Overview

More than 50 SDG indicators, across more than 10 goals, have been selected to measure health outcomes, direct determinants of health or health-service provision. These health-related indicators may be grouped into the following seven thematic areas:

- reproductive, maternal, newborn and child health
- infectious diseases
- noncommunicable diseases and mental health
- injuries and violence
- universal health coverage and health systems
- environmental risks
- health risks and disease outbreaks.

Available data indicate that despite the progress made during the MDG era major challenges remain in terms of reducing maternal and child mortality, improving nutrition, and making further progress in the battle against communicable diseases such as HIV/AIDS, tuberculosis (TB), malaria, neglected tropical diseases and hepatitis. Furthermore, the results of situation analyses provide clear evidence of the crucial importance of addressing NCDs and their risk factors – such as tobacco use, mental health problems, road traffic injuries and environmental conditions – within the sustainable development agenda. In many countries, weak health systems remain an obstacle to progress and result in deficiencies in coverage for even the most basic health services, as well as poor preparedness for health emergencies. Based on the latest available data, the global and regional situation in relation to the above seven thematic areas is summarized below. Country-specific findings by indicator, where available, are presented graphically in Annex A and in tabular form in Annex B.

2.1 Reproductive, maternal, newborn and child health

Worldwide, approximately 830 women died every single day due to complications during pregnancy or childbirth in 2015 (1). Reducing the global maternal mortality ratio (MMR) from 216 per 100 000 live births in 2015 to less than 70 per 100 000 live births by 2030 (SDG Target 3.1) will require a global annual rate of reduction of at least 7.5% – which is more than triple the annual rate of reduction that was achieved between 1990 and 2015 (2). Most maternal deaths are preventable as the necessary medical interventions are well known. It is therefore crucially important to increase women’s access to quality care before, during and after childbirth. In 2016, millions of births globally were not assisted by a trained midwife, doctor or nurse, with only 78% of births were in the presence of a skilled birth attendant (3).
In 2016, 77% of women of reproductive age who were married or in-union had their family planning need met with a modern contraceptive method. While nine out of 10 women in the WHO Western Pacific Region had their family planning need satisfied, only half of women in the WHO African Region did (4). Globally, the adolescent birth rate in 2015 was 44.1 per 1000 adolescent girls aged 15–19 years (5).

The global under-five mortality rate in 2015 was 43 per 1000 live births, while the neonatal mortality rate was 19 per 1000 live births – representing declines of 44% and 37% respectively compared to the rates in 2000. Newborn deaths represented half or more of all deaths among children under 5 years of age in all WHO regions in 2015 with the exception of the WHO African Region where one third of under-five deaths occurred after the first month of life (Figure 2.1). The WHO African Region also had the highest under-five mortality rate (81.3 per 1000 live births) that year – almost double the global rate (6).

![Figure 2.1](#) Under-five mortality rates by age at death, by WHO region, 2015

Globally in 2016, there were 155 million children under the age of five who were stunted (too short for their age), 52 million wasted (too light for their height) and 41 million overweight (too heavy for their height). Stunting prevalence was highest (34%) in the WHO African Region and the WHO South-East Asia Region. Both the highest prevalence of wasting (15.3%) and number of wasted children (27 million) were found in the WHO South-East Asia Region. Between 2000 and 2016, the number of overweight children under the age of five increased globally by 33% (7).

### 2.2 Infectious diseases

Globally, 2.1 million people were estimated to have become newly infected with HIV in 2015, representing a rate of 0.3 new infections per 1000 uninfected people. In the same year, an estimated 11 million people died of HIV-related illnesses. At the end of 2015, an estimated 36.7 million people were living with HIV. The WHO African Region remains the most severely affected, with 4.4% of adults aged 15–49 years living with HIV. Globally, 18.2 million people living with HIV were on antiretroviral therapy by mid 2016 (8).

In 2015, there were an estimated 212 million malaria cases globally, translating into an incidence rate of 94 per 1000 persons at risk – a 41% decrease from the rate in 2000. The greatest decrease was achieved in the WHO European Region, with the number of indigenous cases being reduced to zero in 2015. There were an estimated 429 000 malaria deaths globally, with the heaviest burden borne by the WHO African Region – where an estimated 92% of all deaths occurred – and by children under 5 years of age, who accounted for more than 70% of all deaths (9).

Tuberculosis (TB) remains a major global health problem, despite being a treatable and curable disease. In 2015, there were an estimated 10.4 million new TB cases and 1.4 million TB deaths, with an additional 0.4 million deaths resulting from TB among HIV-positive people. In 2015, the TB case fatality rate (calculated as mortality divided by incidence) varied widely – from under 5% in some countries to more than 20% in most countries in the WHO African Region. This finding highlights the persistence of large inequities in access to high-quality diagnostic and treatment services. The WHO European Region had the highest incidence rate of multidrug- or rifampicin-resistant TB (MDR/RR-TB) at 14 per 100 000 population (10).

