



# **WORLD HEALTH STATISTICS 2012**

## **Part I**

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# **Health-related Millennium Development Goals**

# Summary of status and trends

It is now more than a decade since world leaders adopted the Millennium Development Goals (MDGs) and their associated targets. In that time, substantial progress has been made in reducing child and maternal mortality, improving nutrition, reducing morbidity and mortality due to HIV infection, tuberculosis and malaria, and increasing access to improved drinking-water sources. These current trends provide a firm basis for the intensified collective actions and expansion of successful approaches now needed to overcome the challenges posed by multiple crises and large inequalities. Although progress in settings with the highest rates of mortality has been accelerated in recent years, large variations in health status persist both between and within countries.

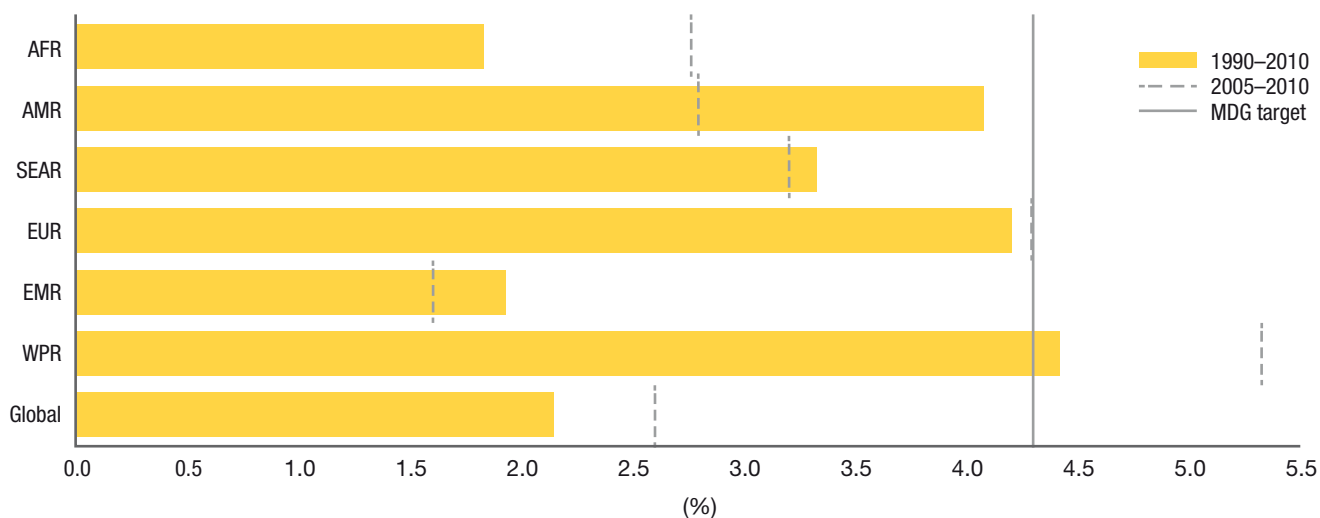
Childhood malnutrition is the underlying cause of an estimated 35% of all deaths among children under five years of age. The proportion of such children in developing countries who were underweight is estimated to have declined from 29% to 18% between 1990 and

2010. Although this rate of progress is close to the rate required to meet the relevant MDG target,<sup>4</sup> improvements have been unevenly distributed between and within different regions.

Globally, significant progress has been made in reducing mortality rates among children under five years old. Between 1990 and 2010, the under-five mortality rate declined by 35% – from an estimated 88 deaths per 1000 live births to 57. The global rate of decline has also accelerated in recent years – from 2.1% per annum during 1990–2010 to 2.6% during 2005–2010 (Figure 1). The annual rate of decline in the WHO African Region – where almost half of all child deaths occur – increased from 1.8% during 1990–2010 to 2.8% during 2005–2010. Despite this improvement, most countries in the Region are unlikely to achieve the MDG target of a two-thirds reduction in 1990 mortality levels by the

<sup>4</sup> MDG 1; Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger.

**Figure 1.** Average annual rate of decline (%) in under-five mortality levels, 1990–2010 and 2005–2010



year 2015. Globally, 37 out of 143 low- and middle-income countries will reach that target by 2015 if the pace of progress achieved during the period 2005–2010 is maintained.

In 2010, global measles immunization coverage was 85% among children aged 12–23 months. More countries are achieving high levels of measles immunization coverage, with 65% of all countries either reaching or maintaining at least 90% coverage in 2010. Between 2000 and 2010, the estimated number of measles deaths decreased by 74%, accounting for about one fifth of the overall reduction in child mortality.

Almost 20% of deaths in children under the age of five – mostly those due to pneumonia and diarrhoeal diseases – are also preventable by vaccines. Efforts are therefore being made to expand interventions. For example, a rapidly increasing number of countries in the WHO African Region, the WHO Region of the Americas and the WHO Eastern Mediterranean Region have introduced pneumococcal conjugate vaccines in the past year with support from the GAVI Alliance.

Despite a significant reduction in the number of maternal deaths – from an estimated 543 000 in 1990 to 287 000 in 2010 – the rate of decline is just over half that needed to achieve the relevant MDG target.<sup>5</sup> Between 1990 and 2010, the global rate of decline was 3.1% per annum, with lower rates in the WHO African Region, WHO Region of the Americas and WHO Eastern Mediterranean Region (Table 1). Approximately one quarter of the countries with the highest maternal mortality ratio in 1990 ( $\geq 100$  maternal deaths per 100 000 live births) have made insufficient or no progress.

**Table 1.** Average annual rate of decline (%) in maternal mortality, 1990–2010

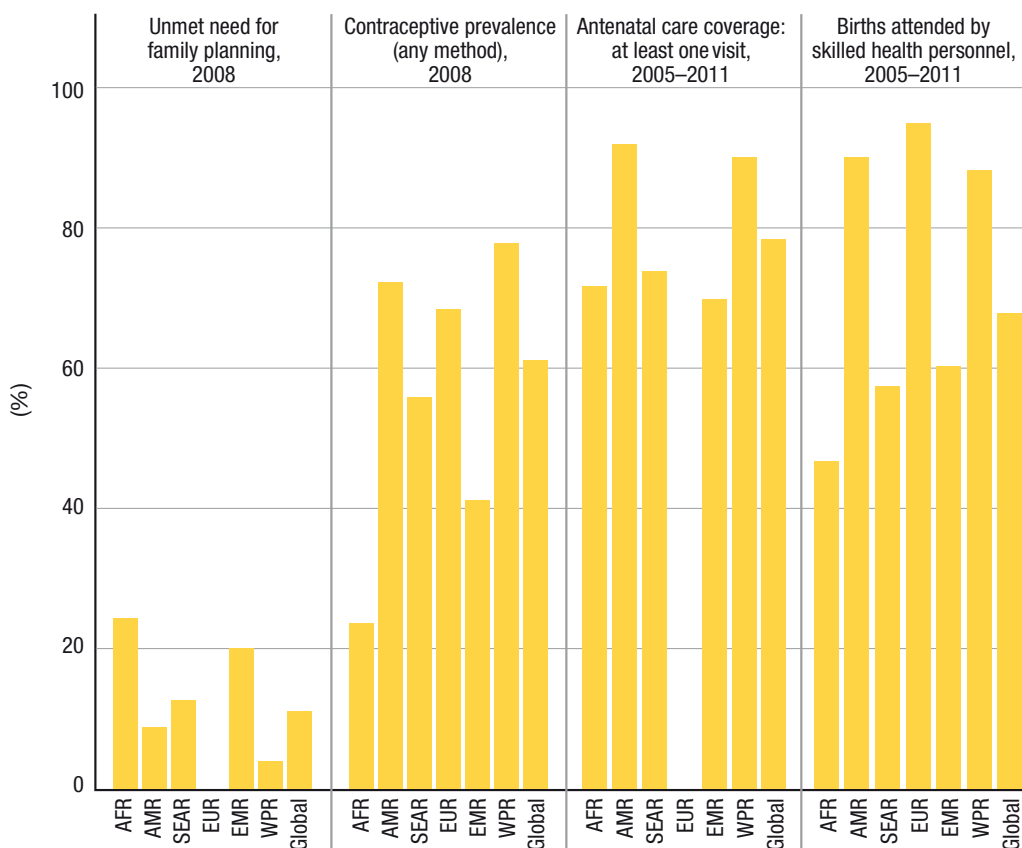
WHO region	1990–2010
AFR	2.7
AMR	2.5
SEAR	5.2
EUR	3.8
EMR	2.6
WPR	5.2
<b>Global</b>	<b>3.1</b>

To reduce the number of maternal deaths, women need access to good-quality reproductive-health care and effective interventions. In 2008, 63% of women aged 15–49 years who were married or in a consensual union were using some form of contraception, while 11% wanted to stop or postpone childbearing but were not using contraception. The proportion of women receiving antenatal care at least once during pregnancy was about 81% for the period 2005–2011, but for the recommended minimum of four visits or more the corresponding figure drops to around 55%. The proportion of births attended by skilled personnel – crucial for reducing perinatal, neonatal and maternal deaths – is above 90% in three of the six WHO regions. However, increased coverage is needed in certain regions, such as Africa where the figure remains less than 50% (Figure 2).

About half the world's population is at risk of malaria, and an estimated 216 million cases in 2010 led to approximately 655 000 deaths – 86% of these in children under the age of five. In a total of eight countries and one territory in the WHO African Region there was a more than 50% reduction in either confirmed malaria cases or malaria admissions and deaths. In other WHO regions, the number of reported cases of confirmed malaria decreased by more than 50% in 35 of the 53 countries with ongoing transmission between 2000 and

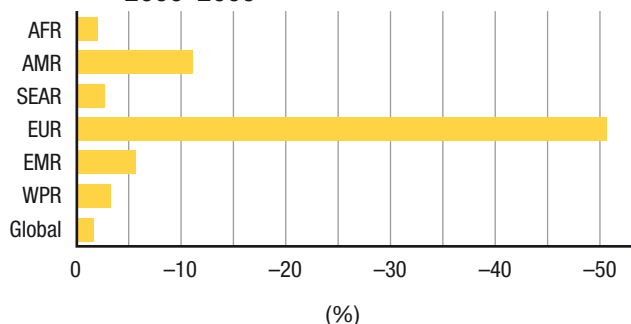
<sup>5</sup>. MDG 5; Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio.

