World health statistics 2026

Monitoring health for the SDGs, Sustainable Development Goals

World Health Organization

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Foreword

The *World Health Statistics report* provides the most comprehensive annual assessment of global health trends available to WHO Member States and the broader international health community.

Over the past two decades, sustained national and multilateral commitments have delivered major gains in global health: significant reductions in maternal and child mortality, HIV and tuberculosis incidence, tobacco use and alcohol consumption. These achievements demonstrate that coordinated action at scale produces measurable results.

Nevertheless, this report presents a sobering picture. Progress toward the health-related Sustainable Development Goals is insufficient, uneven across regions and populations, and increasingly vulnerable to systemic shocks. A disproportionate burden falls on low- and middle-income countries and under-served communities, especially in fragile and conflict-affected settings. Progress has stalled on universal health coverage, maternal and child health and reduction in premature mortality due to noncommunicable diseases – which remain the leading causes of mortality globally.

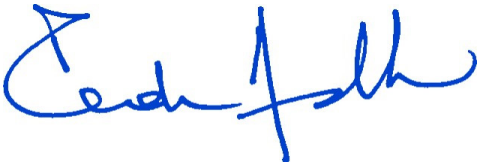
The COVID-19 pandemic inflicted a setback of historic proportions. An estimated 22.1 million excess deaths occurred between 2020 and 2023, with nearly a decade of gains in life expectancy and healthy life expectancy wiped out by 2021. Recovery since 2022 has been uneven, with persistent disparities according to region, age and sex.

These challenges are exacerbated by a global health financing emergency. Many countries face long-standing structural constraints including high debt burdens and insufficient domestic public financing. Official development assistance for health was estimated to be 30-40 per cent less in 2025 than in 2023. Sudden aid reductions risk significant disruption of essential health services, reduced access to life-saving essential medicines and vaccines.

In addition, erosion of data, planning, and surveillance systems undermines reliable measurement, which is essential for progress. Too few deaths are recorded with timely, accurate, and meaningful cause-of-death information, limiting the accuracy and relevance of mortality statistics for policy and planning. Strengthening civil registration and vital statistics systems, including completeness of death registration, medical certification, ICD-based coding, and timely reporting, remains an urgent priority. So too does investment in interoperable digital and health information system infrastructure that can generate reliable, actionable data.

As the SDG period enters its final years, we must accelerate our efforts. Countries and partners have a shared responsibility to ensure sustained political commitment, adequate and predictable financing, and evidence-informed decision-making. This report provides crucial evidence on which, together, we must act.

Dr Tedros Adhanom Ghebreyesus
Director-General
World Health Organization



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Chapter 2 was written by Nelly Biondi and Bochen Cao with supporting data analysis by Charlton Callender, Doris Ma Fat and Katie Paulson (WHO Department of Data, Digital Health, Analytics and AI).

The methods for estimating excess mortality associated with the coronavirus disease 2019 (COVID-19) pandemic was developed with the support of and guidance from the Technical Advisory Group on COVID-19 Mortality Assessment (from 1 February 2021 to 31 December 2025) and the estimates were generated by WHO and the University of Washington, United States of America (Victoria Knutson and Jon Wakefield), in collaboration with the following experts: Enrique Acosta (Centre d'Estudis Demogràfics, Spain); Ariel Karlinsky (Hebrew University of Jerusalem, Israel); William Msemburi (Gates Foundation, United States of America); and Jonas Schöley (Max Planck Institute for Demographic Research, Germany).

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Abbreviations and acronyms

CDR	crude death rate
COVID-19	coronavirus disease 2019
CRVS	civil registration and vital statistics
DALYs	disability-adjusted life years
HALE	healthy life expectancy
HIV	human immunodeficiency virus
ICD	International Classification of Diseases
IHR	International Health Regulations
SDGs	Sustainable Development Goals
UHC	universal health coverage
UI	uncertainty intervals
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
WASH	water, sanitation and hygiene
WHO	World Health Organization

Introduction

The *World health statistics* report is the annual compilation of health and health-related indicators, which has been published by the World Health Organization (WHO) since 2005.

The 2026 edition consists of three chapters and the accompanying methods annex. Chapter 1 reviews the status of the health-related indicators of the Sustainable Development Goals (SDGs), covering age- and cause-specific mortality, infectious diseases, risk factors for health, and universal health coverage (UHC) and health systems. Chapter 2 presents an in-depth analysis of global and regional estimates of excess mortality associated with the coronavirus disease 2019 (COVID-19) pandemic, life expectancy and healthy life expectancy (HALE). Chapter 3 assesses the availability and quality of country cause-of-death registration as reported to the WHO mortality database. This chapter also presents selected country experiences demonstrating how strengthening civil registration and vital statistics (CRVS) systems improves the quality, completeness and use of mortality data.