The number of global deaths in 2015 attributable to hepatitis is estimated to be in the order of 1.3 million (11). This figure includes deaths from acute hepatitis, liver cancer due to hepatitis and cirrhosis due to hepatitis. In the same year, an estimated 257 million people were living with hepatitis B virus infection, and 71 million people were living with hepatitis C virus infection (12). Global coverage with three doses of hepatitis B vaccine (a priority intervention) reached 84% among infants in 2015. However, in 36 countries the estimated coverage was less than 80% (Figure 2.2) (13).

In 2015, a reported 1.6 billion people required mass or individual treatment and care for neglected tropical diseases (NTDs) – down from 2.0 billion people in 2010. Most of these people required mass treatment for lymphatic filariasis, soil-transmitted helminthiases, schistosomiasis, trachoma and/or onchocerciasis. The progress made in reducing the number of people requiring mass treatment has been driven in large part by the fact that lymphatic filariasis and trachoma have either been eliminated or are under surveillance for verification of elimination in 18 and eight countries respectively. In 2015, fewer people required individual treatment and care for dracunculiasis, human African trypanosomiasis and visceral leishmaniasis than ever before (14).
2.3 Noncommunicable diseases and mental health

In 2015, an estimated 40 million deaths occurred due to NCDs, accounting for 70% of the overall total of 56 million deaths. The majority of such deaths were caused by the four main NCDs, namely: cardiovascular disease, 17.7 million deaths (accounting for 45% of all NCD deaths); cancer, 8.8 million deaths (22%); chronic respiratory disease, 3.9 million deaths (10%); and diabetes, 1.6 million deaths (4%). The risk of dying from any one of the four main NCDs between ages 30 and 70 decreased from 23% in 2000 to 19% in 2015. In high-income countries, age-standardized cardiovascular mortality rates have declined rapidly in recent years, while mortality rates from the other main NCDs have fallen at a slower pace. Although age-standardized cardiovascular mortality rates and chronic respiratory mortality rates have improved substantially in low- and middle-income countries (LMIC), they remain far higher than rates in high-income countries (Figure 2.3) (11).

The worldwide level of alcohol consumption in 2016 was 6.4 litres of pure alcohol per person aged 15 years or older, with considerable variation between WHO regions (15). Available data indicate that treatment coverage for alcohol and drug-use disorders is inadequate, though further work is needed to improve the measurement of such coverage.

In 2015, more than 1.1 billion people smoked tobacco, with far more males than females currently engaging in this behaviour (16). The WHO Framework Convention on
Almost 800,000 deaths by suicide occurred in 2015, making it the second leading cause of death by injury after road traffic injuries. Men are almost twice as likely as women to die as a result of suicide. Suicide mortality rates are highest in the WHO Western Pacific Region (14.1 per 100,000 population) and lowest in the WHO Eastern Mediterranean Region (3.8 per 100,000 population) (11).

### 2.4 Injuries and violence

Around 1.25 million people died from road traffic injuries in 2013, with up to 50 million people sustaining non-fatal injuries as a result of road traffic collisions or crashes. Road traffic injuries are the main cause of death among people aged 15–29 years and disproportionately affect vulnerable road users, namely pedestrians, cyclists and motorcyclists. Between 2000 and 2013 the number of road traffic deaths globally increased by approximately 13% (17).

Latest estimates indicate that globally almost one quarter of adults (23%) suffered physical abuse as a child (18) and about one third (35%) of women experienced either physical and/or sexual intimate partner violence or non-partner sexual violence at some point in their life (19).

During the period 2011–2015, the global annual average death rate due to natural disasters was 0.3 deaths per 100,000 population. The WHO Western Pacific Region had the highest rate at 0.5 deaths per 100,000 population (11).

In 2015, there were an estimated 468,000 murders, with four fifth of all homicide victims being male. Men in the WHO Region of the Americas suffered the highest rate of homicide deaths at 32.9 per 100,000 population, 12 times the rate among men in the WHO Western Pacific Region (Figure 2.4). Globally, during the period 2000–2015 there was a marked decline (19%) in homicide rates (11).

It is estimated that in 2015, 152,000 people were killed in wars and conflicts, corresponding to around 0.3% of all global deaths that year. This estimate does not include deaths due to the indirect effects of war and conflict on the spread of diseases, poor nutrition and collapse of health services (11).