**Figure 2.** Coverage of reproductive-health services



2010, while downward trends of 25–50% were seen in four other countries. The estimated incidence of malaria fell globally by 1.8% per annum between 2000 and 2009 (Figure 3). The coverage of interventions such as the distribution of insecticide-treated nets and indoor residual spraying has greatly increased, and will need to be sustained in order to prevent the resurgence of disease and deaths caused by malaria.

**Figure 3.** Annual decline (%) in malaria incidence, 2000–2009

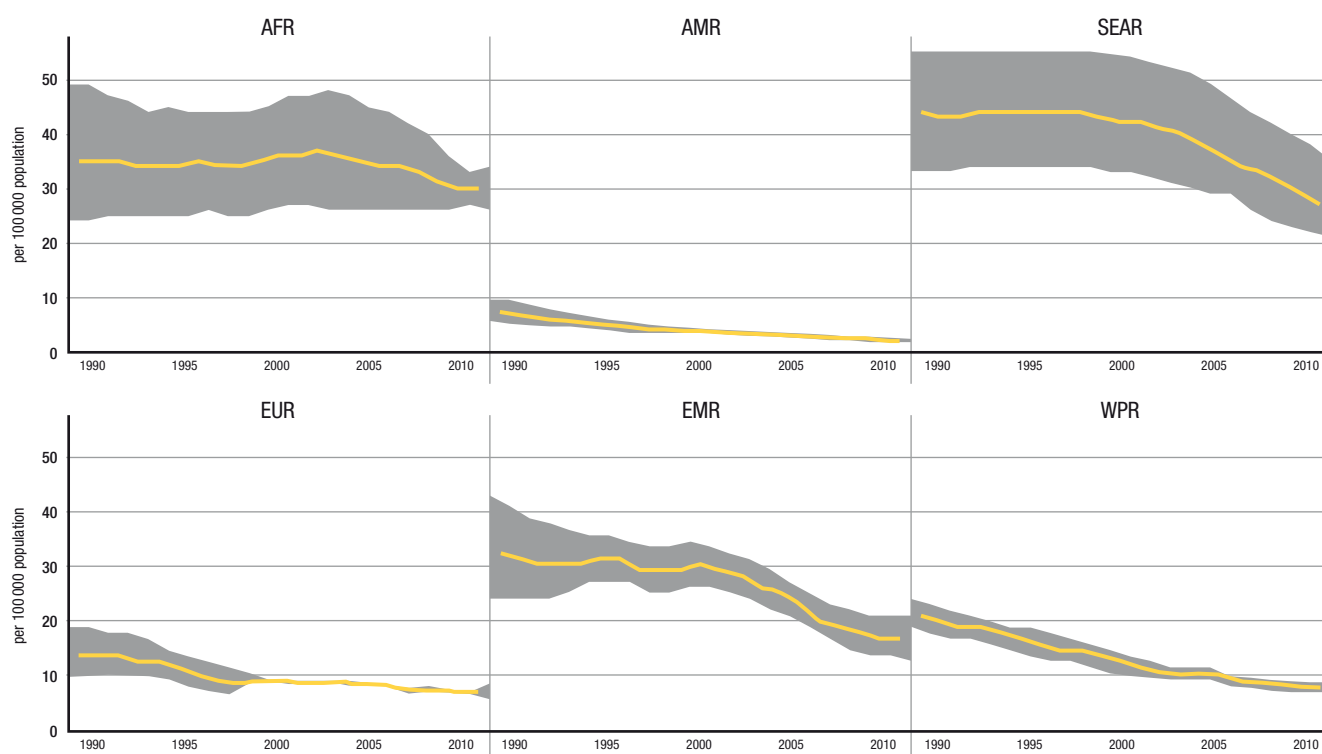


Globally, the annual number of new cases of tuberculosis has been slowly falling since 2006. In 2010, there were an estimated 8.8 million new cases – approximately 13% of which occurred in people living with HIV. In 2010, an estimated 1.1 million HIV-negative people died from tuberculosis, while an additional 0.35 million died from HIV-associated tuberculosis. Since 1990, mortality due to tuberculosis has fallen by just over one third – though regional variations persist (Figure 4). In 2009, the treatment-success rate reached 87% worldwide, representing the third successive year that the target of 85% (first set by the World Health Assembly in 1991) was exceeded. Although all six WHO regions are on course to achieve the relevant MDG target,<sup>6</sup> multidrug-resistant tuberculosis continues to present significant problems.

In 2010, an estimated total of 2.7 million people were newly infected with HIV – 15% less than the 3.1 million

<sup>6</sup> MDG 6; Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.

**Figure 4.** Trends in estimated tuberculosis mortality rates, 1990–2010<sup>7</sup>



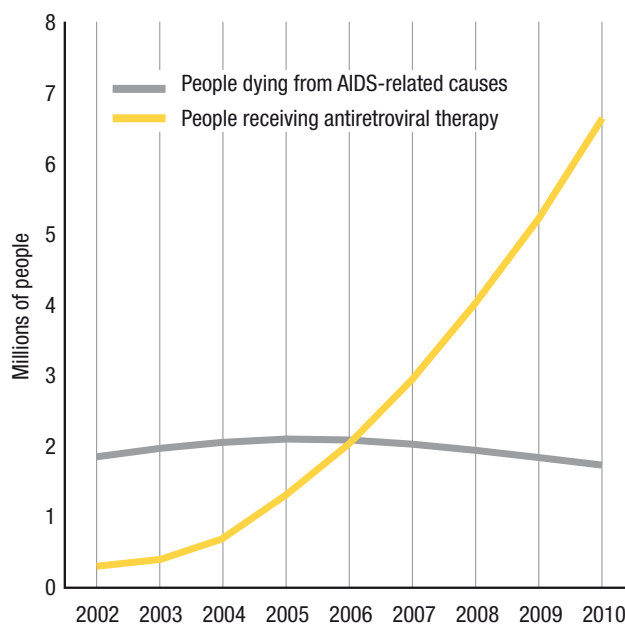
people newly infected in 2001. In 22 countries in sub-Saharan Africa, a similar rate of decline has been observed over the past decade, but the number of cases in this region still accounts for 70% of all those who acquire HIV infection globally. At the end of 2010, there were an estimated 34 million people living with HIV – an increase on previous years. As access to antiretroviral therapy in low- and middle-income countries expands (16 times more people were treated in 2010 than in 2003), the population living with HIV will continue to climb as fewer individuals die from AIDS-related causes (Figure 5).

Neglected tropical diseases are a group of 17 diseases<sup>8</sup> endemic in 149 countries and which affect more than 1000 million people. With the exception of dengue and leishmaniasis, these diseases rarely cause outbreaks,

<sup>7</sup>. Estimated tuberculosis mortality excludes tuberculosis deaths among HIV-positive people. Shaded areas represent margins of uncertainty.

<sup>8</sup>. For a list of the 17 neglected tropical diseases please see: [http://www.who.int/neglected\\_diseases/diseases/en/](http://www.who.int/neglected_diseases/diseases/en/)

**Figure 5.** Number of people with access to antiretroviral therapy and the number of people dying from AIDS-related causes in low- and middle-income countries, 2002–2010

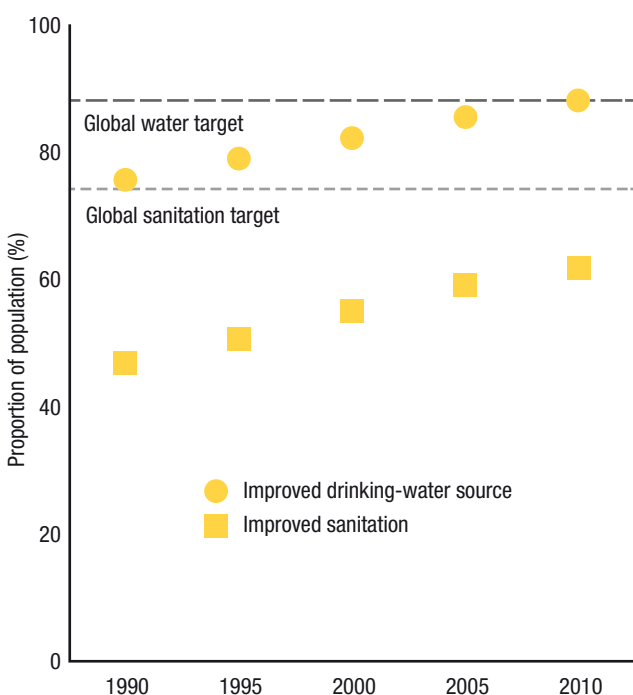


and thrive in the poorest, most marginalized communities, causing severe pain, permanent disability and death. Since 2007, a coordinated and integrated approach has enabled WHO to reach a turning point in its efforts to overcome these diseases through the simultaneous use of multiple safe and high-quality donated medicines. In the case of dracunculiasis, fewer than 1100 cases were reported in 2011 which would indicate that this disease is on the verge of eradication without the use of any medication or vaccine.

The world has now met the MDG target relating to access to safe drinking-water.<sup>9</sup> In 2010, 89% of the population used an improved source of drinking-water compared to 76% in 1990 (Figure 6). Progress has however been uneven in different regions. While coverage is at least 90% in four of the six WHO regions, it remains low in the WHO African Region and WHO Eastern Mediterranean Region.

<sup>9</sup> MDG 7; Target 7.C: Halve, by 2015, the proportion of the population without sustainable access to safe drinking-water and basic sanitation.

