# Part I Health-related Millennium Development Goals

# Summary of status and trends

The progress made towards the achievement of the health-related Millennium Development Goals (MDGs) continues to vary – both between countries and across the range of different goals.

**Undernutrition** among children remains common in many parts of the world. According to recent estimates, 115 million children under 5 years of age worldwide are underweight. Although global prevalence is decreasing, progress is uneven (**Figure 1**). In Africa, the stagnation of prevalence coupled with population growth led to an increase in the number of underweight children – from 24 million in 1990 to 30 million in 2010. In Asia, the number of underweight children was estimated to be even larger at around 71 million in 2010. About 178 million children globally are too short for their age group (stunted) compared to the WHO child growth standards, with such stunting being a key indicator of chronic malnutrition. As growth slows down, brain development lags behind and as a result stunted children are more likely to learn poorly. Stunting rates among children are highest in Africa and Asia.

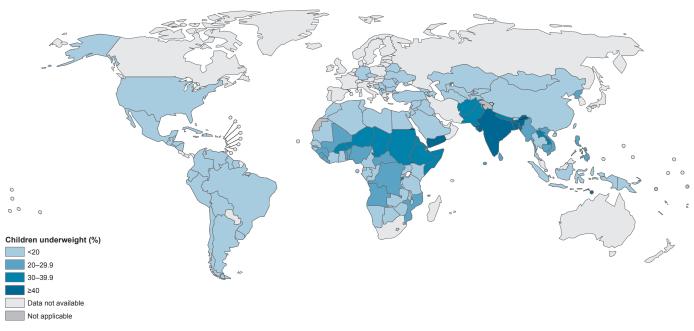


Figure 1: Children aged <5 years underweight (%)\*

**Child mortality** continues to decline worldwide. The total number of deaths of children under 5 years old fell from 12.4 million in 1990 to 8.1 million in 2009. The mortality rate in children under 5 years old has fallen correspondingly from 89 per 1000 live births in 1990 to 60 per 1000 live births in 2009, representing a reduction of about one third. At the same time, the average annual rate of decline has accelerated over the period 2000–2009 compared with the 1990s

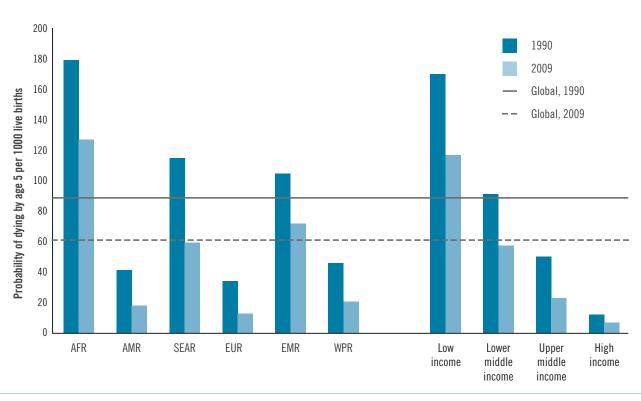
<sup>\*</sup> Created 14 January 2011 using the most up-to-date data available for different countries in the period 2000–2009.

(**Table 1**). The level of mortality, however, remained alarmingly high in certain regions of the world. In 2009, the levels of mortality in children under 5 years old in the WHO African Region (127 per 1000 live births) and in low-income countries (117 per 1000 live births) were still higher than the 1990 global level of 89 per 1000 live births (**Figure 2**). Much more needs to be done to achieve the target of a two-thirds reduction in the 1990 mortality levels by the year 2015. In particular, efforts to reduce neonatal mortality rates (deaths during the first 28 days of life) need to be increased as the rates of decline are slower than those observed among older children. In 2009, 40% of all deaths among children under 5 years old occurred in the neonatal period.

Table 1: Average annual rate of decline (%) in mortality in children under 5 years old, 1990–1999 and 2000–2009

WHO region	1990–1999	2000–2009
African Region	1.0	2.5
Region of the Americas	4.2	4.3
South-East Asia Region	2.7	4.0
European Region	3.7	5.6
Eastern Mediterranean Region	1.8	2.1
Western Pacific Region	2.4	5.4
GLOBAL	1.3	2.7

Figure 2: Mortality in children under 5 years old in 1990 and 2009 by WHO region and country-income group



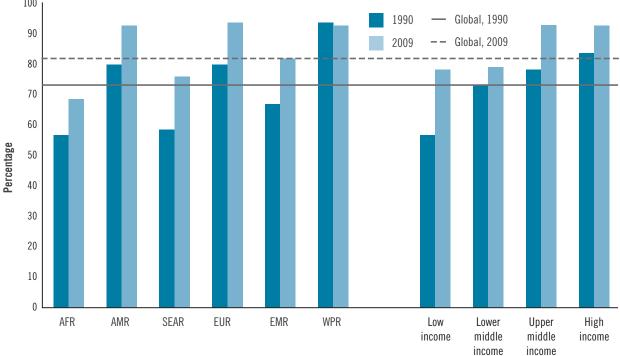
**Pneumonia** and **diarrhoeal diseases** are the two biggest killers of children under 5 years old, accounting for 18% and 15% of all deaths respectively in 2008. These rates include deaths that occur during the neonatal period. The WHO African Region and the WHO South-East Asia Region experience the highest burden of mortality due to pneumonia and diarrhoea, and include numerous countries that are not on track to achieve the MDG 4 target of reducing child mortality by two-thirds.

The coverage of crucial **child health interventions** against often fatal diseases remains inadequate. These interventions include oral rehydration therapy and zinc for diarrhoea, and case management with antibiotics for pneumonia. Most child deaths due to pneumonia could be avoided if effective interventions were implemented on a broad scale and reached the most vulnerable populations.

By 2009, global **measles immunization** coverage was 82% among children aged 12–23 months. This was up from 73% in 1990 (**Figure 3**) with low-income countries experiencing the highest increase during that time. Coverage in the WHO African Region, however, remained low compared to other regions.

Figure 3: Measles immunization coverage (%) in 1990 and 2009 by WHO region and country-income group

100
90
1990 — Global, 1990
2009 — Global, 2009



The most recent estimates suggest that the number of women dying as a result of complications during pregnancy and childbirth has decreased by 34% – from 546 000 in 1990 to 358 000 in 2008. Although such progress is notable, the annual rate of decline of 2.3% is less than half of the 5.5% needed to achieve the target of reducing the **maternal mortality** ratio by three quarters between 1990 and 2015. Almost all maternal deaths (99%) in 2008 occurred in developing countries (**Figure 4**). While the rate of decline in maternal mortality in the WHO South-East Asia Region was among the highest observed, the rate of decline in the WHO African Region remained stubbornly slow (**Table 2**) corresponding to 620 per 100 000 live births in 2008.

Figure 4: Estimated number of maternal deaths, 2008

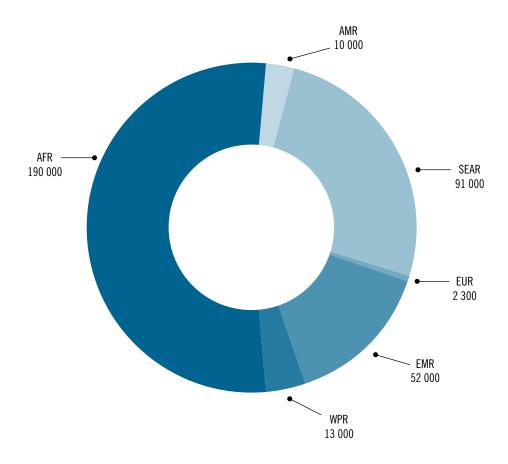


Table 2: Average annual rate of decline (%) in maternal mortality, 1990–2008

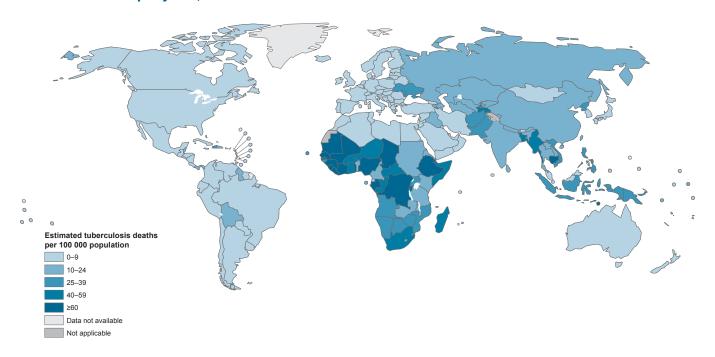
WHO region	1990–2008
African Region	1.7
Region of the Americas	2.7
South-East Asia Region	5.0
European Region	4.1
Eastern Mediterranean Region	1.5
Western Pacific Region	5.0
GLOBAL	2.3

There have been improvements in the coverage of interventions to reduce maternal mortality, including the provision of family-planning services and ensuring that all women have access to skilled care during pregnancy, childbirth and the postpartum period. Latest estimates suggest that 63% of women in developing countries aged 15–49 years who are married or in another type of union are using some form of contraception. Although 80% of pregnant women received antenatal care at least once during the period 2000–2010, only 53% received the WHO-recommended minimum of four antenatal visits. The proportion of deliveries attended by skilled health personnel rose from 58% in 1990 to 68% in 2008, but remained low in the WHO African Region and the WHO South-East Asia Region where only around 50% of deliveries were attended by skilled health personnel.