The information presented in *World health statistics 2026* is based on data available from global monitoring as of March 2026. These data have been compiled primarily from publications and databases produced and maintained by WHO, other United Nations (UN) entities (such as the United Nations Children's Fund (UNICEF), Joint United Nations Programme on HIV/AIDS (UNAIDS) and the Population Division in the Department of Economic and Social Affairs of the United Nations), UN Inter-Agency bodies of which WHO is a member and other international organizations. A summary of the methods used for each chapter is described in the Annex. Tables of health statistics by country and area, WHO region and globally can be accessed at the Global Health Observatory *(1)*.

Key messages

Global progress towards the health and health-related SDGs remains uneven and too slow to meet the 2030 targets with fewer than 5 years remaining. In some areas, persistent data gaps mean that progress cannot be adequately assessed.

Global long-term declines continue for the infectious diseases: between 2010 and 2024, new human immunodeficiency virus (HIV) infections fell by 40%; the tuberculosis incidence rate has dropped 12% since 2015; and the number of people who required interventions for neglected tropical diseases fell by 36% from 2010. However, global malaria incidence has risen 8.5% since 2015, moving further away from the 2030 target. Some regions of WHO have made meaningful progress. The African Region has achieved faster reductions in both new HIV infections and tuberculosis incidence rate (70% and 28%, respectively) than the global average, and the South-East Asia Region is on track to meet the 2025 milestone of a 75% reduction in the malaria incidence rate.

High prevalence rates of preventable risk factors continue to hold back improvements. Global anaemia prevalence in women of reproductive age rose slightly to 30.7% in 2023 compared with the 2012 level and overweight in children younger than 5 years has reached 5.5% in 2024. Violence against women remains pervasive: in 2023, an estimated 24.7% ever-partnered women and girls aged 15 years or older had been subjected to intimate partner violence, and 8.2% women and girls aged 15 years or older had been subjected to non-partner sexual violence, with the true prevalence likely to be higher due to underreporting.

Despite challenges, the prevalence of some risk factors has fallen. Both tobacco use and alcohol consumption have declined since 2010 and are projected to only narrowly miss global targets. Access to water, sanitation and hygiene (WASH) services and clean cooking fuels and technologies has expanded significantly: between 2015 and 2024, 961 million more people gained safely managed drinking-water services, 1.2 billion gained safely managed sanitation, 1.6 billion gained basic hygiene services and 1.4 billion gained access to clean cooking fuels and technologies. Nevertheless, billions of people still do not have access to these services and access in rural areas continues to lag behind urban areas.

Progress towards UHC has slowed considerably in the SDG era. Between 2015 and 2023, the global UHC service coverage index increased only from 68 to 71, reflecting a deceleration in improvement of about two thirds compared with 2000–2015. About a quarter of the global population faces financial hardship due to out-of-pocket health spending, and 1.6 billion people are living in or have been pushed into poverty because of health expenses as of 2022. Coverage of four childhood vaccines (SDG indicator 3.b.1) is still below the 90% global target, particularly for the second dose of the measles-containing vaccine, and immunity gaps continue to fuel outbreaks.

Global mortality rates have improved since 2000, but progress has slowed sharply across key health areas. Maternal mortality ratio and under-5 mortality rate have fallen by 40% and 51%, respectively, since 2000, yet progress has slowed down in the SDG era. The 2023 maternal mortality ratio is still nearly three times the target and many countries are not on track to reach child mortality goals. Global premature mortality from the four main noncommunicable diseases has declined by over 20% since 2000, but progress is uneven and has slowed significantly since 2015. As a result, no WHO region is on track to meet the 2030 SDG target; some regions are stagnating or worsening and the COVID-19 pandemic has added further uncertainty. While long-term declines have occurred in injury-related deaths – such as from road traffic injuries, homicides and unintentional poisoning – inequalities persist with notable regional variation and consistently higher risks among males for all of these causes. Environmental risks, such as air pollution, cause millions of preventable deaths each year – 6.6 million deaths in 2021 were attributable to exposure to household and ambient air pollution from particulate matter.