**Figure 6.** Global trends in the proportion of population using safe drinking-water sources and improved sanitation



With regard to basic sanitation, current rates of progress are too slow for the MDG target to be met, both globally (Figure 6) and within WHO regions – with the exception of the WHO Western Pacific Region. In 2010, 2500 million people did not have access to improved sanitation facilities, with 72% of these people living in rural areas. The number of people living in urban areas without access to improved sanitation is increasing because of rapid growth in the size of urban populations.

Although almost all countries publish an essential medicines list, the availability of medicines at public health facilities is often poor. Surveys conducted in more than 70 mainly low- and middle-income countries indicate that the average availability of selected generic medicines at health facilities was only 42% in the public sector and 64% in the private sector. The availability of medicines for the treatment of chronic noncommunicable diseases (NCDs) is particularly poor when compared with the availability of medicines for acute conditions. In a study of 40 countries, the mean public sector availability of generic chronic NCD medicines was 36%, while in the same facilities the availability of medicines for acute conditions was 53.5%.<sup>10</sup> A lack of medicines in the public sector forces patients to purchase medicines from the private sector, where generic medicines cost on average 610% more than their international reference price. Such low public sector availability and high private sector prices drive many families into catastrophic poverty, particularly those with a family member suffering from a chronic NCD.

With less than four years to go before the end of 2015, it is clear that much remains to be done if the health-related MDGs set out in 2000 are to be achieved. At the same time, the world faces new challenges that will need to be reflected in the ways in which progress is measured after 2015.

<sup>10</sup> Cameron A et al. (2011). Differences in the availability of medicines for chronic and acute conditions in the public and private sectors of developing countries. *Bulletin of the World Health Organization*, 89:412–421. Doi: 10.2471/BLT.10.084327 (<http://www.who.int/bulletin/volumes/89/6/10-084327/en/index.html>).

# 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 two types of chart:

## Chart type I

For six indicators – under-five mortality rate; maternal mortality ratio; HIV prevalence; tuberculosis incidence rate; population without access to improved drinking-water sources; and population without access to improved sanitation – the charts show the average annual rate of decline (AARD) since 1990 up to the latest available year (or for the year range indicated), and the overall AARD required for the country to achieve the relevant MDG by 2015. The country figures show data for the latest available year.

## Chart type II

For seven indicators – measles immunization coverage among 1-year-olds; births attended by skilled health personnel; antenatal care coverage; unmet need for family planning; antiretroviral therapy coverage among people with advanced HIV infection; 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 with a WHO target.

... indicates data not available or not applicable.

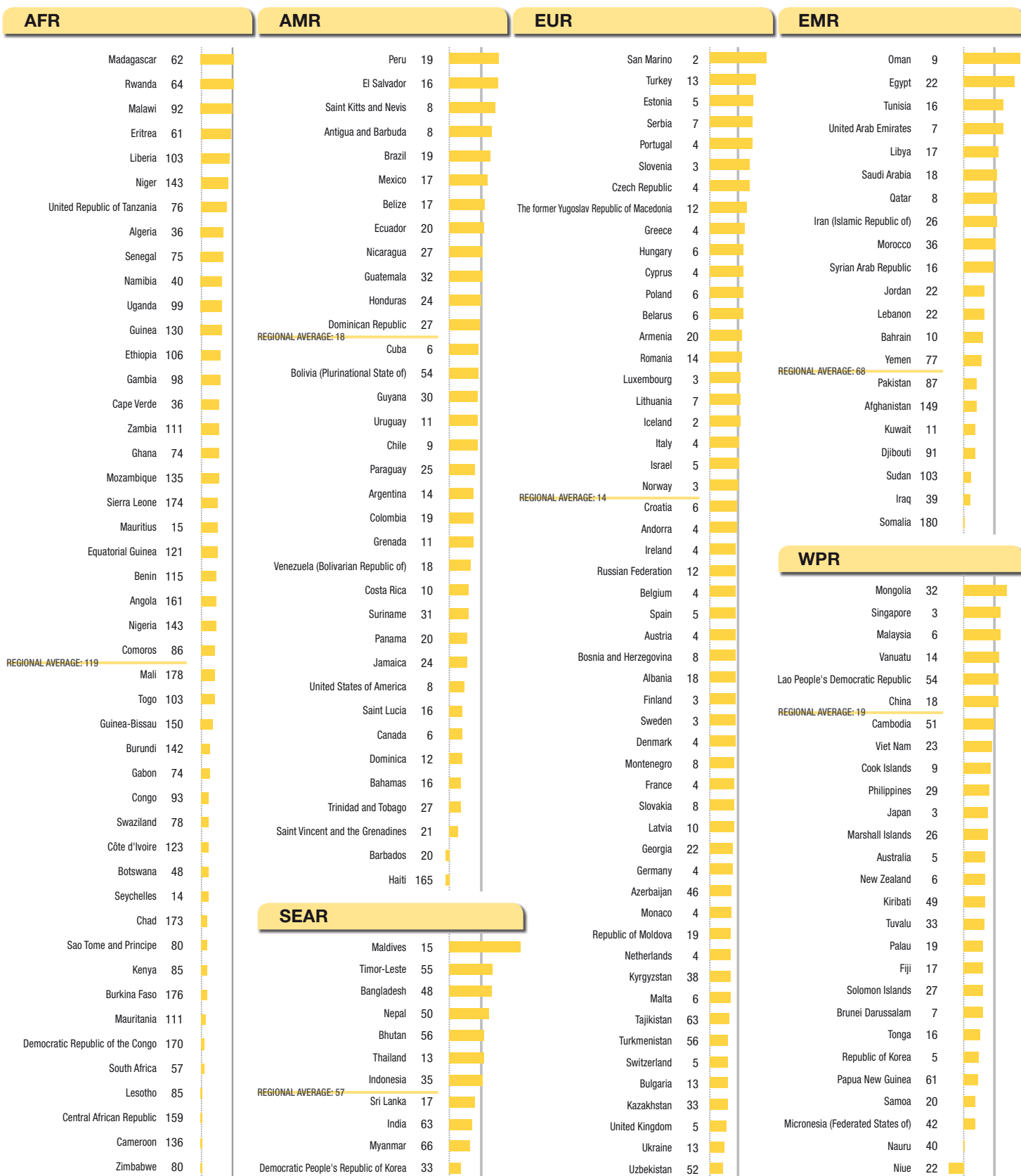
Further details can be found in the country tables shown in **Part III** as indicated below each chart.





# 1 AARD (%) in under-five mortality rate, 1990–2010

WORLD HEALTH  
STATISTICS  
2012

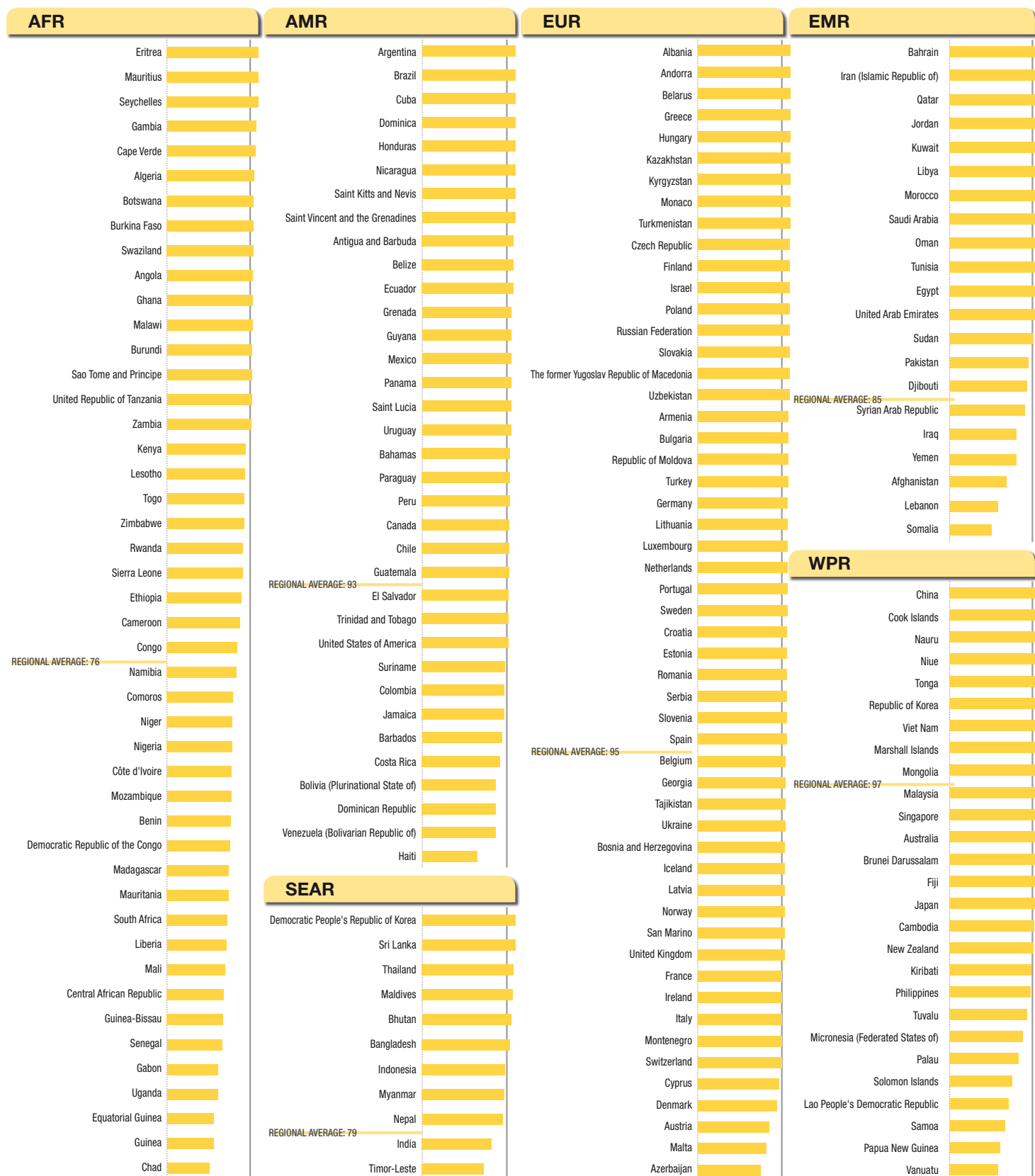


The under-five mortality rate is defined as the probability of dying by age 5 expressed as the total number of such deaths per 1000 live births. Within each WHO region, countries are sorted in descending order based on the AARD in this rate.