A growing number of countries have recorded decreases in the number of confirmed cases of **malaria** and/or reported admissions and deaths since 2000. National control efforts have resulted in a reduction in the estimated number of deaths from almost 1 million in 2000 to 781 000 in 2009. The estimated number of cases of malaria rose from 233 million in 2000 to 244 million in 2005 but decreased to 225 million in 2009. A total of 11 countries and one area in the WHO African Region showed a reduction of more than 50% in either confirmed malaria cases or malaria admissions and deaths between 2000 and 2009. In other WHO regions, the number of reported cases of confirmed malaria decreased by more than 50% in 32 countries. In 2009, the WHO European Region reported for the first time no cases of *Plasmodium falciparum* malaria.

The annual global number of new cases of **tuberculosis** continues to increase slightly as slow reductions in incidence rates per capita are offset by population increases. In 2009, prevalence was estimated at 12–16 million cases, with an estimated 9.4 million new cases. An estimated 1.3 million HIV-negative people died from tuberculosis in 2009 (**Figure 5**). Mortality due to this disease has fallen by more than a third since 1990, and if the current rate of decline is sustained at the global level, the MDG targets of halving tuberculosis prevalence and deaths by 2015 could be achieved. At the regional level, however, efforts will be needed to accelerate the rate of decline in the WHO African Region if these targets are to be met. In 2008, the treatment success rate reached 86% worldwide and 87% in countries with a high burden of disease. However, multidrug-resistant tuberculosis continues to pose problems.

Figure 5: Deaths due to tuberculosis among HIV-negative people (per 100 000 population per year), 2009



The number of people living with **HIV** worldwide continues to grow, reaching an estimated 33.3 million people in 2009 – 23% higher than in 1999. In 2009, there were an estimated 2.6 million new infections and 1.8 million **HIV/AIDS**-related deaths. However, the overall growth of the global epidemic appears to have stabilized, with the annual number of estimated new HIV infections steadily declining. In 2009, the estimated number of new HIV infections was 19% lower than in 1999. The increasing number of people living with HIV reflects in part the life-prolonging effects of antiretroviral therapy (ART). As of December 2009, ART was available to more than 5 million people in low-income and middle-income countries. An additional 700 000 people received treatment in high-income countries in 2009, bringing the global total to almost 6 million. Despite such global progress, treatment-coverage rates remain low in low-income and middle-income countries (36% overall) with significant variation at regional level (**Table 3**).

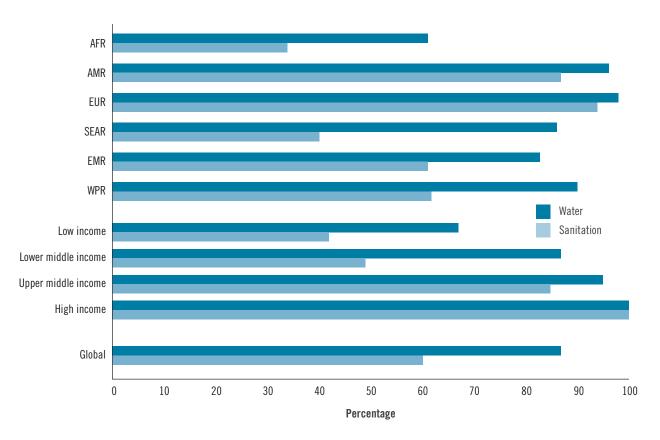
Table 3: Antiretroviral therapy (ART) in low-income and middle-income countries by WHO region, 2009

WHO region	ART coverage among people with advanced HIV infection (%)	Number of people receiving ART (000s)
African Region	37	3912
Region of the Americas	50	478
South-East Asia Region	32	577
European Region	19	115
Eastern Mediterranean Region	7	13
Western Pacific Region	33	160
GLOBAL	36	5254

Neglected tropical diseases affect more than 1000 million people, primarily in poor populations living in tropical and subtropical climates. Since 1985, the reported prevalence of leprosy has been reduced by more than 90%, and more than 15 million patients have been cured. In 2009, lymphatic filariasis was endemic in 81 countries. Of these countries, 53 were implementing mass treatment programmes – with the number of people treated increasing from 10 million in 2000 to 546 million in 2007. Between 1989 and 2009, the number of new cases of dracunculiasis fell from an estimated 892 055 in 12 disease-endemic countries to 3190 reported cases in four countries – a decrease of more than 99%. Outbreaks of dengue, however, are increasing and spreading geographically, with cases being reported in five of the six WHO regions.

The percentage of the world's population with access to **improved drinking-water** sources increased from 77% to 87% between 1990 and 2008. One component of Target 7.C of MDG 7 is to halve the proportion of the population without sustainable access to safe drinking-water. Given the current rate, it is likely that this component will be met. Nevertheless, in 2008 some 884 million people still relied upon unimproved water sources – 84% of whom were living in rural areas. The other component of Target 7.C is to halve the proportion of the population without sustainable access to basic sanitation. Current rates of progress towards this are insufficient. In 2008, 2600 million people were not using **improved sanitation facilities**, including over 1100 million people with no access to toilets or sanitation facilities of any kind. If current trends continue, this component of Target 7.C will not be met. There remains considerable variation not only between WHO regions and country-income groups in the attainment of these components but between the two components themselves (**Figure 6**).

Figure 6: Percentage of population using improved drinking-water sources and sanitation facilities in 2008 by WHO region and country-income group



Developing countries continue to face low availability and high costs in relation to **essential medicines**. Surveys in more than 40 mainly low-income and middle-income countries indicate that selected generic medicines were available in only 42% of health facilities in the public sector and 64% of facilities in the private sector. Lack of medicines in the public sector forces patients to purchase medicines from the private sector, where generic medicines cost on average 630% more than their international reference price – with originator brands being generally even more expensive.

The impact of **noncommunicable diseases** – including cardiovascular diseases, diabetes, certain types of cancers and chronic respiratory diseases – is steadily growing, affecting both developed and developing countries, and people in all age groups. In 2008, noncommunicable diseases caused an estimated 36 million deaths worldwide; up from 35 million in 2004. The causes of the main chronic disease epidemics are well established and well known, including unhealthy diet and excessive energy intake, physical inactivity, overweight and obesity, tobacco use and the harmful use of alcohol. Tackling these risk factors largely depends upon actions taken in a variety of policy domains, as well as increased prevention efforts and access to services such as those for early detection.

**Injuries**, both intentional and unintentional, directly lead to the death of more than 5 million people worldwide annually and cause harm to millions more. Such injuries account for 9% of global mortality and create enormous demand for medical care and rehabilitation services. The

burden of injury disproportionately falls upon the poor, who often live, work and travel in unsafe environments; benefit less from prevention efforts; and have less access to high-quality treatment and rehabilitation services.

Achieving the health-related MDGs will depend heavily upon the extent to which health programmes can be integrated, shortfalls in funding met and underlying health systems strengthened – particularly in terms of health personnel, financing and the organization of service delivery. There are major concerns with regard to raising the necessary resources needed in all these areas. The most-recent statistics from countries still indicate a ten-fold gap in the density of doctors and nurses between low-income and high-income countries. The gap in per capita total health expenditure in 2008 was even larger at 74 versus 4246 PPP int. \$ (Purchasing Power Parity at international dollar rate) respectively.