### 2.5 Universal health coverage and health systems

The average national percentage of total government expenditure devoted to health was 11.7% in 2014. Regionally, such average ranged from 8.8% in theWHO Eastern Mediterranean Region to 13.6% in the WHO Region of the Americas (20). This measure indicates the level of government spending on health within the total expenditure for public sector operations in a country, and is part of SDG indicator 1.a.2 on the proportion of total government spending on essential services (education, health and social protection).

Consultations with WHO Member States on estimating the SDG indicators needed to monitor SDG Target 3.8 on UHC began in February 2017. Once completed, estimates of the SDG indicators 3.8.1 and 3.8.2 – coverage of essential health services; and the proportion of population with large household expenditures on health as a share of total household expenditure or income, respectively – will provide the first comparable set of SDG monitoring figures for developing an index for use as a measure of financial protection. On average, countries have data since 2010 for around 70% of tracer indicators within SDG indicator 3.8.1 with 50% of countries having at least one data source for SDG indicator 3.8.2 since 2005.

In 2015, global coverage of three doses of diphtheria-tetanus-pertussis (DTP3) vaccine, as a proxy for full immunization among children, was 86% (13). Data from 2007–2014 show that the median availability of selected essential medicines in the public sector was only 60% in selected low-income countries and 56% in selected lower-middle-income countries (21). Access to medicines for chronic conditions and NCDs is even worse than that for acute conditions. Despite improvements in recent decades, the development of innovative new products remains focused away from the health needs of those living in developing countries. As a result, the current landscape of health research and development (see section 1.5) is insufficiently aligned with global health demands and needs. Health workforce densities are also distributed unevenly across the globe. As shown in Figure 2.5, WHO regions with the highest burden of disease expressed in disability-
adjusted life years (22) also have the lowest densities of health workforce required to deliver much-needed health services. Data from 2005–2015 show that around 40% of countries have less than one physician per 1000 population and around half of all countries have less than three nursing and midwifery personnel per 1000 population (23). Even in countries with higher national health worker densities, the workforce is often inequitably distributed, with rural and hard-to-reach areas tending to be understaffed compared to capital cities and other urban areas.

In the area of monitoring and evaluation (see section 1.1 above), WHO estimates that only half of its 194 Member States register at least 80% of deaths, with associated information provided on cause of death (11, 24). In addition, data-quality problems further limit the use of such information.

2.6 Environmental risks

Around 3 billion people still heat their homes and cook using solid fuels (that is, using wood, crop wastes, charcoal, coal or dung) in open fires and leaky stoves. The use of such inefficient fuels and technologies leads to high levels of household air pollution. In 2012, such household air pollution caused 4.3 million deaths globally. Women and children are at particularly high risk of disease caused by exposure to household air pollution, accounting for 60% of all deaths attributed to such pollution (25).

In 2014, 92% of the world population was living in places where WHO air quality guideline standards were not met. Outdoor air pollution in both cities and rural areas was estimated to have caused 5.8 million deaths worldwide in 2012. Some 87% of these deaths occurred in LMIC (26). Jointly, indoor and outdoor air pollution caused an estimated 6.5 million deaths (11.6% of all global deaths) in 2012 (27).

Unsafe water, unsafe sanitation and lack of hygiene also remain important causes of death, with an estimated 871 000 associated deaths occurring in 2012.1 Such deaths disproportionately occur in low-income communities and among children under 5 years of age (28, 29). Although 6.6 billion people used an improved drinking-water source in 2015 the coverage of safely managed drinking-water services remains low, with preliminary estimates of 68% coverage in urban areas and only 20% in rural areas (30,31). Around one third of the world population (32%) did not have access to improved sanitation facilities in 2015, including 946 million people who practised open defecation (30).

An estimated 108 000 deaths were caused by unintentional poisonings in 2015. In LMIC, pesticides, kerosene, household chemicals and carbon monoxide are all common causes of such poisoning. In high-income countries, the substances involved primarily include carbon monoxide, drugs, and cleaning and personal-care products in the home. The number deaths attributed to this cause are highest among children under 5 years of age and among adults aged 60 years or older. Mortality rates are also higher among men than among women across all age groups (Figure 2.6) (11).

2.7 Health risks and disease outbreaks

The International Health Regulations (IHR) monitoring process involved the use of a self-assessment questionnaire sent to States Parties to assess the implementation status of 13 core capacities. In 2016, 129 States Parties (66% of all States Parties) responded to the monitoring questionnaire. The average core capacity scores of all reporting countries in 2016 was 76% (32,33).

1 Includes deaths from diarrhoea, intestinal nematode infections and protein-energy malnutrition attributable to lack of access to WASH services.
References


24. Based on data reported to the WHO Mortality Database (http://www.who.int/healthinfo/mortality_data/en/) as of 12 October 2016.