In order to reach the MDG target of reducing by two thirds the under-five mortality rate between 1990 and 2015, an AARD of 4.3% is needed and this is denoted by the vertical line. The numerical values show the estimated under-five mortality rate in each country in 2010. For countries with low levels of under-five mortality, the target AARD may not be applicable.

Further details may be found in **Part III, Table 1**.

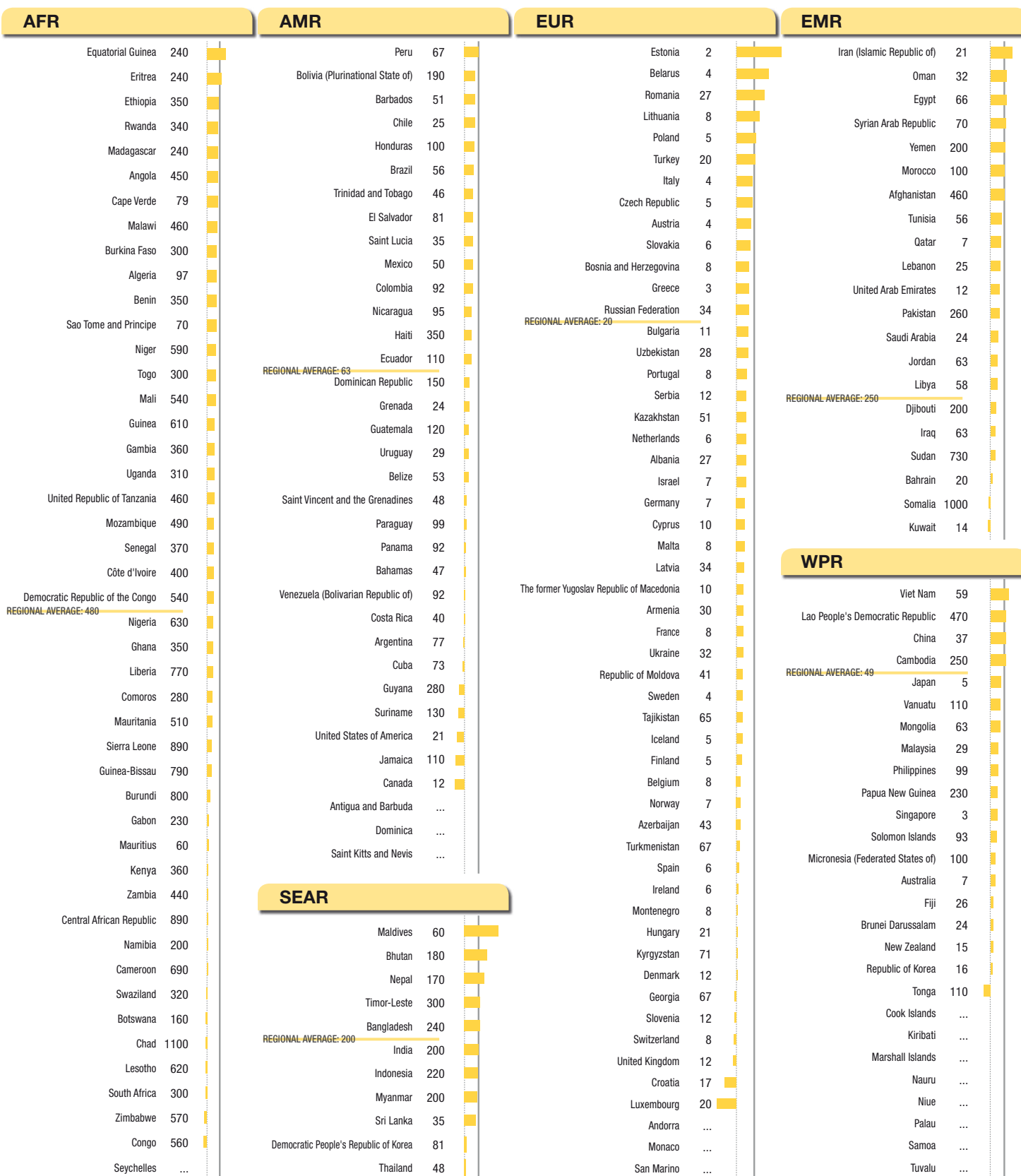
# 2 Measles immunization coverage among 1-year-olds (%)



This chart shows the percentage of 1-year-olds fully immunized against measles. Within each WHO region, countries are sorted by the 2010 level. The vertical line denotes the target of 90% coverage by 2015 set at the World Health Assembly (WHA) 2010. Further details may be found in **Part III, Table 3**.

# 3 AARD (%) in maternal mortality ratio, 1990–2010

WORLD HEALTH  
STATISTICS  
2012

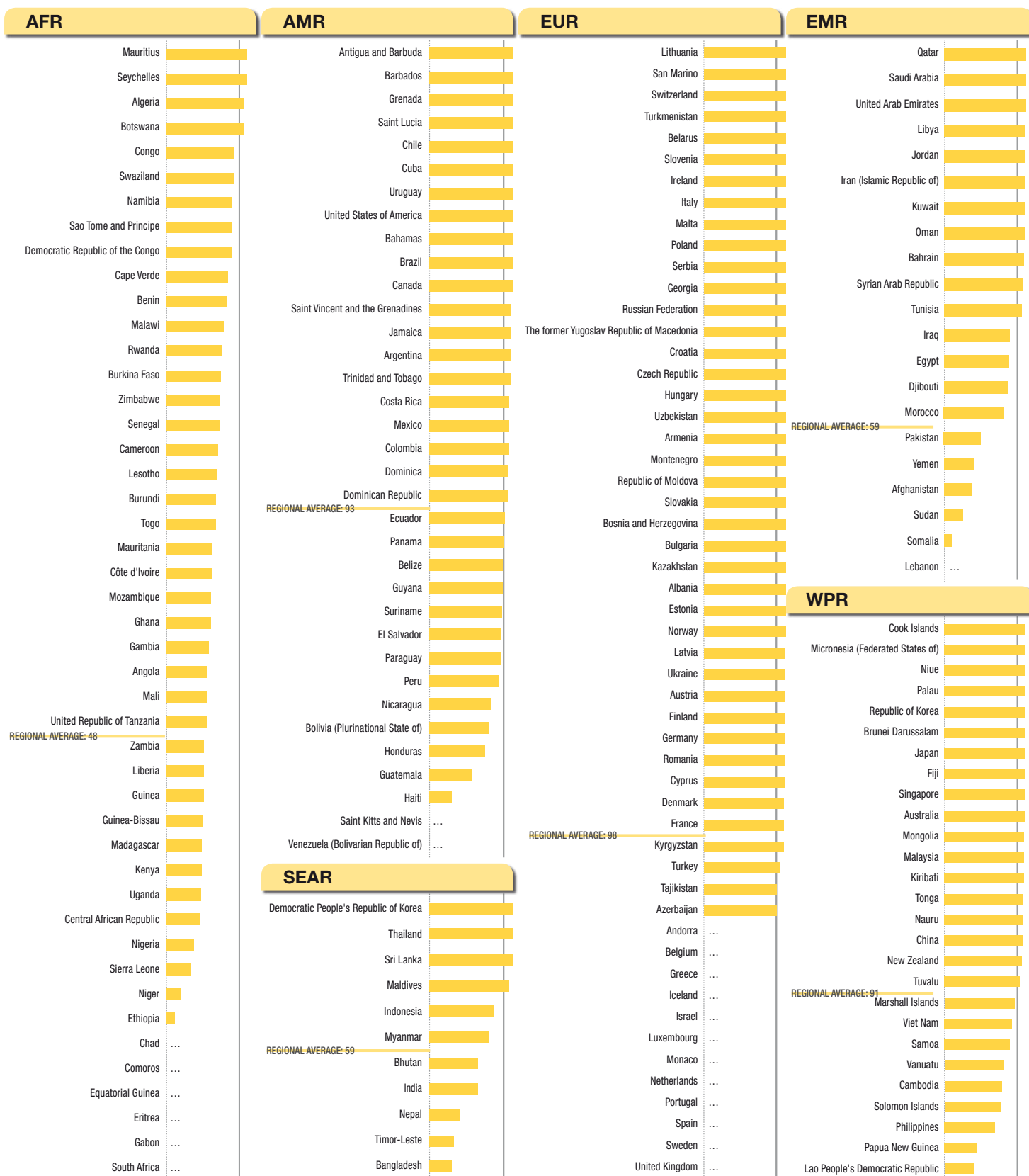


The maternal mortality ratio is defined as the number of maternal deaths per 100 000 live births. Within each WHO region, countries are sorted in descending order based on the AARD in this ratio. Unrounded values have been used to calculate the AARD.

In order to reach the MDG target of reducing the maternal mortality ratio by three quarters between 1990 and 2015, an AARD of 5.5% is needed and this is denoted by the vertical line. The numerical values show the estimated maternal mortality ratio for 2010. For countries with low levels of maternal mortality, the target AARD may not be applicable.

Further details may be found in **Part III, Table 2**.