Well-functioning health information systems continue to be needed to monitor progress towards the attainment of the health-related MDGs, as well as the progress made towards other national health objectives and equity goals. Reviews of systems performance are also needed to inform national and international decision-making processes. Although progress is being made, reliable statistics are scarce in many countries and enormous challenges remain in the building of in-country capacity.

# **Regional and country charts**

The following charts provide country-by-country summaries of progress and current regional averages for key MDG indicators for which data are available. Depending on the availability of data for each indicator, there are three types of chart:

#### Chart type I

For four indicators – under-five mortality rate; maternal mortality ratio; population using improved drinking-water sources; and population using improved sanitation – the charts show data for the latest available year; trends since 1990 (or since the first year for which data are available); and the overall trend required for the country to achieve the relevant MDG by 2015.

#### Chart type II

For five indicators – children aged <5 years underweight; measles immunization coverage among 1-year-olds; births attended by skilled health personnel; prevalence of HIV among adults aged 15–49 years; and tuberculosis mortality rate among HIV-negative people – the charts show data for the latest available year; and country trends since the year for which data were first available. For most countries, data have been available since the baseline year of 1990.

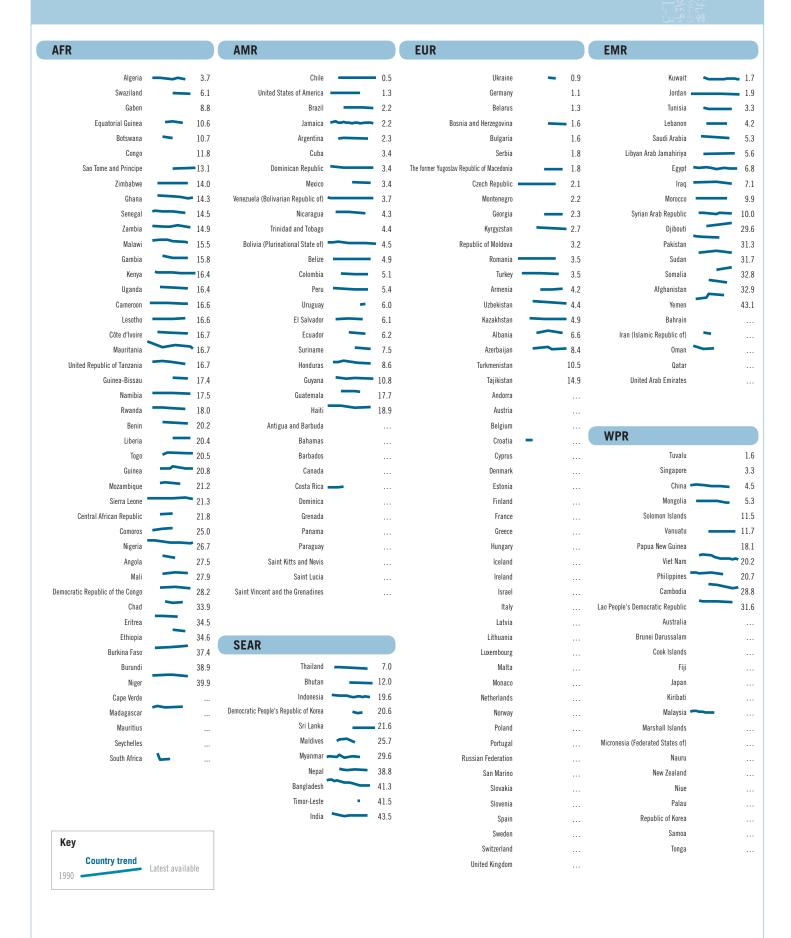
#### Chart type III

For ten indicators – contraceptive prevalence; adolescent fertility rate; antenatal care coverage; unmet need for family planning; males aged 15–24 years with comprehensive correct knowledge of HIV/AIDS; females aged 15–24 years with comprehensive correct knowledge of HIV/AIDS; antiretroviral therapy coverage among people with advanced HIV infection; malaria mortality rate; children aged <5 years sleeping under insecticide-treated nets; and children aged <5 years with fever who received treatment with any antimalarial – the charts show only data for the latest available year.

Further details can be found in the country tables as indicated in each chart.

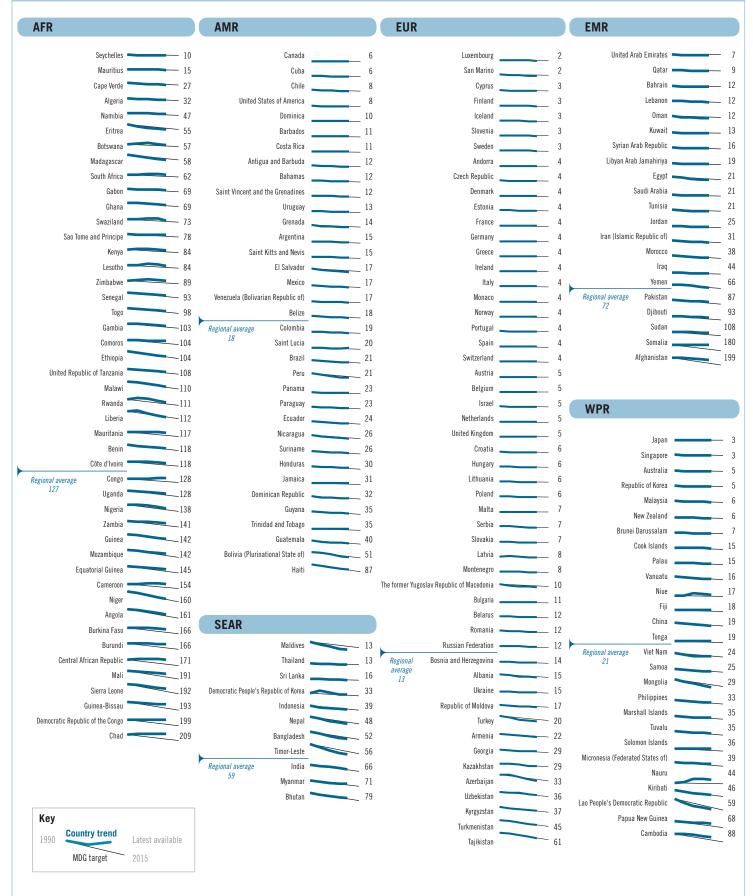


#### 1. Children aged <5 years underweight (%)



This chart shows the percentage of children under 5 years old who are underweight in each country. Within each WHO region, countries are sorted by the latest available data since 2000. Regional averages are not available at this time. Further details can be found in **Part II, Table 5**.

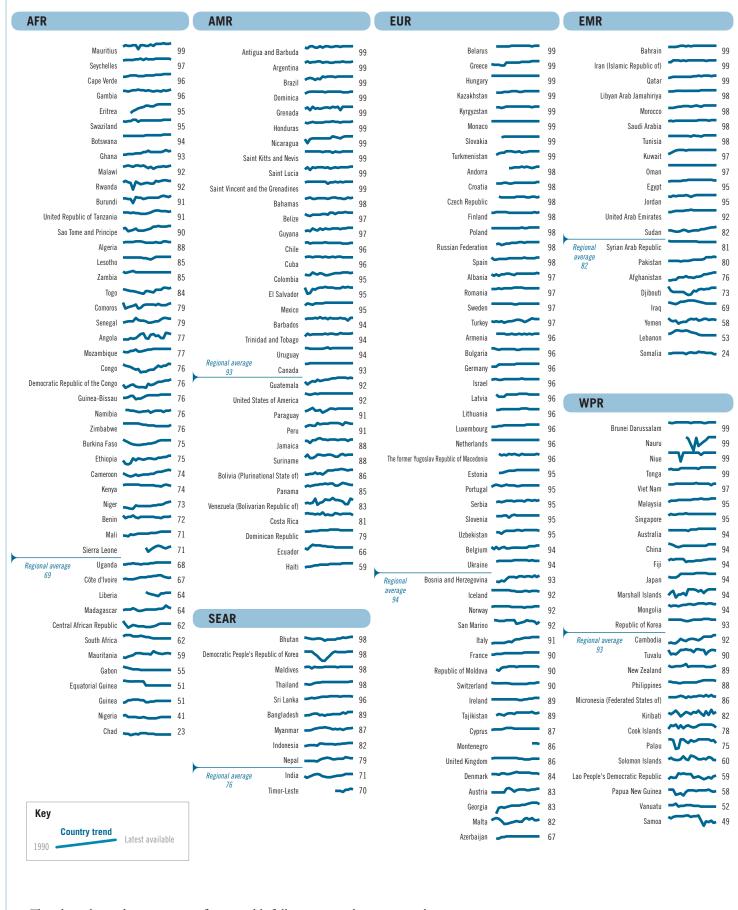
#### 2. Under-five mortality rate (probability of dying by age 5 per 1000 live births)



This chart shows estimated under-five mortality. The bold lines indicate trends since 1990 or since the first year for which data are available. The thin lines indicate the projected trend needed to reduce by two thirds the under-five mortality rate by 2015. Within each WHO region, countries are sorted by 2009 level.