Globally, an estimated 22.1 million excess deaths associated with the COVID-19 pandemic occurred from 2020 to 2023, roughly three times the 7.0 million deaths officially reported. Excess mortality was highest in 2021, with 10.4 million deaths, as more lethal variants emerged and health systems faced severe strain, before declining to 3.3 million deaths in 2023. Men consistently had higher excess mortality than women, with age-standardized mortality rates about 50% higher in men than women at the 2021 peak. A strong age gradient was apparent; excess mortality rose sharply in older adults and was 10 times higher in people 85 years and older than among younger adults.

After adjusting for age and sex of a population, higher crude excess mortality rates in some settings are primarily driven by older population structures. These adjustments highlight a greater underlying impact in lower-income countries and in some WHO regions. Yet, many countries, especially in low- and lower middle-income settings, lack complete, timely and disaggregated mortality data, highlighting critical gaps in reporting of global mortality data.

These patterns of excess mortality associated with the COVID-19 pandemic have shaped recent shifts in global life expectancy and HALE. Global life expectancy and HALE rose steadily from 2000 to 2019, but the COVID-19 pandemic erased nearly a decade of progress. Although both indicators have partially rebounded since 2021 – with female life expectancy returning to pre-pandemic levels by 2023 – most measures are still slightly below where they stood before the pandemic. Regionally, the pandemic's impact and recovery were uneven: the Region of the Americas were most affected. While many regions and lower-income countries have fully recovered or had surpassed 2019 life expectancy and HALE levels by 2023, gaps remain especially for HALE among groups in the Region of the Americas, the European Region and higher-income countries.

Timely, complete and high-quality disaggregated mortality and cause-of-death data are essential for monitoring health trends, informing effective policy and ensuring preparedness for future health crises. While global mortality data reporting has improved over time, important gaps persist, particularly in low- and lower middle-income countries. Timeliness remains a challenge: as of end 2025, only 18% of countries report mortality data within 1 year, while 32% have never submitted cause-of-death data to WHO. Completeness of death registration also varies widely: many high-income countries achieve near complete coverage, but substantial gaps are evident in many regions.

Compared with the total number of deaths that occur, only a small proportion of deaths are registered with meaningful cause-of-death information. Of an estimated 61 million global deaths in 2023, only 21 million were reported to WHO with cause-of-death information, and only 12 million had meaningful International Classification of Diseases (ICD) coded data. Overall, just one third of countries meet WHO standards for high-quality mortality data, while about half of countries have low- or very-low quality or no data. Despite these challenges, many countries are making progress by investing in capacity-building, digitalization and transition to ICD11. These advances are gradually improving mortality and cause-of-death reporting, even in resource-constrained settings.

Chapter 1

Health-related SDGs

1.1 Infectious diseases

The world's progress in the fight against infectious diseases is monitored in the SDG framework through the case reduction of HIV, tuberculosis, malaria, hepatitis, neglected tropical diseases and the reduction in the proportion of bloodstream infections caused by antimicrobial-resistant organisms as a measure of antimicrobial resistance. Progress in this area has been insufficient to meet the global targets and it is further at risk due to funding cuts which will affect billions of people all over the world.

1.1.1 HIV

In 2024, an estimated 1.3 million (95% uncertainty intervals (UI): 1.0–1.7 million) people worldwide were newly infected with HIV, representing a 40% reduction from the 2010 baseline. This rate of decline is insufficient to reach the target of 370 000 or fewer new infections by 2025 and a 90% reduction by 2030 *(2)*. The global HIV incidence rate (SDG indicator 3.3.1) in 2024 was 0.16 (95% UI: 0.13–0.21) new infections per 1000 uninfected population, half the incidence rate in 2010. The African Region is still the region with the highest HIV burden, despite having reduced the HIV incidence rate by 70% since 2010 to reach 0.53 (95% UI: 0.40–0.71) new infections per 1000 uninfected population in 2024. The region accounted for 65% (26.3 million, 95% UI: 23.9–29.3 million) of the people living with HIV worldwide (40.8 million, 95% UI: 37.0–45.6 million) at the end of 2024 *(3)*.