# 4 Births attended by skilled health personnel (%)



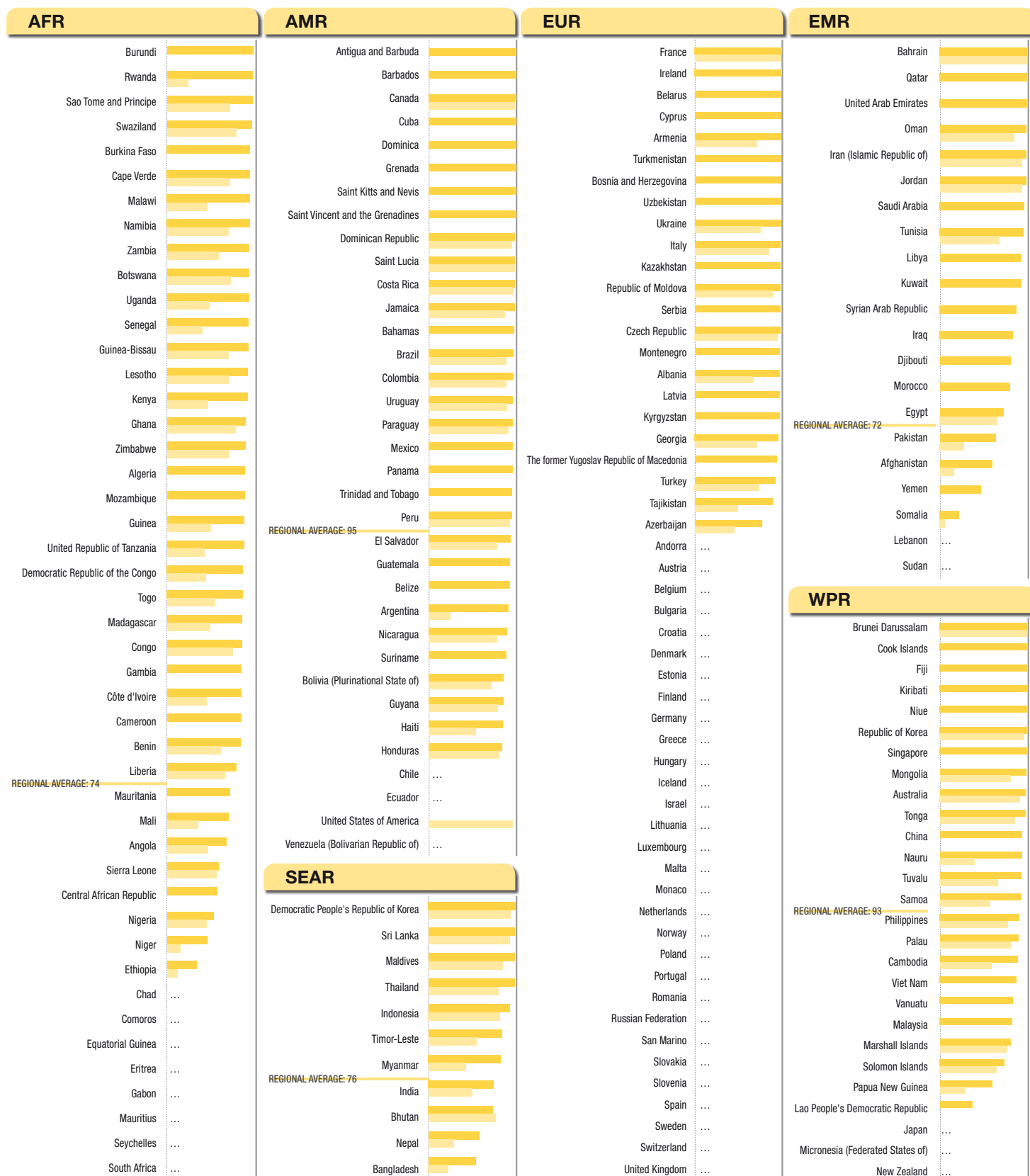
This chart shows the percentage of births attended by skilled health personnel. Within each WHO region, countries are sorted by the latest available data since 2005.

The vertical line denotes the global target of 90% coverage by 2015 set by the International Conference on Population and Development (ICPD+5).

Further details may be found in **Part III, Table 4**.

# 5 Antenatal care coverage (%): at least one visit and at least four visits

WORLD HEALTH  
STATISTICS  
2012

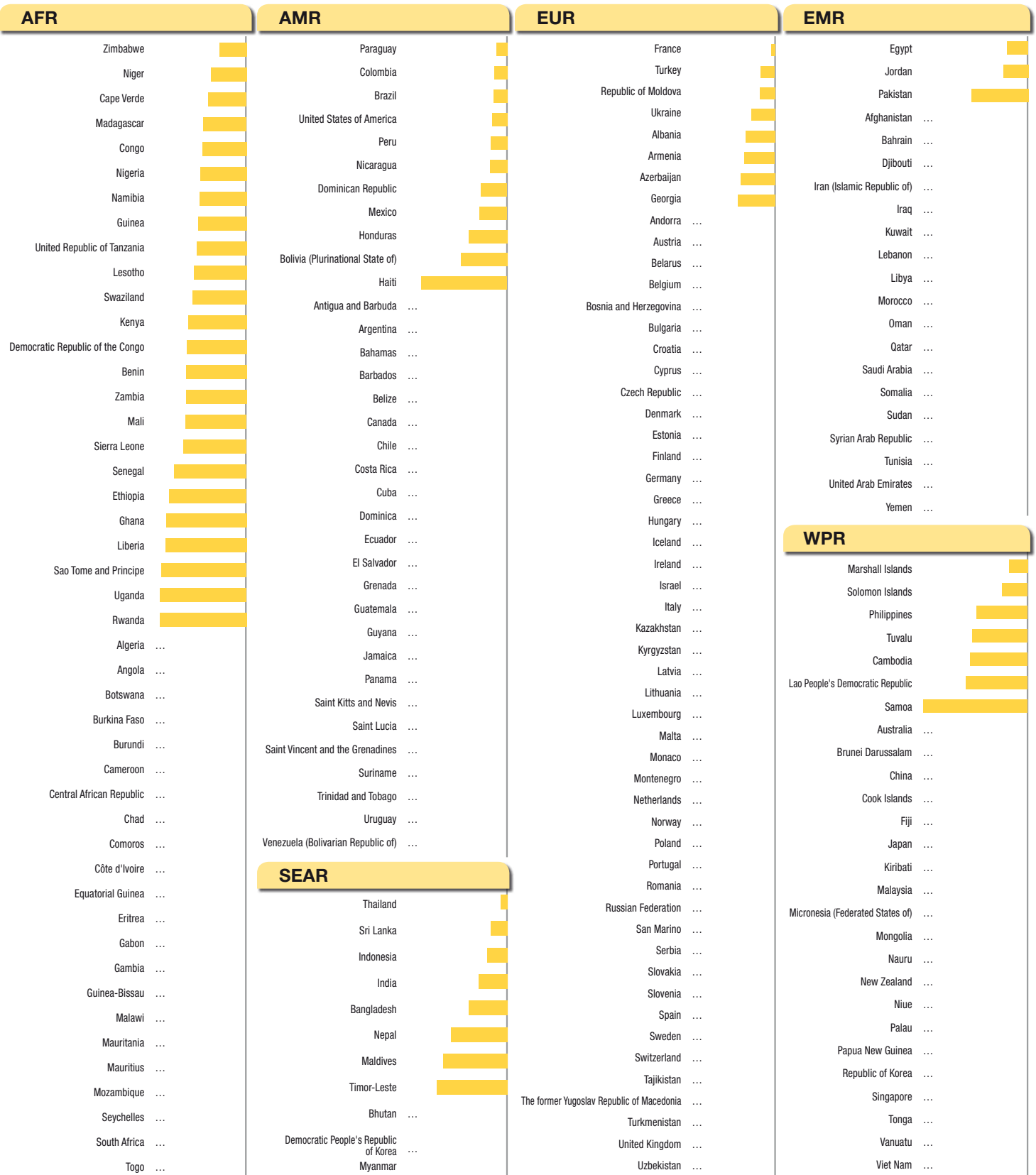


This chart shows the percentage of women who received antenatal care from skilled health personnel at least once and at least four times during pregnancy. Within each WHO region, countries are sorted by the latest available data since 2005 for at least one visit. The regional averages refer to at least one visit.

The vertical line denotes the global target of 100% coverage by 2015 set by the International Conference on Population and Development (ICPD+5).

Further details may be found in **Part III, Table 4**.