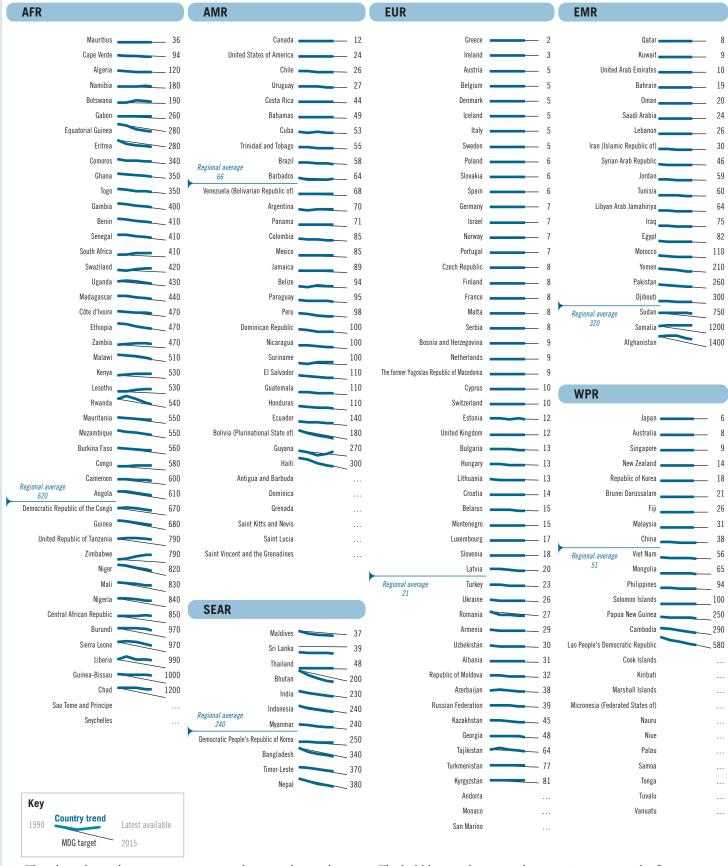
Further details can be found in Part II, Table 1.

#### 3. Measles immunization coverage among 1-year-olds (%)



This chart shows the percentage of 1-year-olds fully immunized against measles. Within each WHO region, countries are sorted by 2009 level. Further details can be found in **Part II, Table 4**.

#### 4. Maternal mortality ratio (per 100 000 live births)

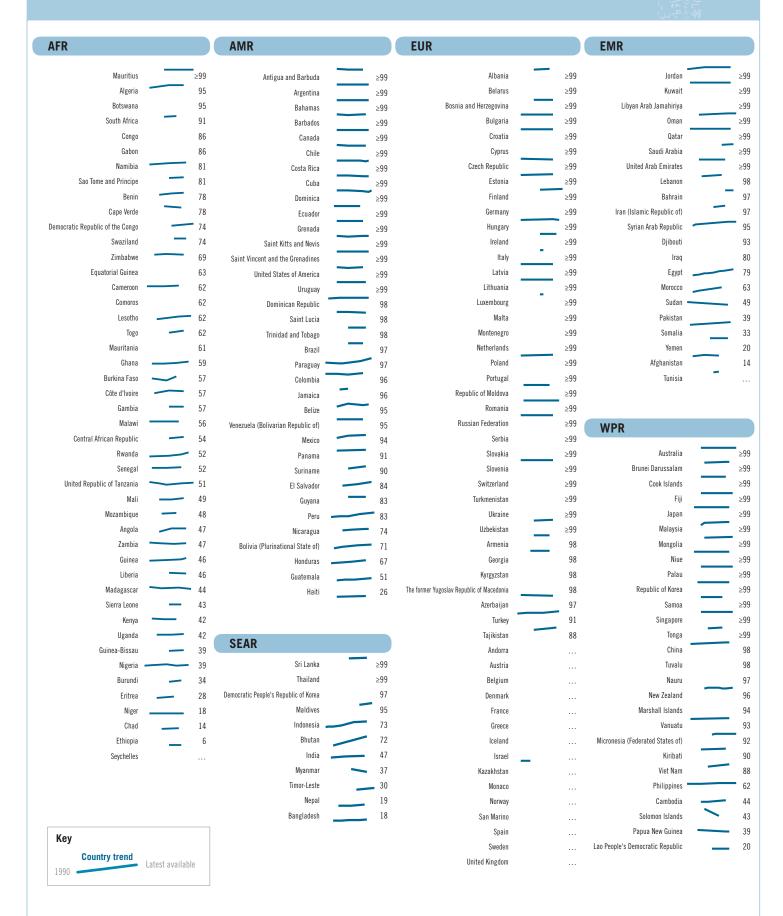


This chart shows the interagency estimated maternal mortality ratio. The bold lines indicate trends since 1990 or since the first year for which data are available. The thin lines indicate the projected trend needed to reduce by three quarters the maternal mortality ratio by 2015.

Within each WHO region, countries are sorted by 2008 level.

Further details can be found in Part II, Table 2.

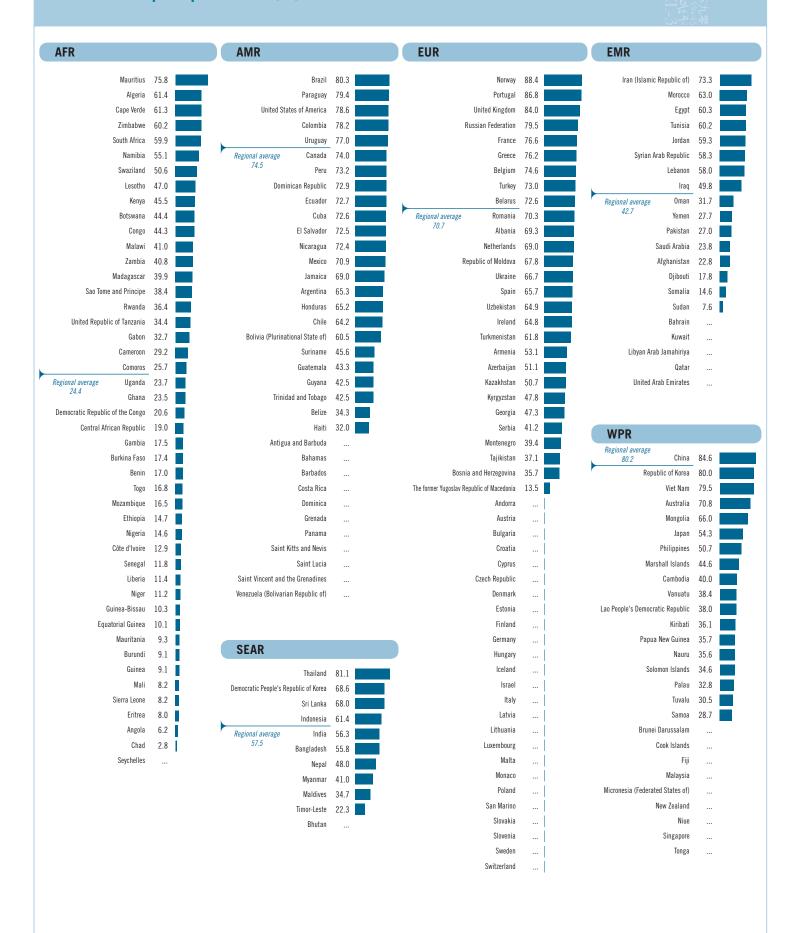
## 5. Births attended by skilled health personnel (%)



This chart shows the percentage of births attended by skilled health personnel.

