

Technical Note Data Sources for MDG Monitoring

This technical note provides an overview of the data sources used for MDG monitoring, and how progress toward achieving the MDGs is assessed. Specifically, this note provides the following information: definition of indicator; source of data; periodicity; responsible agencies; methodology; publications where the data are made available; method for data estimation (where applicable); method for assessing trends and MDG progress.

MDG 1: Eradicate extreme poverty and hunger

Target: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

Indicator:	Underweight prevalence (moderate and severe) % children aged 0-59 months who fall below minus 2 standard deviations from the median weight for age of the standard reference population
Responsible agencies:	UNICEF in collaboration with World Bank and WHO
Primary data sources:	Household surveys, including MICS and DHS and other national-level household surveys
Periodicity:	Household surveys generally conducted every 3-5 years. Global assessments of progress based on the latest available data published every year
Assessing trends and MDG progress:	Progress toward achieving this MDG is calculated by comparing the average annual rate of reduction (AARR) based on available trend data for around the period of 1990-2004, with the average annual rate of reduction (AARR) needed to achieve a 50% reduction over a 25 year period (1990-2015). This required rate of change to achieve the goal is a constant of 2.8% per year for all countries.
Publications:	Annual compilation of latest available data published in UNICEF, <i>The State of the World's Children</i> and www.childinfo.org . MDG progress is published in the forthcoming UNICEF, <i>Progress for Children</i> (May 2006) and UN, <i>The Millennium Development Goals Report 2005</i> .

MDG 2: Achieve universal primary education

Target: Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

Indicator:	Net enrolment ratio in primary education Number of children enrolled in primary school who belong to the age group that officially corresponds to primary schooling, divided by the total population of the same age group
Responsible agencies:	UNESCO
Primary data sources:	Administrative records on enrolment (numerator); country-specific primary school age population from the UN Population Division (denominator). UNESCO annually reviews and adjusts enrolment data provided by Ministries of Education to ensure comparability.
Periodicity:	Every year (with a 2-3 year time lag in reporting).
Publications:	Annual compilation of latest available data is published on the UIS website (www.uis.unesco.org) and in UNICEF, <i>The State of the World's Children</i> and at www.childinfo.org . MDG progress is published in UNICEF, <i>Progress for Children</i> (April 2005), and UN, <i>The Millennium Development Goals Report 2005</i> .

Indicator:	Primary net attendance ratio Ratio of the number of children of official school age attending primary school to the total population of children of official school age
Responsible agencies:	UNICEF
Primary data sources:	Household surveys, including MICS and DHS
Periodicity:	Household surveys generally conducted every 3-5 years. Global assessments of progress based on the latest available data published every year
Publications:	Annual compilation of latest available data is published in UNICEF, <i>The State of the World's Children</i> and www.childinfo.org . MDG progress is published in UNICEF, <i>Progress for Children</i> (April 2005), and UN, <i>The Millennium Development Goals Report 2005</i> .

MDG 3: Promote gender equality and empower women

Target: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015

Indicator:	Gross enrolment ratio in primary and secondary education, gender parity index Gross enrolment ratio (girls) divided by the gross enrolment ratio (boys). The gross enrolment ratio refers to the proportion of children enrolled in a primary (or a secondary) level divided by the proportion of the age group that officially corresponds to the same level
Responsible agencies:	UNESCO
Primary data sources:	Administrative records on enrolment (numerator); country-specific primary or secondary school age population from the UN Population Division (denominator). UNESCO annually reviews and adjusts enrolment data provided by Ministries of Education to ensure comparability.
Periodicity:	Every year (with a 2-3 year time lag in reporting)
Assessing trends and MDG progress:	Progress toward this MDG is calculated using the gender parity index for latest available estimate of the gross enrolment ratio in primary and secondary education. Countries are considered on track if the gender parity index is between 0.96 and 1.04.
Publications:	Annual compilation of latest available data published in UNICEF, <i>The State of the World's Children</i> and www.childinfo.org . MDG progress is published in the UNICEF, <i>Progress for Children</i> (April 2005) and UN, <i>The Millennium Development Goals Report 2005</i> .