1.1.2 Tuberculosis

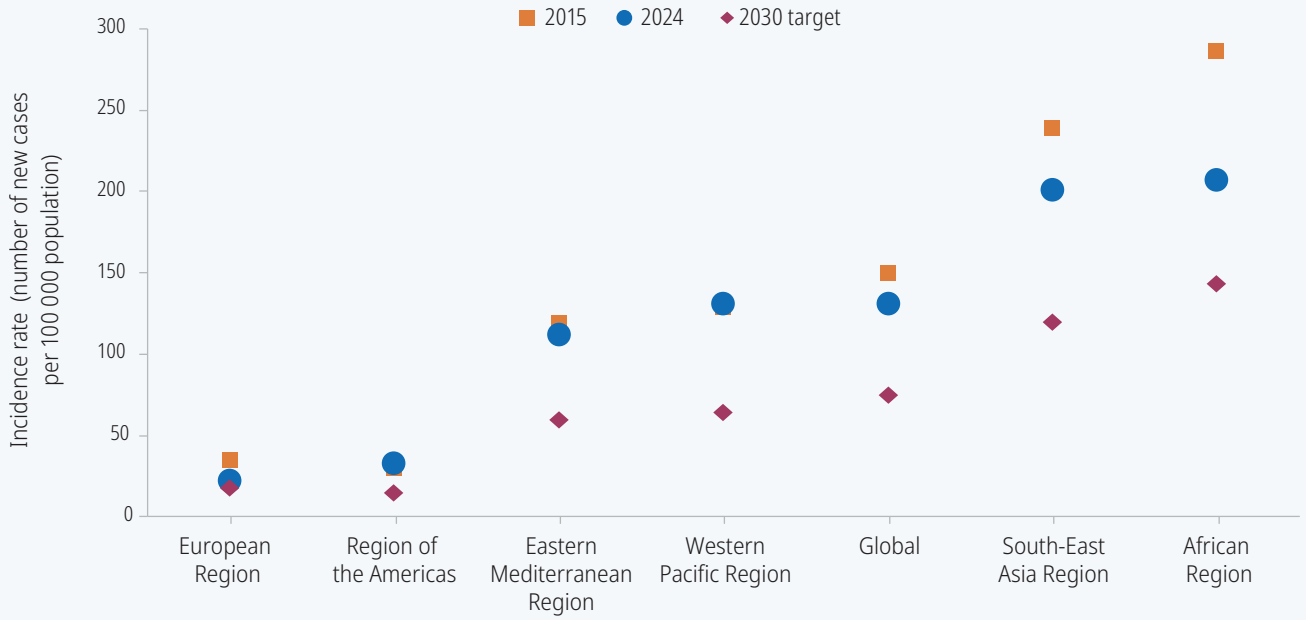
Globally in 2024, an estimated 10.7 million (95% UI: 9.9–11.5 million) people developed tuberculosis. The tuberculosis incidence rate (SDG indicator 3.3.2) was 131 (95% UI: 122–141) new cases per 100 000 population, a 12% decline[1] from 150 (95% UI: 136–164) per 100 000 population in 2015. This decline falls short of the target of the WHO End TB Strategy which is an 80% reduction by 2030 *(4,5)*.

The tuberculosis incidence rate, as well as progress in its reduction, varied across WHO regions (Fig. 1.1). The Region of the Americas and the European Region had the lowest incidence rates in 2015. However, while the European Region achieved a net reduction of 39% between 2015 and 2024, the Region of the Americas experienced a net increase of 13% in the same period. The African Region, while still having the highest incidence rate since 2015, achieved a 28% net reduction, which is more than double the global rate of reduction.[2] This finding shows that progress can be made at all levels of disease burden and accelerating progress is key to achieving the target *(5)*.

[1] Percentage change in incidence rate was calculated from unrounded incidence rates.

[2] Ibid

Fig. 1.1. Tuberculosis incidence rates, globally and by WHO region, 2015, 2024 and the 2030 target



WHO: World Health Organization.
Note: The regions are shown in ascending order of the tuberculosis incidence rate in 2024.
Source: WHO; 2025 *(5)*.

1.1.3 Malaria

An estimated 282 million (95% UI: 256–313 million) cases of malaria occurred globally in 2024, with an incidence rate (SDG indicator 3.3.3) of 64 (95% UI: 58–71) cases per 1000 population at risk. This incidence rate is an 8.5% increase from the 2015 baseline of 59 (95% UI: 55–64) cases per 1000 population at risk. This trajectory runs counter the target set in the *Global technical strategy for malaria 2016–2030,* which calls for a 90% reduction in the incidence of malaria cases by 2030. The African Region continues to be the most affected with an incidence rate in 2024 of 238 (95% UI: 214–266) cases per 1000 population at risk, which is almost four times the global rate. With the current trends, no WHO region is on track to meet the 2030 incidence reduction target, except for the European Region which has been free of malaria since 2015. The South-East Asia Region, however, is on track to reach the 2025 milestone of a 75% reduction in the incidence rate and would only narrowly miss the 2030 target *(6,7)*.