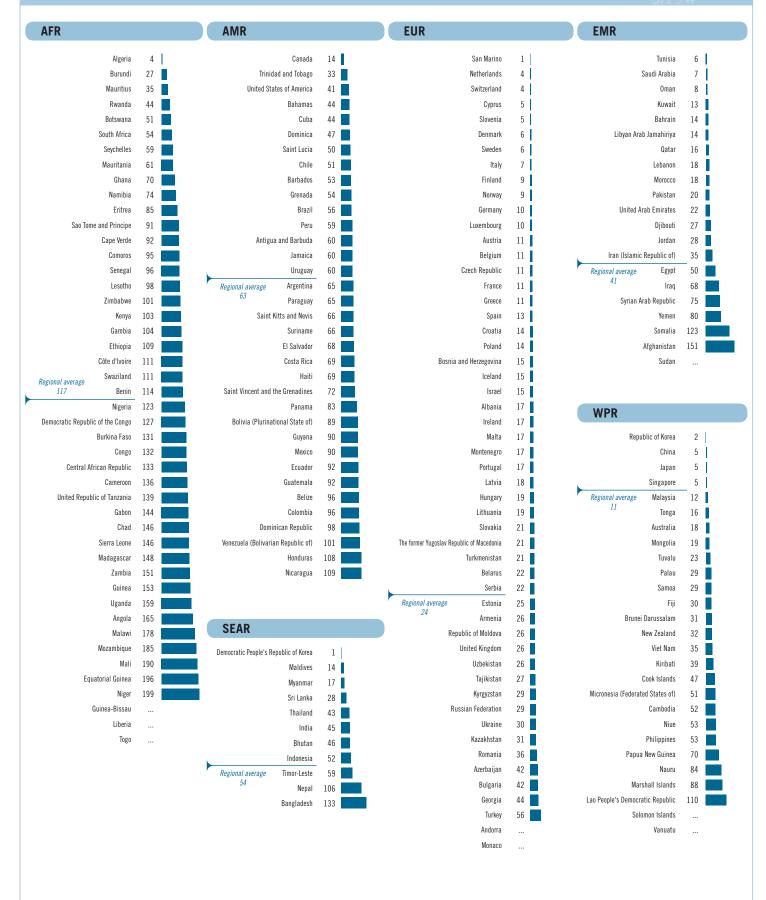
Within each WHO region, countries are sorted by the latest available data since 2000. In order to provide the country trends shown, the lines are derived, to the extent possible, from broadly comparable data sources. Therefore, the country figures shown here may not reflect the most recent available data as reported in **Part II**, **Table 4**.

#### 6. Contraceptive prevalence (%)



This chart shows the percentage of women married or cohabiting who report current use of at least one method of contraception. Within each WHO region, countries are sorted by the latest available data since 2000. Further details can be found in **Part II**, **Table 4**.

#### 7. Adolescent fertility rate (per 1000 girls aged 15–19 years)

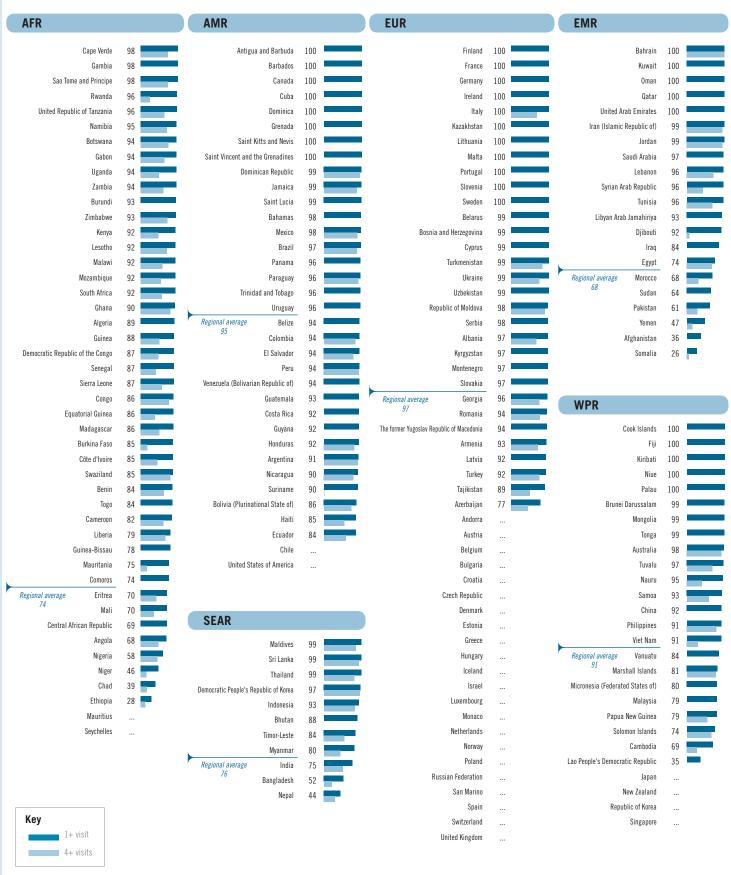


This chart shows estimated adolescent fertility expressed as the number of births among girls aged 15–19 years per 1000 girls in this age group per year.

Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in Part II, Table 9.

#### 8. Antenatal care coverage (%): at least 1 visit and at least 4 visits

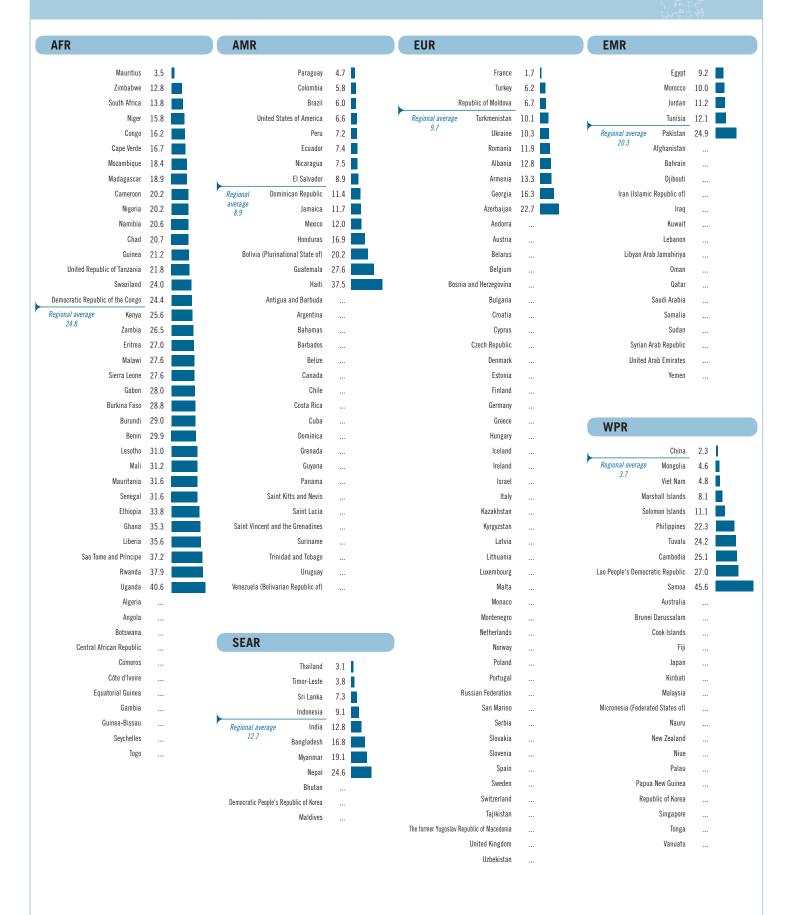


This chart shows the percentage of women who received antenatal care from skilled health personnel at least once and at least four times during pregnancy.

Within each WHO region, countries are sorted by the latest available data since 2000 for coverage of at least one visit. Regional averages are also for coverage of at least one visit.

Further details can be found in Part II, Table 4.