# 6 | Unmet need for family planning (%)



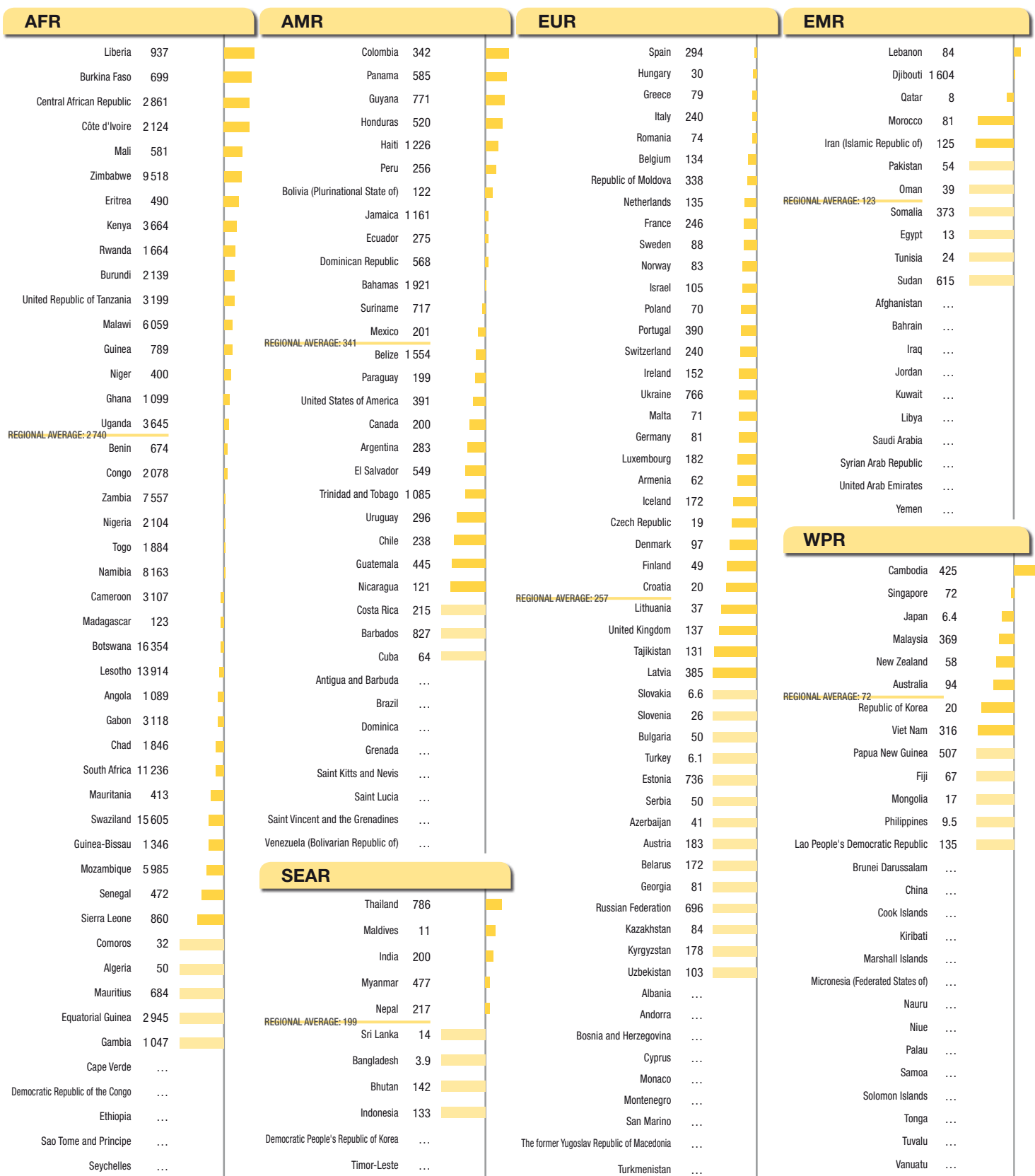
This chart shows the percentage of women who are fecund and sexually active but want to stop or delay childbearing and are not using any method of contraception. Within each WHO region, countries are sorted by the latest available data since 2005.

Achieving the MDG target of universal access to reproductive health by 2015 can be interpreted as 0% unmet need. The vertical line corresponds to 0% with the percentage of unmet need shown to the left of this line with a range of 50%.

Further details may be found in **Part III, Table 4**.

# 7 AARD (%) in HIV prevalence, 2000–2009

WORLD HEALTH STATISTICS  
2012

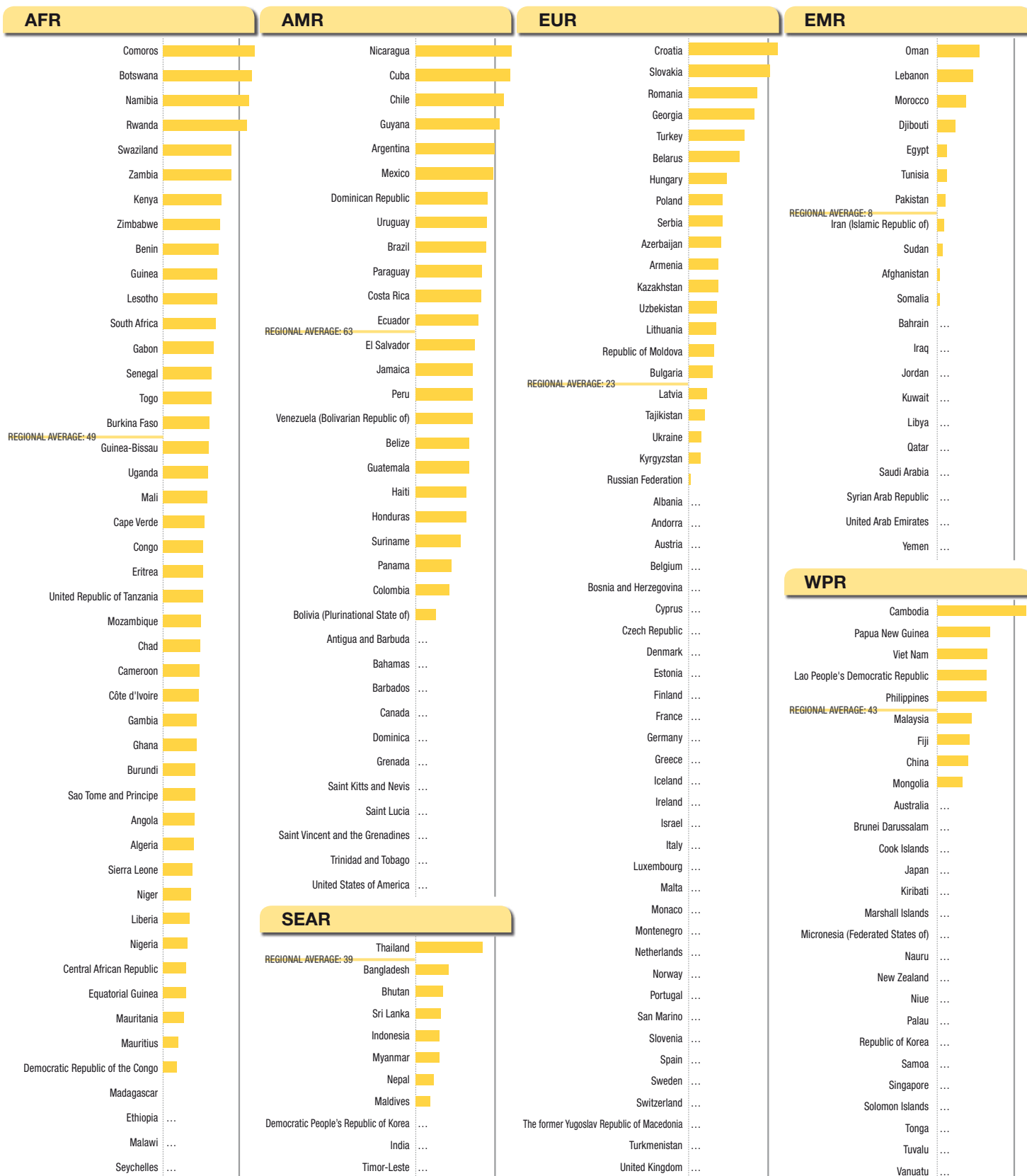


This chart shows the AARD in the estimated prevalence of HIV infections per 100 000 population per year for the period 2000–2009. Within each WHO region, countries are sorted in descending order based on the AARD in this rate.

The MDG target to halt by 2015 and begin to reverse the spread of HIV/AIDS can be interpreted as any AARD greater than 0%. The vertical line corresponds to an AARD of 0% with cut-off points of  $\pm 10\%$  on either side. Lightly shaded bars indicate countries in which the AARD was less than  $-10\%$ . The numerical values show estimated HIV prevalence per 100 000 population for 2009.

Further details may be found in **Part III, Table 2**.

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



This chart shows estimated antiretroviral therapy coverage in 2010 based on the standards for treatment set out in the 2010 guidelines of the Joint United Nations Programme on HIV/AIDS. Within each WHO region, countries are sorted in descending order by the level of coverage achieved.

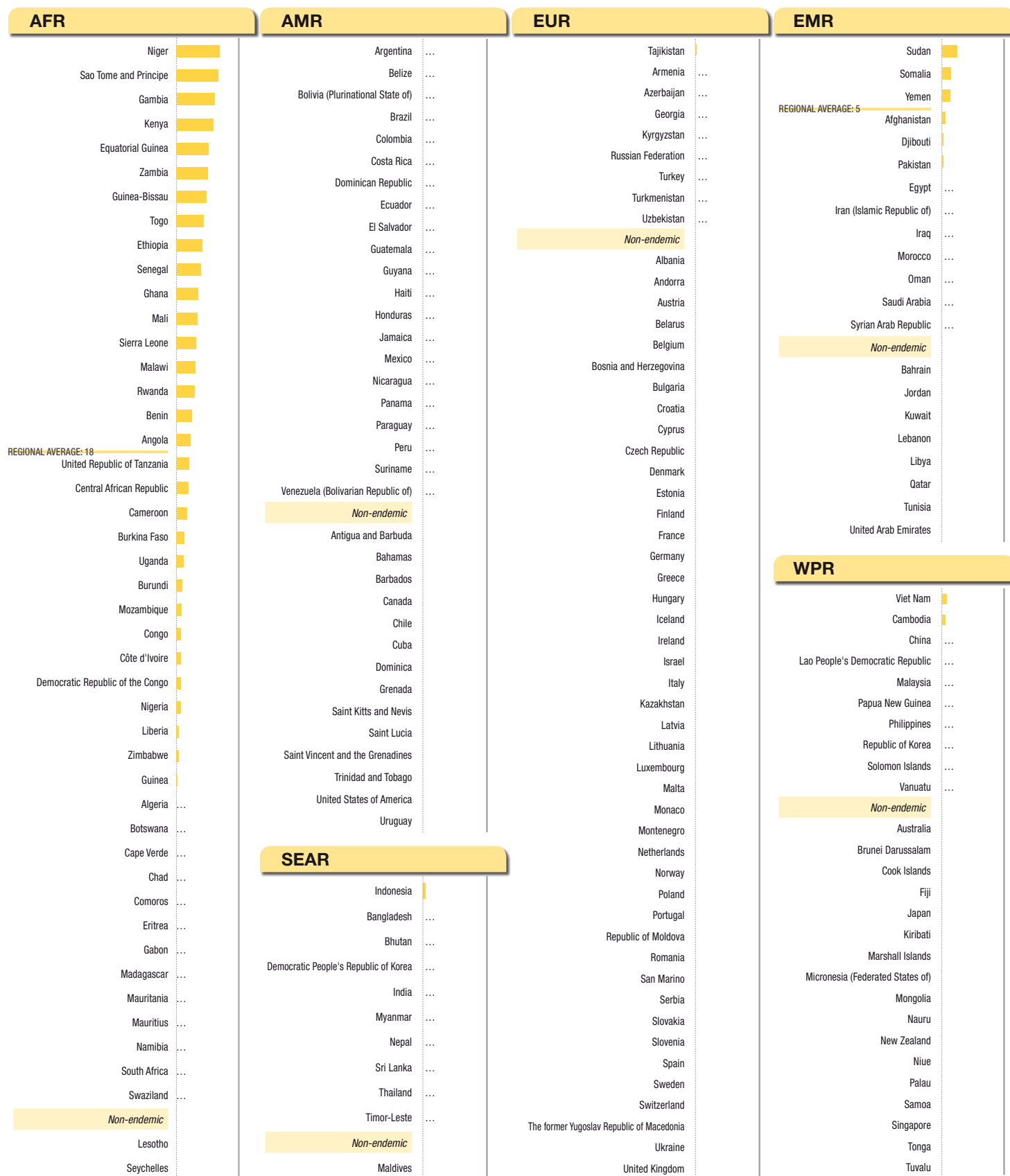
The vertical line denotes the target of universal access to antiretroviral therapy, defined as providing antiretroviral therapy to at least 80% of patients in need.