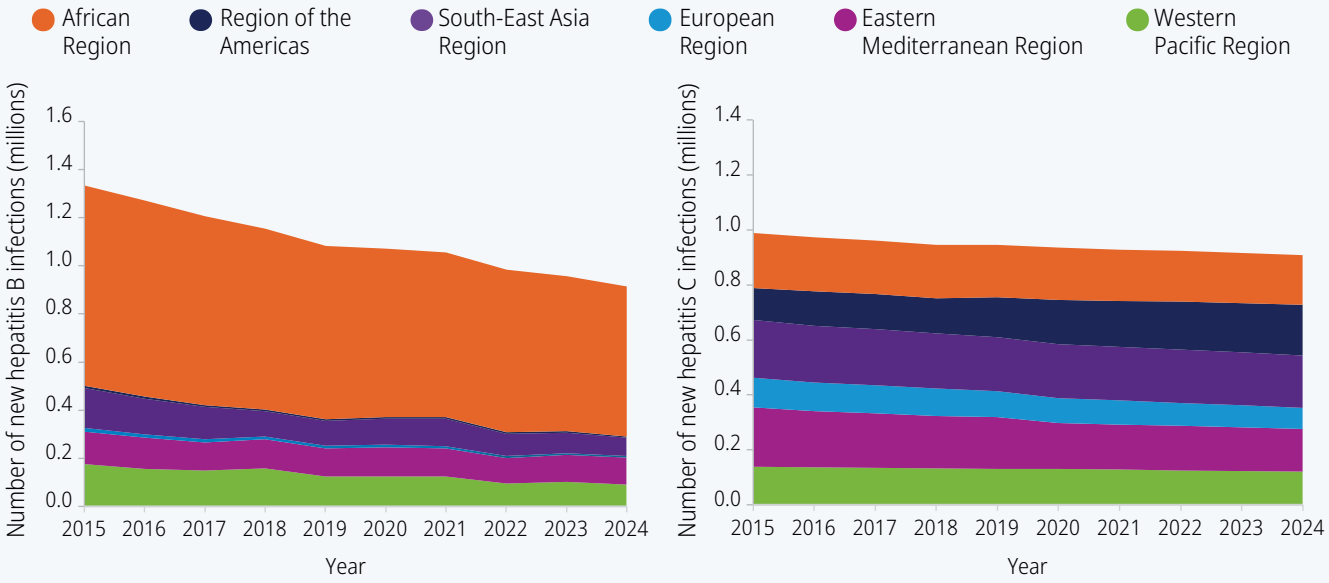
1.1.4 Hepatitis

Viral hepatitis B and C lead to chronic diseases and, left untreated, can cause death from liver cirrhosis and liver cancer. Globally, an estimated 240 million (95% UI: 202–296 million) people were living with hepatitis B and 47 million (95% UI: 31–71 million) people were living with hepatitis C in 2024 *(8,9)*.

New infections of both viral hepatitis B and C have declined worldwide in the past decade. The number of new hepatitis B infections dropped faster, from 1.3 million (95% UI: 1.1–1.8 million) in 2015 to 0.9 million (95% UI: 0.7–1.2 million) in 2024, while new hepatitis C infections fell from 1.0 million (95% UI: 0.6–1.5 million) to 0.9 million (95% UI: 0.6–1.4 million). The global hepatitis B prevalence in children younger than 5 years (SDG indicator 3.3.4) declined from 0.8% (95% UI: 0.6–1.1%) in 2015 to 0.6% (95% UI: 0.5–0.8%) in 2024. This decline has been largely driven by expanded birth-dose and infant vaccination coverage over the last 20 years; however, this progress is far too slow to achieve the 2030 target of 0.1% *(9)*.

The African Region continued to bear a disproportionate burden, notably in hepatitis B incidence, with 68% of new infections globally in 2024 occurring in the region (Fig. 1.2). It is also the only region where the hepatitis B prevalence in children younger than 5 years still exceeds 1%. The Region of the Americas was the only region where new hepatitis C infections had increased since 2015 (Fig. 1.2) *(9)*.

Fig. 1.2. Number of new hepatitis B and hepatitis C infections, by WHO region, 2015–2024



WHO: World Health Organization.
Source: WHO; 2026 *(9)*.