MDG 4: Reduce child mortality**Target:** Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

Indicator:	Under-five mortality rate Probability of dying between birth and exactly five years of age expressed per 1,000 live births
Responsible agencies:	Interagency Group for Mortality Estimation: UNICEF, WHO, World Bank and UN Population Division
Primary data sources:	Primary sources of data include vital registration systems, household surveys and national population census
Estimation method by interagency group:	The methodology used to estimate U5MR by the interagency group involves fitting a curvilinear regression line through all available data points, and extrapolating the line to a common reference year. Further details on the methodology can be obtained at www.childinfo.org . It should be noted that the annual process for updating the under-five mortality estimates involves a detailed review by the interagency group of all newly available data points. The data received by UNICEF through CRING are a major source for these updates.
Periodicity:	Estimates updated every year.
Assessing trends and MDG progress:	Progress toward achieving this MDG is assessed by calculating an average annual rate of reduction (AARR). Unlike the comparison of absolute changes, the AARR reflects the fact that the lower limits to U5MR are approached with increasing difficulty. The AARR is calculated on an exponential basis, which assumes a continuous, exponential reduction between two points in time. It does not take into account the intermediate values in the series. To achieve a two-third reduction between 1990 and 2015 requires a rate of progress of 4.4% or more per year.
Publications:	Annual compilation of latest estimates available in UNICEF, <i>The State of the World's Children</i> and at www.childinfo.org . MDG progress is published in the UNICEF, <i>Progress for Children</i> (2004) and UN, <i>The Millennium Development Goals Report 2005</i> .

Indicators:	<p>Measles immunization coverage % of one year old children immunized with one dose of measles vaccine</p> <p>DPT3 immunization coverage % of one year old children immunized with 3 doses of DPT vaccine</p>
Responsible agencies:	UNICEF and WHO
Primary data sources:	WHO/UNICEF Joint Reporting Form (JRF), comprising administrative coverage data and official country estimates of coverage. Other data sources include: national-level household surveys (including MICS, DHS and EPI cluster surveys) and research studies
Estimation method by interagency group:	UNICEF and WHO annually estimate immunization coverage levels for each country based on the information collected through the Joint Reporting Form as well as other sources. These estimates are then sent to Ministries of Health for their comment before finalized as the official estimates of national immunization coverage published by WHO and UNICEF. Additional information on this methodology is available at www.childinfo.org .
Periodicity:	Estimates updated every year
Publications:	Annual compilation of latest estimates available in UNICEF, <i>Immunization Summary (A Statistical Reference)</i> and UNICEF, <i>The State of the World's Children</i> as well as at www.childinfo.org

MDG 5: Improve maternal health**Target:** Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio

Indicator:	Maternal mortality ratio (adjusted estimates) Annual number of deaths of women from pregnancy-related causes, when pregnant or within 42 days of termination of pregnancy for a specified year (expressed per 100,000 live births)
Responsible agencies:	UNICEF, WHO and UNFPA
Primary data sources:	Primary sources of data include vital registration systems, household surveys (direct and indirect methods), reproductive age mortality studies and national population censuses.
Estimation method by interagency group:	The methodology used to estimate MMR involves a dual approach whereby existing data are adjusted for underreporting and misclassification of deaths and model-based estimates are made for countries with no reliable national level data. Further details on the methodology are available at www.childinfo.org . It should be noted that UNICEF, <i>The State of the World's Children</i> published both the adjusted estimates from interagency work, as well as the unadjusted estimates reported by governments.
Periodicity:	Every 5 years; latest estimates available for 2000.
Assessing trends and MDG progress	<p>Due to the large margins of uncertainty around these estimates, trend analysis based on the maternal mortality ratio is not possible. Progress toward this MDG is therefore assessed based on the latest available estimates of maternal mortality, and are classified according to the following thresholds:</p> <ul style="list-style-type: none">Very high = Latest estimate is 500 or moreHigh = Latest estimate is between 300 and 549Moderate = Latest estimate is between 100 and 299Low = Latest estimate is less than 100 <p>In addition, a second indicator, proportion of births attended by skilled health personnel, is used as a proxy measure to assess trends over time.</p>
Publications:	UNICEF/WHO/UNFPA "Maternal Mortality in 2000: Estimates Developed by WHO/UNICEF/UNFPA". Latest available estimates published annually in UNICEF, <i>The State of the World's Children</i> and www.childinfo.org

Indicator:	Proportion of births attended by skilled health personnel (doctors, nurses, midwives)
Responsible agencies:	UNICEF
Primary data sources:	Household surveys, including MICS and DHS
Periodicity:	Household surveys generally conducted every 3-5 years. Global assessments of progress based on the latest available data published every year
Publications:	Annual compilation of latest available estimates published in UNICEF, <i>The State of the World's Children</i> and www.childinfo.org

MDG 6: Combat HIV/AIDS, malaria and other diseases**Target:** Have halted and begun to reverse the spread of HIV/AIDS