Further details may be found in **Part III, Table 4**.



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

WORLD HEALTH  
STATISTICS  
2012

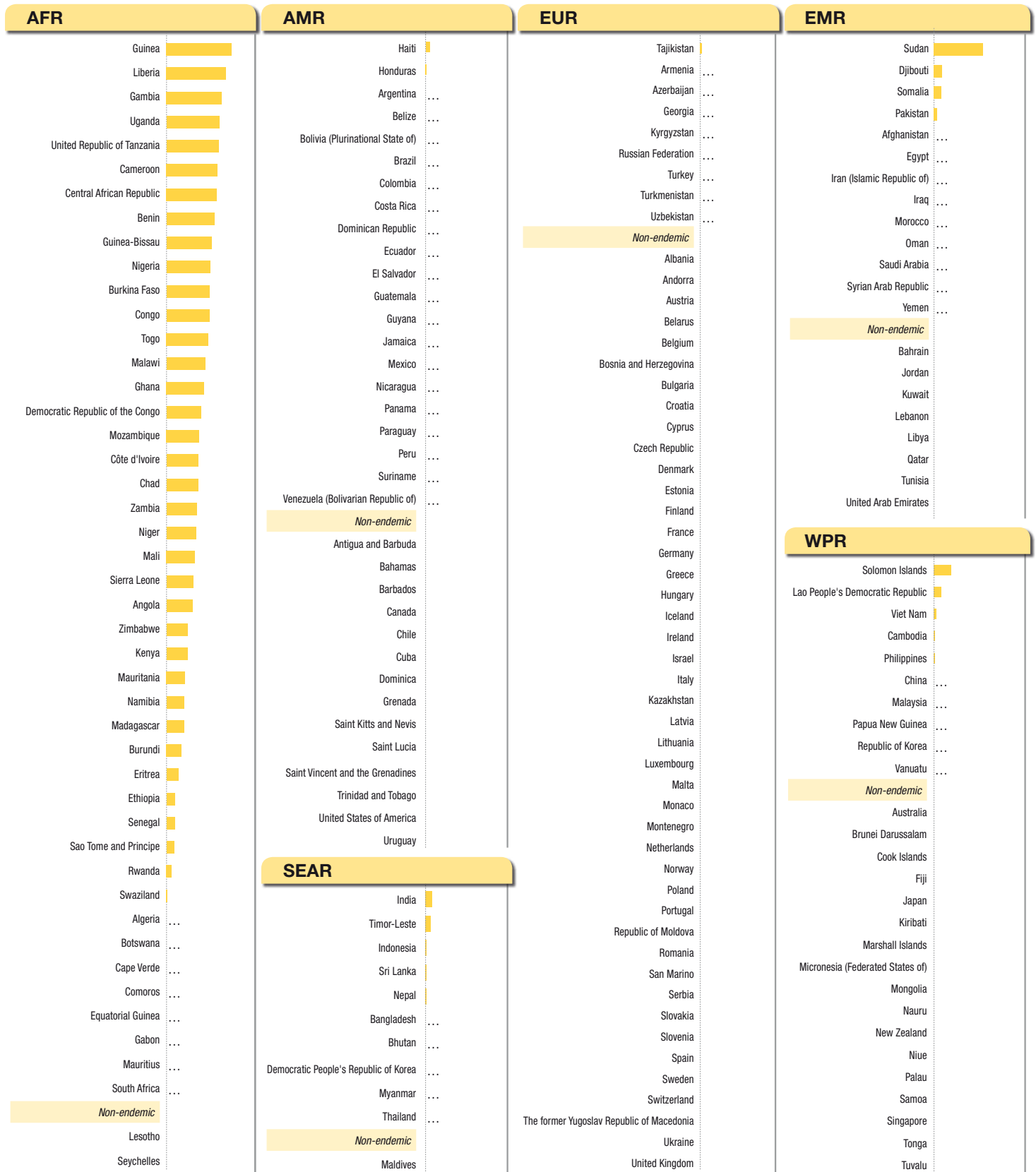


This chart shows the percentage of children under 5 years old that slept under an insecticide-treated net the night prior to the survey. Within each WHO region, countries are sorted by the latest available data since 2005.

The vertical line denotes the target of 80% coverage set by WHO and the Roll Back Malaria Partnership.

Further details may be found in **Part III, Table 4**.

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



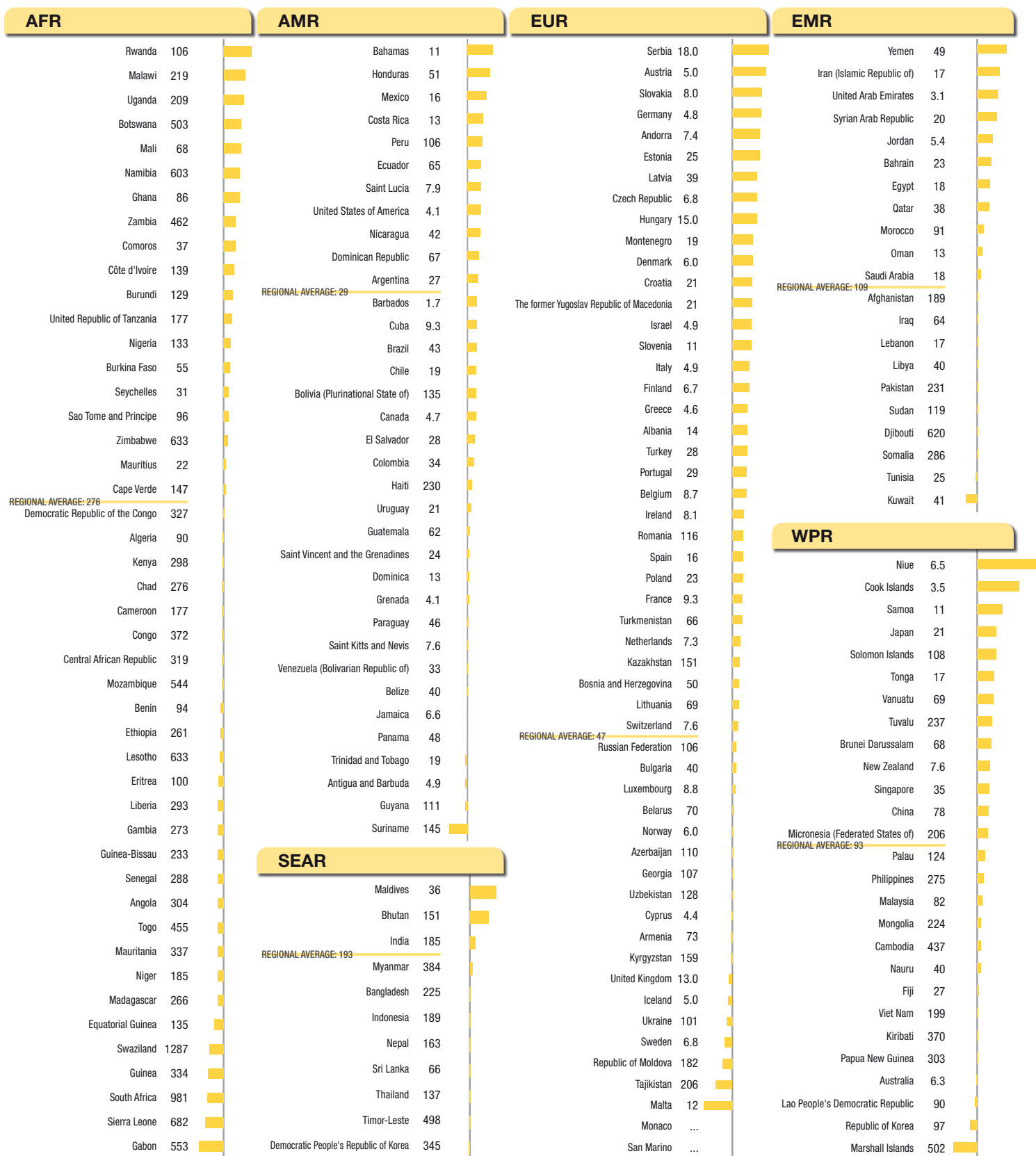
This chart shows the percentage of children under 5 years old with fever in the two weeks prior to the survey who received any antimalarial medicine. Within each WHO region, countries are sorted by the latest available data since 2005.

The vertical line denotes the target of 100% coverage set by WHO and the Roll Back Malaria Partnership.

Further details may be found in **Part III, Table 4**.