1.1.5 Neglected tropical diseases

Globally in 2024, 1.410 billion people required interventions against neglected tropical diseases (SDG indicator 3.3.5). Most of these individuals (1.4 billion people) required mass treatment for diseases amenable to preventive chemotherapy (lymphatic filariasis, onchocerciasis, schistosomiasis, soil-transmitted helminthiases and trachoma), while 15 million people needed other services for neglected tropical diseases such as individual disease management or care. About 5 million people required both types of intervention. The 2024 number is a 36% decrease from the 2010 baseline of 2.190 billion people, which is a step towards the global target for neglected tropical diseases of a 90% reduction by 2030 *(10,11)*. This decrease is remarkable progress especially as the global population grew by more than 1 billion during the same period *(12)*.

1.1.6 Antimicrobial resistance

Antimicrobial resistance is a major global public health threat, compromising the effectiveness of essential treatments and undermining progress towards UHC. SDG indicator 3.d.2 tracks the proportion of bloodstream infections caused by antimicrobial-resistant organisms, specifically *Escherichia coli* resistant to third-generation cephalosporins and methicillin-resistant *Staphylococcus aureus*. In 2023, crude (unadjusted) estimates indicate that the global level of resistance of *E. coli* to third-generation cephalosporins was 45.1% (interquartile range: 22.1–71.3%), while methicillin resistance in *S. aureus* was 35.1% (interquartile range: 15.2–50.8%), with substantial variation across regions *(13)*. The findings highlight a persistently high and geographically unequal burden of antimicrobial resistance in bloodstream infections, with greater impact in settings with limited diagnostic and surveillance capacity. This calls for sustained investment in antimicrobial-resistance surveillance and laboratory systems, coupled with strengthened antimicrobial stewardship and equitable access to effective treatments, to enable evidence-based action and improve patient care.

1.2 Risk factors for ill health

Exposure to a variety of factors affect people's health by increasing the likelihood of developing a disease or injury. The SDGs reflect the global attempt to minimize such exposure, tracked by indicators related to nutritional, behavioural and environmental risk factors, as well as risks specific to the health of girls and women.

1.2.1 Nutritional risk factors

Child malnutrition

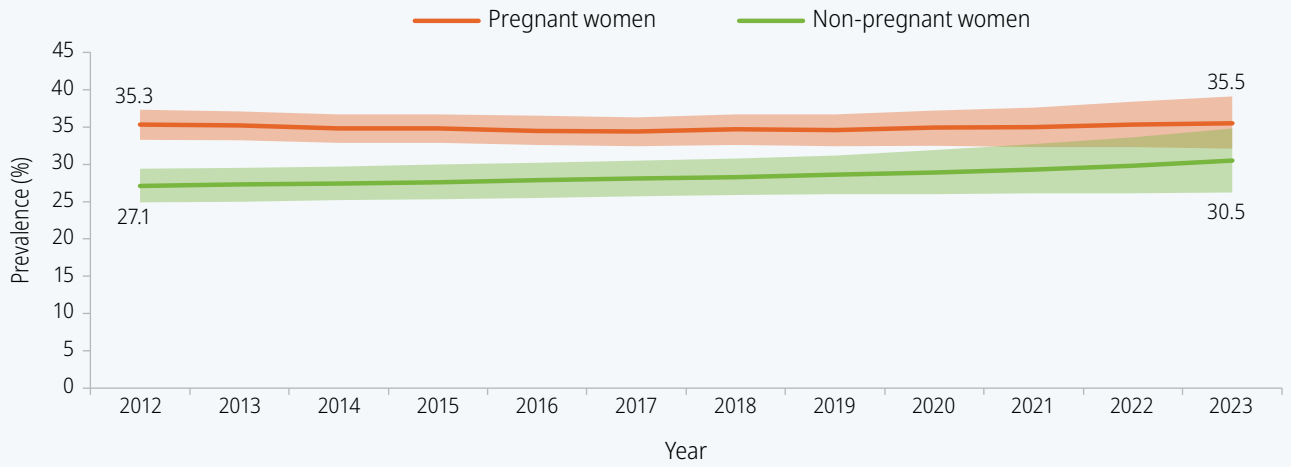
The global prevalence of stunting (low height for age) in children younger than 5 years (SDG indicator 2.2.1) fell from 26.4% (95% UI: 26.1–26.7%) in 2012 to 22.4% (95% UI: 22.0–22.8%) in 2020 but has slightly increased since then to reach 23.2% (95% UI: 22.6–23.8%) in 2024. Globally, the number of children affected by stunting declined from 180.4 million in 2012 to 150.2 million in 2024, a net reduction of 17%. However, this decrease is insufficient to achieve the global target of reducing the number of children affected by stunting by 40% by 2030 from the 2012 baseline *(14,15)*. The African Region was the only region that experienced an increase in the number of children affected by stunting, from 55.2 million (95% UI: 54.7–55.6 million) in 2012 to 59.1 million (95% UI: 58.0–60.3 million) in 2024, as the slight decline in the prevalence of stunting (from 35.4%, 95% UI: 35.1–35.7% to 31.7%, 95% UI: 31.1–32.4%) was offset by population growth *(14)*.