Indicator:	HIV prevalence among young pregnant women aged 15-24 years in antenatal clinics
Responsible agencies:	UNAIDS
Primary data sources:	Sentinel surveillance collected from selected antenatal clinics by the Ministry of Health or AIDS Control Agency
Estimation method by interagency group:	Based on the proportion of HIV-positive blood samples from unlinked anonymous testing of pregnant women aged 15-24 years from selected antenatal clinics in the last year (numerator); and the total number of blood samples from pregnant women aged 15-24 years from selected antenatal clinics submitting through the unlinked, anonymous HIV blood testing in the last year (denominator).
Periodicity:	Every year
Assessing trends and MDG progress:	Estimates of HIV/AIDS incidence are not available. Therefore, information on HIV prevalence among young pregnant women attending antenatal clinics is used as a proxy measure to assess progress toward this MDG in countries with generalized epidemics. Trend data is available for this indicator for different time periods for different countries.
Publications:	Compilation of latest available estimates every 2 years on the UNAIDS website (www.unaids.org), UNAIDS, <i>Global AIDS Epidemic Update</i> , UNICEF, <i>The State of the World's Children</i> and www.childinfo.org

Indicators:	<p>Condom use during last high risk sex among 15-24 year old men and women % of young women and men reporting the use of a condom during sexual intercourse with non-marital, non-cohabiting partners in the last 12 months</p> <p>Comprehensive correct knowledge of HIV among 15-24 year old men and women % of young women and men who correctly identify two major ways of preventing the sexual transmission of HIV, who reject the two most common local misconceptions about HIV transmission, and who know that a healthy-looking person can transmit HIV</p> <p>School attendance ratio for 10-14 year old children of double orphans to non-orphans School attendance rate for 10-14 year old children who have lost both parents divided by the school attendance rate for 10-14 year old children both of whose parents are living and who live with at least one parent</p>
Responsible agencies:	UNICEF
Primary data sources:	Household surveys, including MICS, DHS and other national-level household surveys
Periodicity:	Household surveys are generally conducted every 3-5 years.
Publications:	Annual compilation of latest available data published in UNICEF, <i>The State of the World's Children</i> and at www.childinfo.org . Also published in the UNAIDS Report on the Global HIV Epidemic

MDG 6: Combat HIV/AIDS, malaria and other diseases**Target:** Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

Indicators:	Insecticide-treated net use % children aged 0-59 months who slept under an insecticide-treated mosquito net the night prior to the survey Antimalarial drug use % children aged 0-59 months with a fever in the 2 weeks prior to the survey who received antimalarial drugs
Responsible agencies:	UNICEF and WHO
Primary data source:	Household surveys, including MICS and DHS
Periodicity:	Household surveys generally conducted every 3-5 years. Global assessments of progress based on the latest available data published every year
Assessing trends and MDG progress:	Estimates of malaria incidence are not available. Therefore, information on coverage of key malaria control interventions, including ITNs and use of antimalarials, are used as proxy measures to assess progress toward this target.
Publications:	Annual compilation of latest available estimates in UNICEF, <i>The State of the World's Children</i> and at www.childinfo.org and www.rbm.who.int . Global assessments of progress are published every 2 years by WHO and UNICEF (i.e. "Africa Malaria Report 2003" and "World Malaria Report 2005").

MDG 7: Ensure environmental sustainability**Target:** Halve, by 2015, the proportion of the people without sustainable access to safe drinking water and basic sanitation

Indicators:	Population using improved drinking water sources % population using improved drinking water sources (including household water connection, public standpipe, borehole, protected dug well, protected spring, rainwater collection and bottled water (if a secondary source is also improved)) Population using improved sanitation facilities % population using improved sanitation facilities (including flush to piped sewer system, flush to septic tank, flush/pour flush to pit, flush/pour flush to elsewhere)
Responsible agencies:	UNICEF and WHO Joint Monitoring Programme on Water Supply and Sanitation
Primary data sources:	Primary data sources include household surveys (including MICS and DHS) and census data
Estimation method by interagency group:	Data from household surveys and censuses are adjusted to improve comparability over time. Survey and census data are then plotted on a time scale from 1980 to present. Four graphs for each country show both urban and rural coverage for water and sanitation. A linear trend line, based on the least-squares method, is drawn through these data points to estimate coverage for 1990 and latest available year. More information is available on this methodology at www.childinfo.org and www.wssinfo.org .
Periodicity:	Estimates updated every 2 years (2004 estimates to be available in June 2006)
Assessing trends and MDG progress:	Progress toward this MDG target is assessed by comparing the proportion of people using improved drinking water sources and sanitation facilities in 2015 (if current trends continue) with the proportion using these facilities if 1990 levels were halved by 2015.
Publications:	Compilation of updated estimates every 2 years and published in UNICEF/WHO Joint Monitoring Programme (JMP) reports, UNICEF, <i>The State of the World's Children</i> , www.childinfo.org and www.wssinfo.org .