality rate attributed to unintentional poisoning

No metadata received on current indicator formulation.

Target 3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.

Indicator 3.a.1: Age-standardized prevalence of current tobacco use among persons aged 15 years and older

From WHO:

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.

Target 3.b   Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

Indicator 3.b.1: Proportion of the population with access to affordable medicines and vaccines on a sustainable basis

From WHO:

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).

Indicator 3.b.2: Total net official development assistance to the medical research and basic health sectors

From OECD:

Definition and method of computation

Total net official development assistance (ODA) to the medical research (purpose code 12182) and basic health (code 122) sectors. Data expressed in US dollars at the average annual exchange rate.

Rationale and interpretation

ODA is the accepted measure of international development co-operation. Separate data are available on aid to medical research for the benefit of developing countries and on aid in support of basic health interventions, but the total of the two most closely matches the target.

Sources and data collection

Data are compiled by the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development from returns submitted by its member countries and other aid providers. Data can be accessed here.

Disaggregation

The data are generally obtained on an activity level, and include numerous parameters. They can thus be disaggregated by provider and recipient country; by type of finance, and by type of resources provided. Some data are also available on the policy objectives targeted by individual projects.

Comments and limitations

The data only address international concessional flows provided by governments. Detailed, internationally comparable sectoral information on other support to health in developing countries is generally lacking.

Gender equality issues

The data include a "gender equality" marker which identifies individual projects that have a clear gender dimension.

Data for global and regional monitoring

Data are available for essentially all high-income countries, and for an increasing number of middle-income aid providers.

Supplementary information

See Aid to Health

References

Institute for Health Metrics and Evaluation, 2013, Financing Global Health

Target 3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States.

Indicator 3.c.1: Health worker density and distribution

From WHO:

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).

Target 3.d   Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.

Indicator 3.d.1: International Health Regulations (IHR) capacity and health emergency preparedness

From WHO:

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).