#### 9. Unmet need for family planning (%)

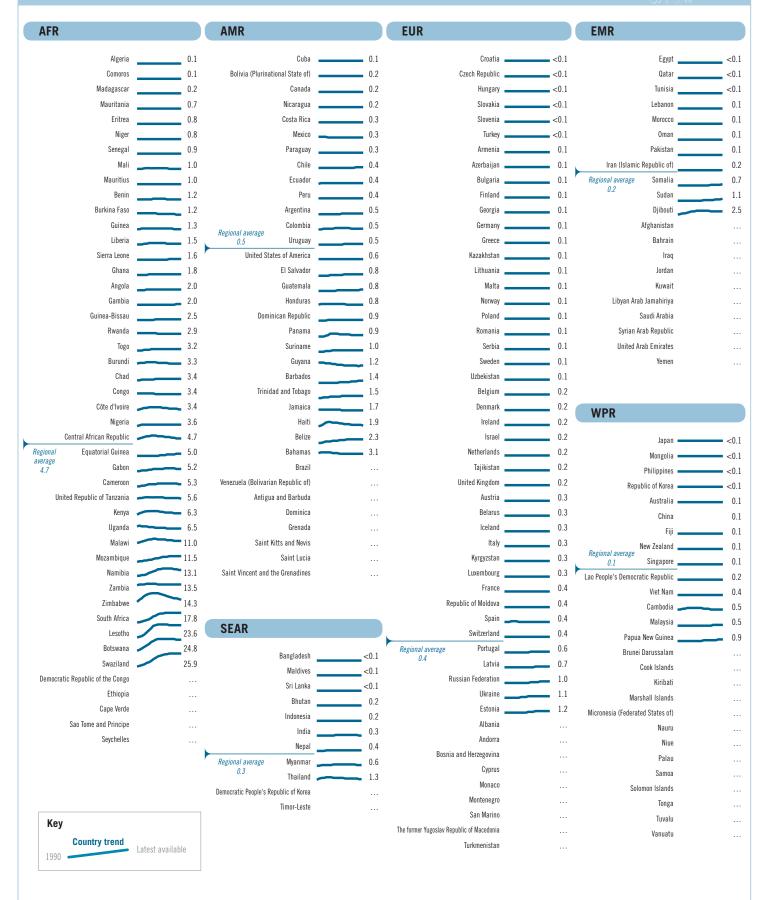


This chart shows the percentage of women who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child.

Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in Part II, Table 4.

#### 10. Prevalence of HIV among adults aged 15-49 years (%)

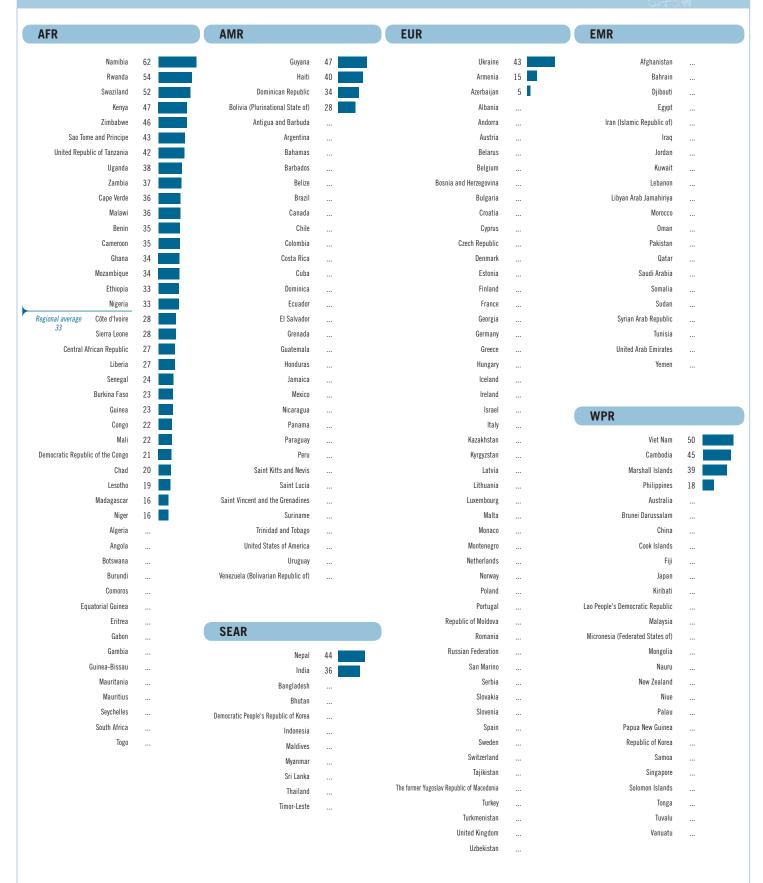


Because of limited data availability for the MDG target age group (15–24 years), this chart shows the estimated prevalence of HIV infection in adults aged 15–49 years.

Within each WHO region, countries are sorted by 2009 level.

Further details can be found in Part II, Table 2.

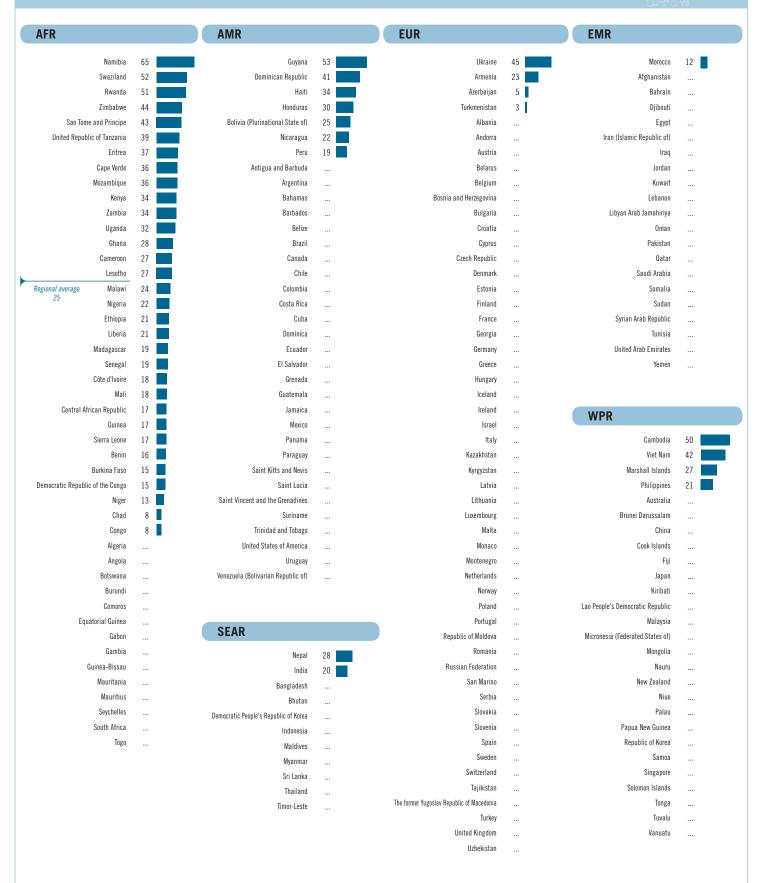
### 11. Males aged 15–24 years with comprehensive correct knowledge of HIV/AIDS (%)



This chart shows the percentage of males who correctly identify the 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.

Within each WHO region, countries are sorted by the latest available data since 2000. Further details can be found in **Part II, Table 5**.

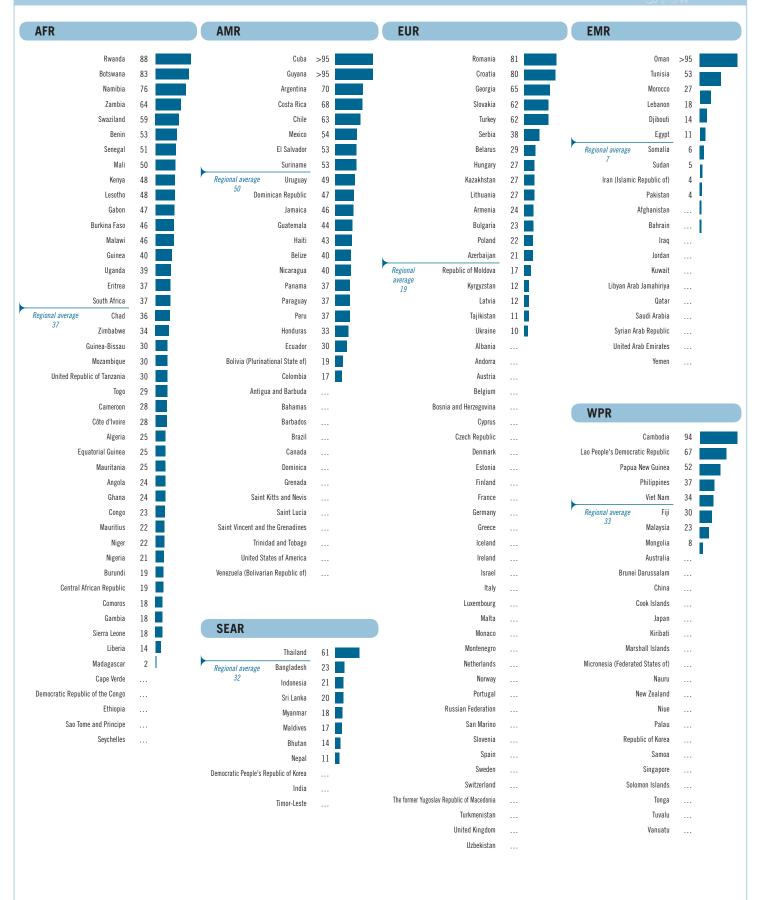
#### 12. Females aged 15–24 years with comprehensive correct knowledge of HIV/AIDS (%)



This chart shows the percentage of females who correctly identify the 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.