# 11 AARD (%) in incidence of tuberculosis, 2000–2010

WORLD HEALTH  
STATISTICS  
2012

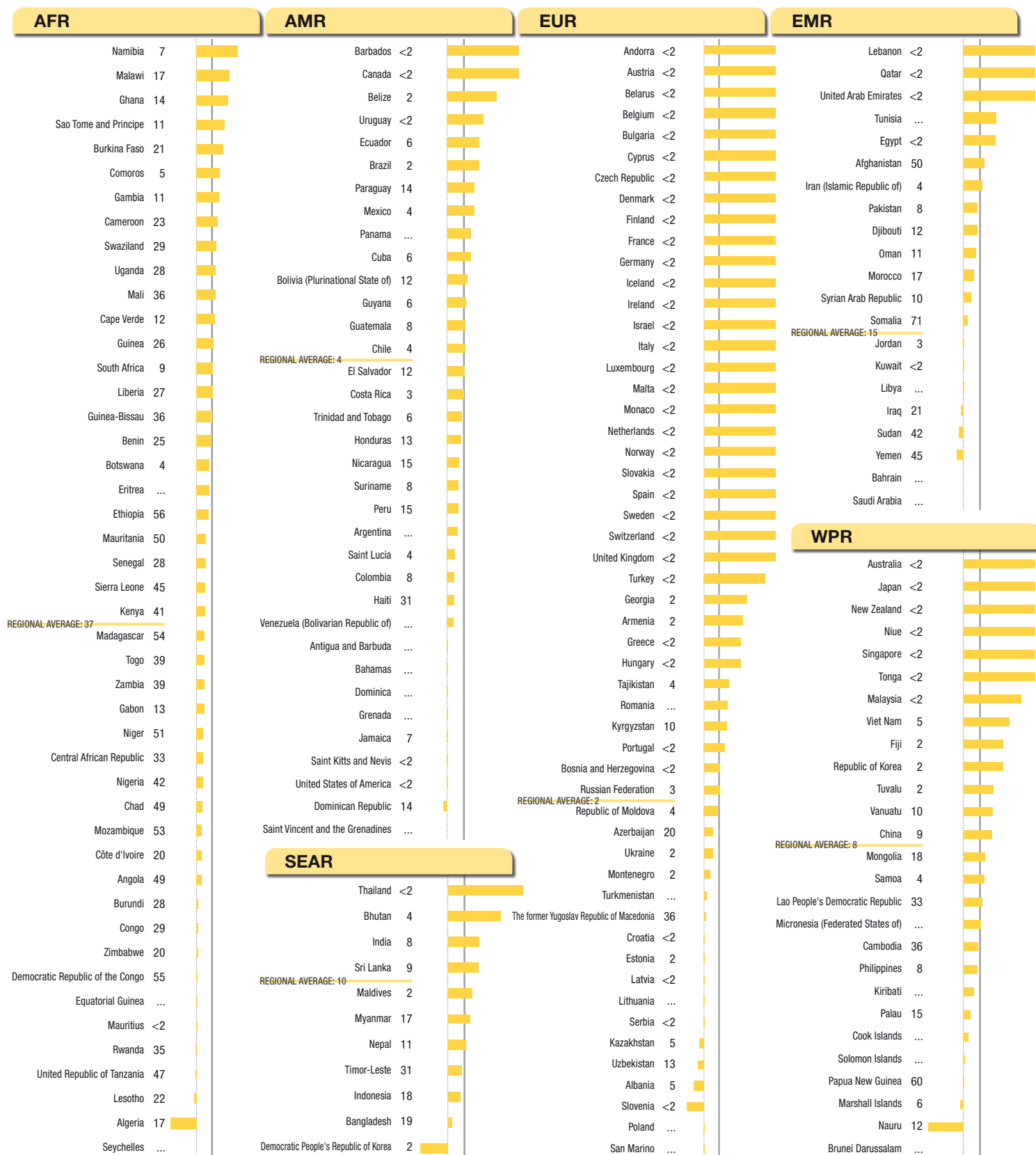


This chart shows the AARD in the estimated incidence of tuberculosis per 100 000 population per year for the period 2000–2010. Within each WHO region, countries are sorted in descending order based on the AARD in estimated tuberculosis incidence.

Achieving the MDG target of halting by 2015 and beginning to reverse the incidence of malaria and other major diseases such as tuberculosis can be interpreted as any AARD greater than 0%. The vertical line corresponds to an AARD of 0% with a range of -10% to the left of the line and +15% to the right. The numerical values show the estimated incidence of new tuberculosis cases per 100 000 population for 2010.

Further details may be found in **Part III, Table 2**.

# 12 | AARD (%) in proportion of population without access to improved drinking water-sources



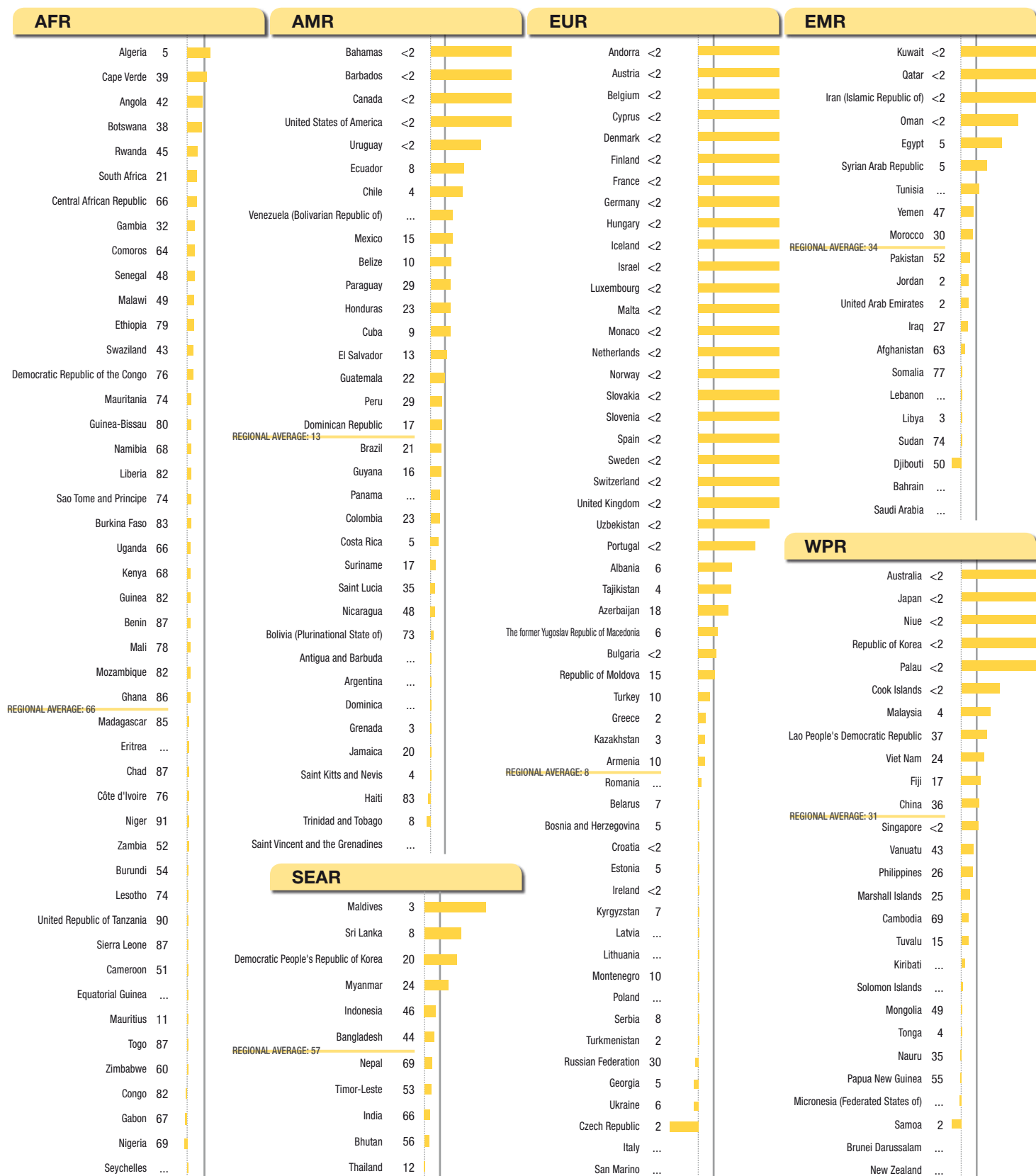
The AARD in the proportion of the population without access to safe drinking-water sources was calculated using the complement of the estimated proportion using an improved drinking-water source, for the period 1990–2010 (or any minimum period of five years since 1990). Within each WHO region, countries are sorted in descending order based on this rate of decline.

In order to reach the MDG target of halving, by 2015, the proportion of people without sustainable access to safe drinking-water, an AARD of 2.7% will be required and is denoted by the vertical line. Countries with sustained low levels of proportion of population without improved drinking-water sources (<2%) can be considered to have met the target and are shown with the maximum AARD at the beginning of their respective regional listing. The numerical values show the estimated percentage of the population not using improved drinking-water sources in 2010.

Further details may be found in **Part III, Table 5**.

# 13 | AARD (%) in proportion of population without access to improved sanitation

WORLD HEALTH  
STATISTICS  
2012



The AARD in the proportion of the population without access to basic sanitation was calculated using the complement of the estimated proportion using improved sanitation, for the period 1990–2010 (or any minimum period of five years since 1990). Within each WHO region, countries are sorted in descending order based on this rate of decline.

In order to reach the MDG target of halving, by 2015, the proportion of people without sustainable access to basic sanitation, an AARD of 2.7% will be required and is denoted by the vertical line. Countries with sustained low levels of proportion of population without improved sanitation (<2%) can be considered to have met the target and are shown with the maximum AARD at the beginning of their respective regional listing. The numerical values show the estimated percentage of the population not using improved sanitation in 2010.

Further details may be found in **Part III, Table 5**.