The world is also not on track to reach the target of reducing the prevalence of wasting (low weight for height) and overweight (high weight for height) in children younger than 5 years (SDG indicator 2.2.2) to less than 5% each by 2030 *(14,15)*. The global prevalence of wasting in children declined only slightly from 7.4% (95% UI: 6.3–8.7%) in 2012 to 6.6% (95% UI: 5.3–8.1%) in 2024, while the global prevalence of overweight in children increased slightly from 5.3% (95% UI: 5.1–5.5%) in 2012 to 5.5% (95% UI: 4.9–6.1%) in 2024. An estimated 42.8 million (95% UI: 34.6–52.6 million) children worldwide were affected by wasting in 2024, while 35.5 million (95% UI: 31.7–39.7 million) others were affected by overweight. A child may suffer from more than one form of malnutrition, for example, stunting and overweight or stunting and wasting. There are currently no joint global estimates for these combined conditions *(14)*.

Anaemia in women

The global prevalence of anaemia in women aged 15–49 years (SDG indicator 2.2.3) remained high and slightly increased from 27.6% (95% UI: 25.3–29.7%) in 2012 to 30.7% (95% UI: 26.6–34.9%) in 2023. These levels indicate that the world is not on track to reach the target of a 50% reduction in anaemia in women by 2030 from the 2012 baseline *(15,16)*. This trend is driven by both the prevalence of anaemia in non-pregnant women, which appeared to be increasing from 27.1% (95% UI: 24.9–29.4%) in 2012 to 30.5% (95% UI: 26.2–34.8%) in 2023, as well as the prevalence in pregnant women, which has stagnated since 2012: in 2023, the prevalence was 35.5% (95% UI: 32.1–39.1%) (Fig. 1.3). An estimated 605 million (95% UI: 524–688 million) women aged 15–49 years suffered from anaemia worldwide in 2023, up from 506 million (95% UI: 465–546 million) in 2012. These figures include 29 million (95% UI: 26–32 million) pregnant women in 2023, down from 32 million (95% UI: 30–34 million) in 2012 *(16)*.

Fig. 1.3. Global prevalence of anaemia in women aged 15–49 years, by pregnancy status, 2012–2023



Note: Shaded areas represent 95% uncertainty intervals.
Source: World Health Organization; 2025 *(16)*.