Within each WHO region, countries are sorted by the latest available data since 2000. Further details can be found in **Part II**, **Table 5**.

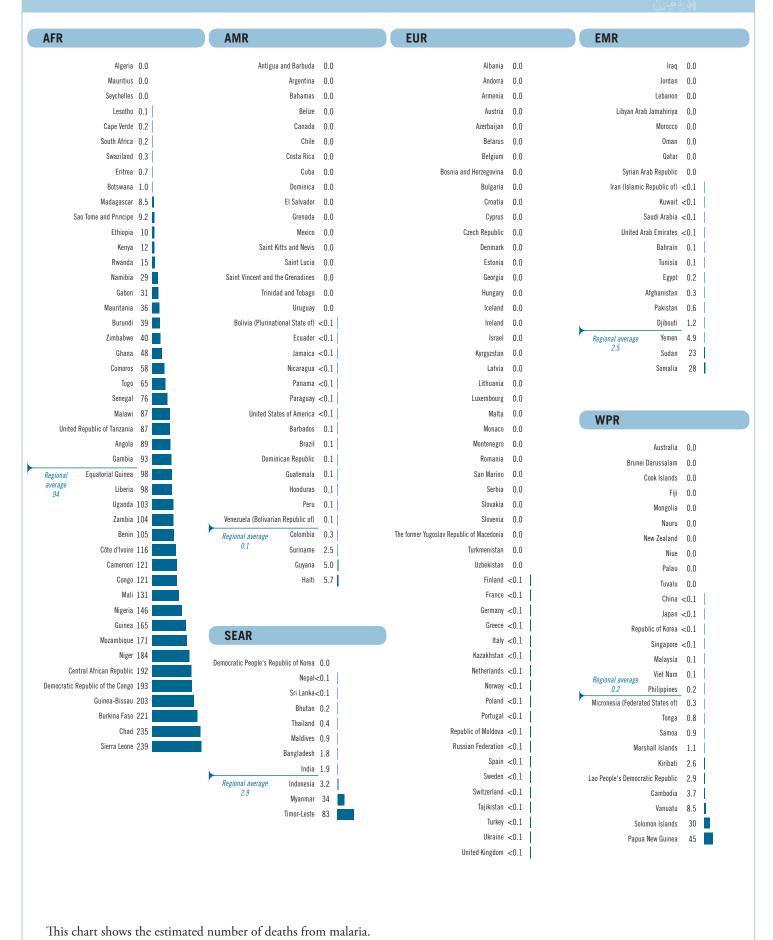
#### 13. Antiretroviral therapy coverage among people with advanced HIV infection (%)



This chart shows the percentage of people with advanced HIV infection currently receiving antiretroviral therapy according to the standards set out in the 2010 guidelines of the Joint United Nations Programme on HIV/AIDS. Within each WHO region, countries are sorted by 2009 level.

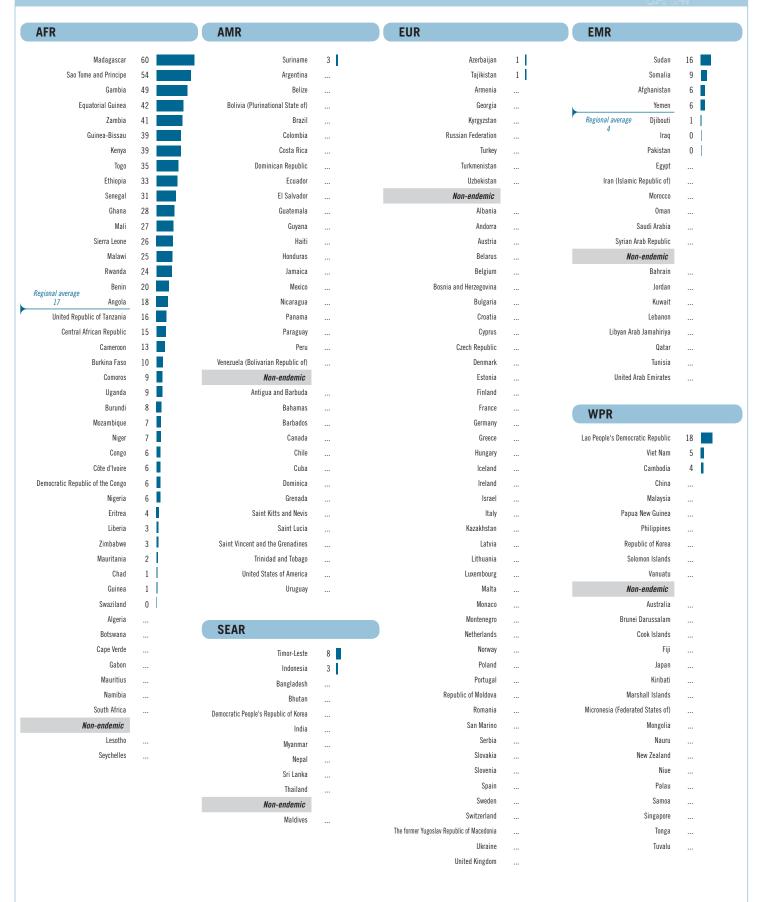
Further details can be found in Part II, Table 4.

#### 14. Malaria mortality rate (per 100 000 population)



Within each WHO region, countries are sorted by 2008 level. Further details can be found in **Part II, Table 2**.

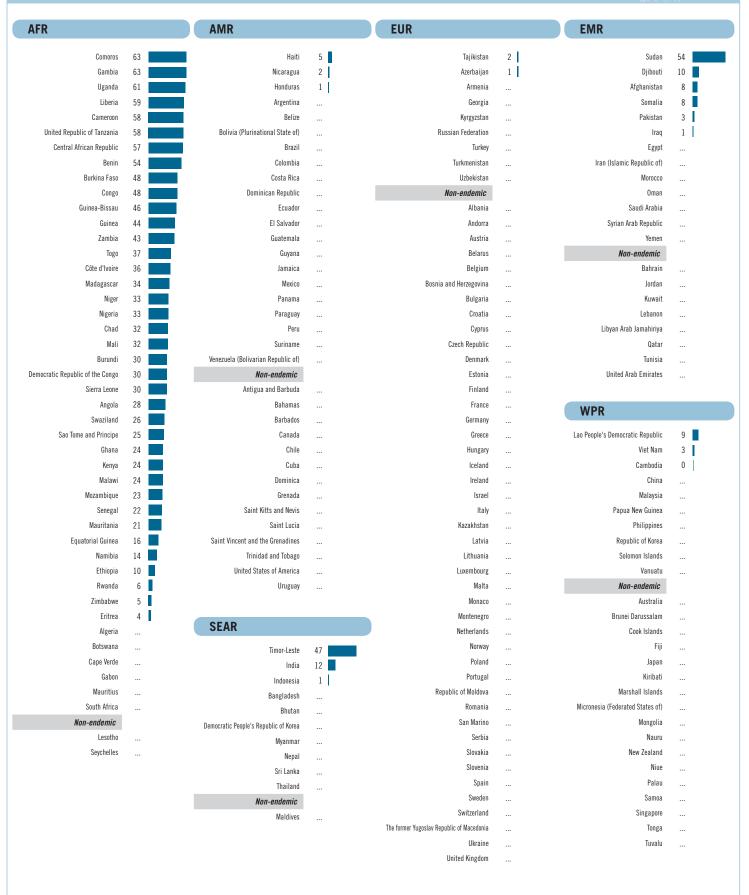
#### 15. Children aged <5 years sleeping under insecticide-treated nets (%)



This chart shows the percentage of children under 5 years old that slept under an insecticide-treated net the night prior to the survey.

Within each WHO region, countries are sorted by the latest available data since 2000. Further details can be found in **Part II, Table 4**.

## 16. Children aged <5 years with fever who received treatment with any antimalarial (%)

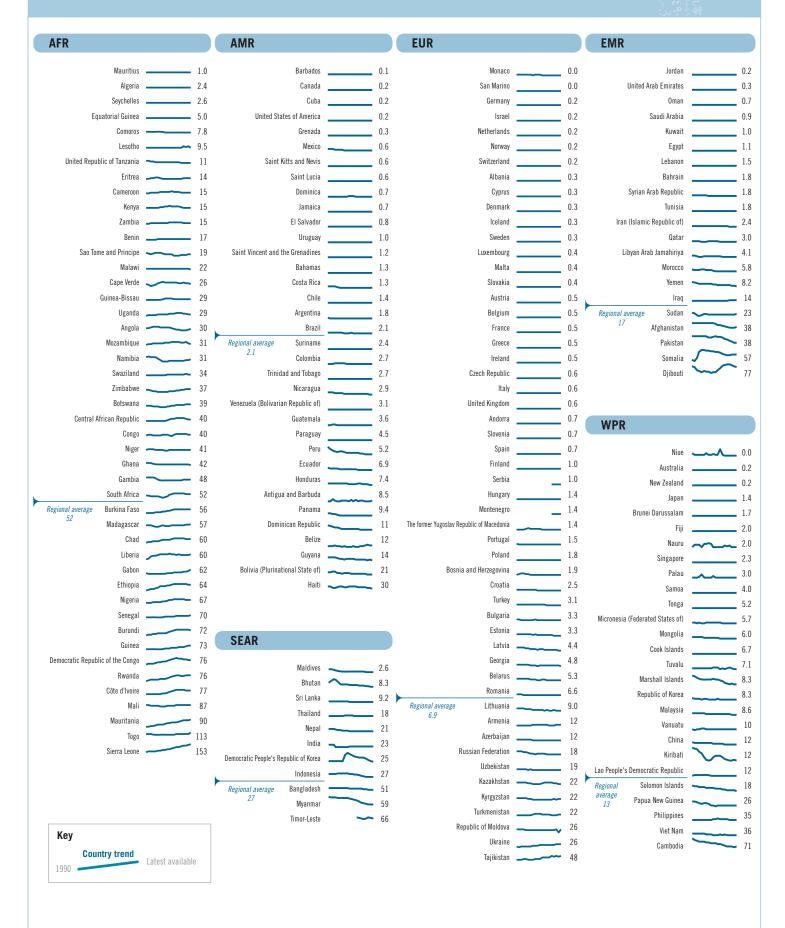


This chart shows the percentage of children under 5 years old with fever in the two weeks prior to the survey who received any antimalarial medicine.

Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in Part II, Table 4.

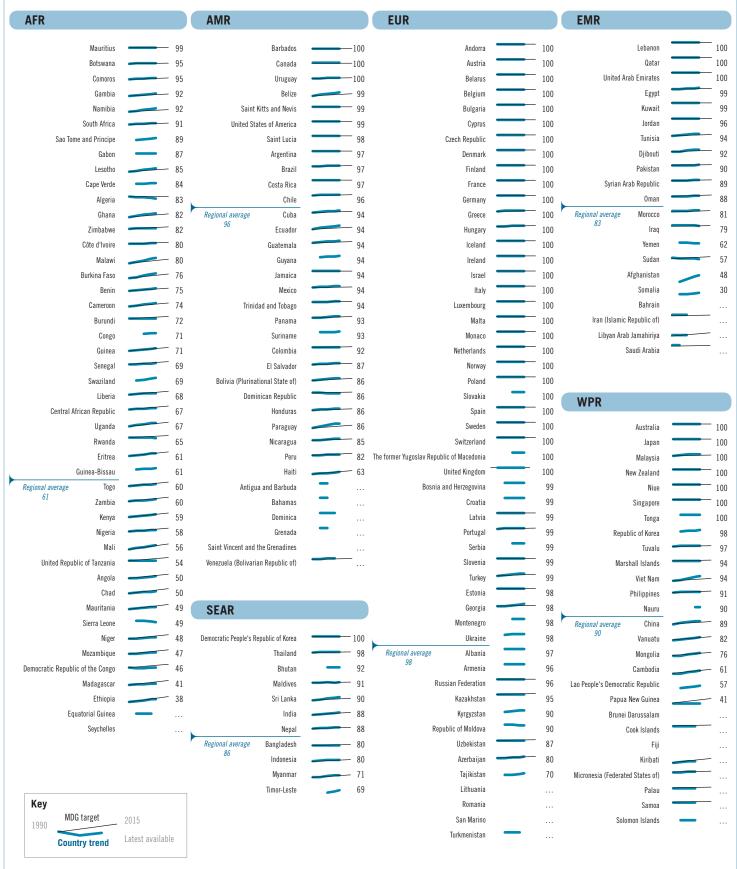
#### 17. Tuberculosis mortality rate among HIV-negative people (per 100 000 population)



This chart shows the estimated number of deaths (per 100 000 population) from tuberculosis among HIV-negative cases. Within each WHO region, countries are sorted by 2009 level.

Further details can be found in Part II, Table 2.

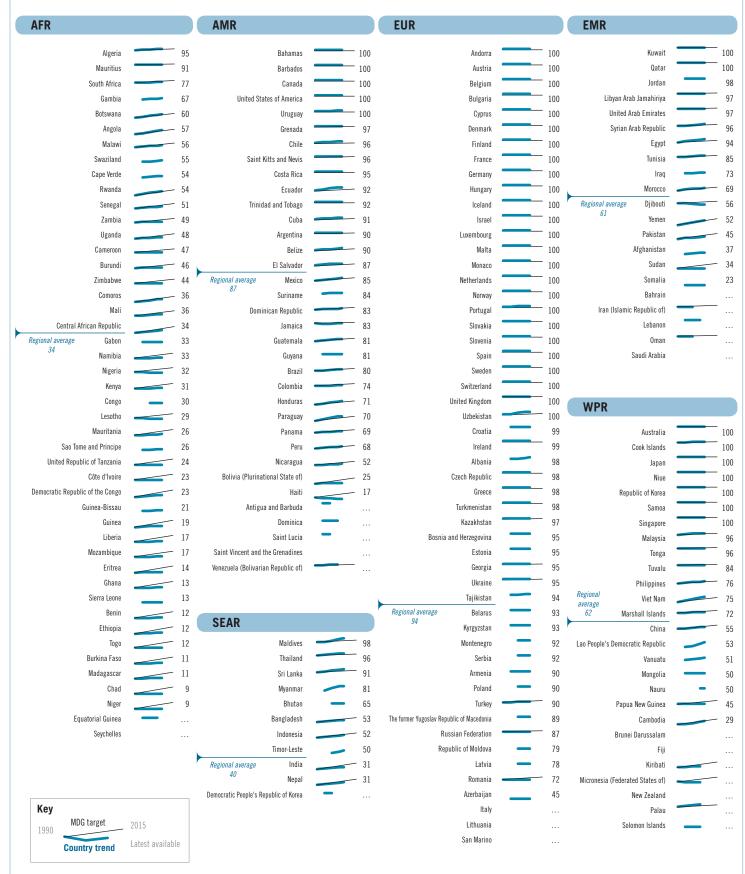
#### 18. Population using improved drinking-water sources (%)



This chart shows the percentage of the population using an improved drinking-water source. The bold lines indicate trends since 1990 or since the first year for which data are available. The thin lines indicate the projected trend needed to achieve the MDG target of halving the proportion of people without sustainable access to safe drinking-water by 2015. Within each WHO region, countries are sorted by 2008 level.

Further details can be found in Part II, Table 5.

#### 19. Population using improved sanitation (%)



This chart shows the percentage of the population using an improved sanitation facility. The bold lines indicate trends since 1990 or since the first year for which data are available. The thin lines indicate the projected trend needed to achieve the MDG target of halving the proportion of people without sustainable access to basic sanitation by 2015.

Within each WHO region, countries are sorted by 2008 level.

Further details can be found in Part II, Table 5.