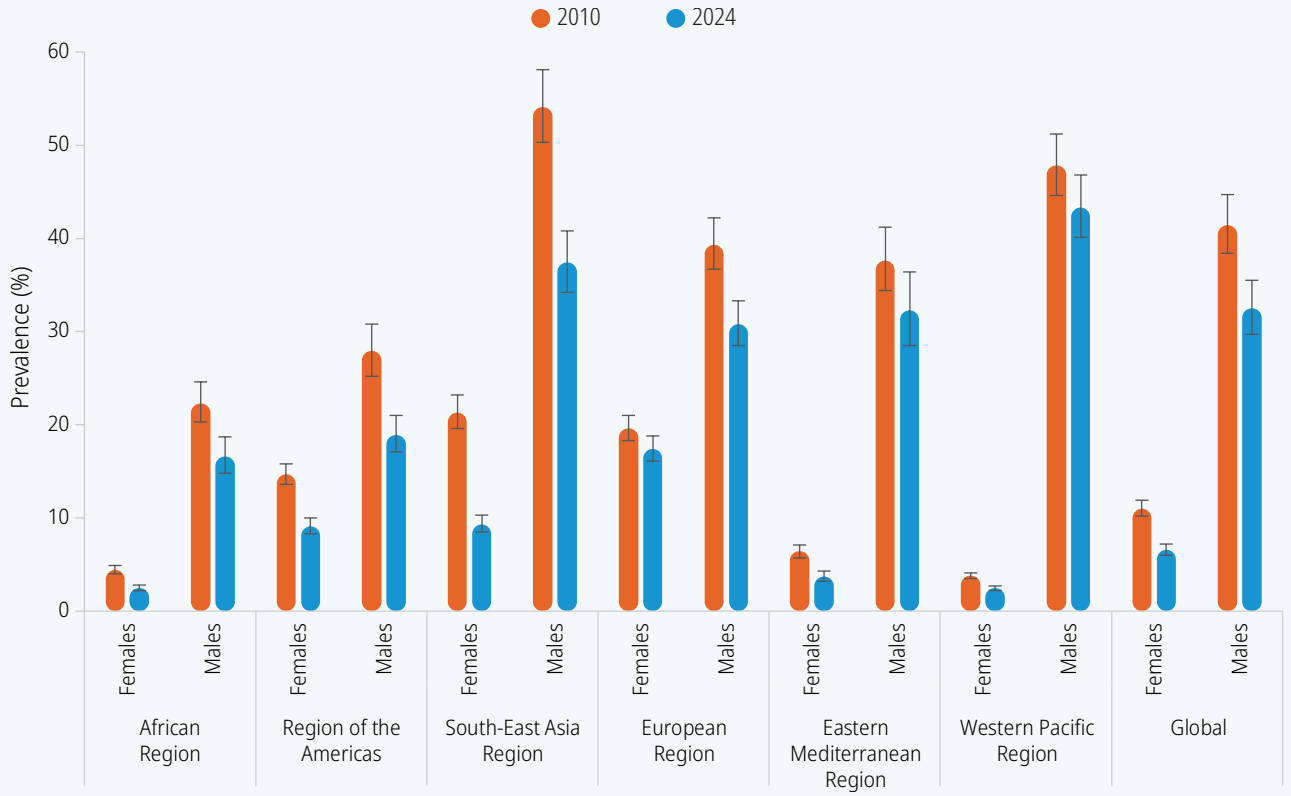
1.2.2 Behavioural risk factors

Tobacco

The global age-standardized prevalence of current tobacco use in people aged 15 years and older (SDG indicator 3.a.1) fell from 26.2% (95% UI: 24.3–28.3%) in 2010 to 19.5% (95% UI: 17.9–21.3%) in 2024. It is projected to decrease further to 19.2% (95% UI: 17.5–21.0%) in 2025, representing a 27% relative reduction by 2025 from the 2010 baseline. This figure is 3 percentage points short of the 30% reduction target of the Global Action Plan for noncommunicable diseases *(17)*.

Globally and in all WHO regions, the prevalence of current tobacco use has been consistently lower in women than men and it has declined more rapidly in women as well. The only exception is the European Region where the reduction in prevalence since 2010 has been slower among women than men. This region also has the highest prevalence of current tobacco use in women (17.4%, 95% UI: 16.1–18.8%) in 2024, almost three times the global prevalence in women (6.6%, 95% UI: 6.0–7.2%) (Fig. 1.4). The target of a 30% reduction in tobacco use from the 2010 baseline has been achieved ahead of time among women globally and in all regions (except the European Region), and among men in the Region of the Americas and South-East Asia Region *(17)*.

Fig. 1.4. Age-standardized prevalence of current tobacco use in people 15 years and older, by sex, globally and by WHO region, 2010 and 2024



WHO: World Health Organization.
Source: WHO; 2025 *(17)*.

Alcohol

Globally, the total alcohol per capita consumption, measured in litres of pure alcohol per person 15 years or older per calendar year (SDG indicator 3.5.2) declined by 13% from 5.6 litres (95% UI: 5.2–6.1 litres) in 2010 to 4.9 litres (95% UI: 4.5–5.2 litres) in 2024 *(18)*. If this rate of reduction is maintained, the total alcohol per capita consumption will reach 4.6 litres in 2030, narrowly missing the target of the *Global alcohol action plan 2022–2030* of a 20% relative reduction by 2030 (4.5 litres) compared to the 2010 baseline *(18,19)*.[3] This progress is noteworthy, especially given the increasing trend in alcohol consumption in the early 2010s, a trend that had been observed since the early 2000s *(18)*.

The Western Pacific Region has reached the target ahead of time, reducing the total alcohol per capita consumption by 27% from 6.2 litres (95% UI: 5.1–7.3 litres) in 2010 to 4.5 litres (95% UI: 3.7–5.4 litres) in 2024. Of concern, the total alcohol per capita consumption increased by 13% in the South-East Asia Region to reach 4.0 litres (95% UI: 3.2–5.0 litres) in 2024. The European Region remained the region with the highest total alcohol per capita consumption despite having reduced consumption by 14% since 2010 to reach 8.9 litres (95% UI: 8.5–9.4 litres) in 2024. Even so, this amount is almost double the global consumption level. As with tobacco use, alcohol consumption among men has been consistently higher than among women *(18)*.

1.2.3 Environmental risk factors

WASH

The decade 2015–2024 saw measurable global progress in household access to WASH services.

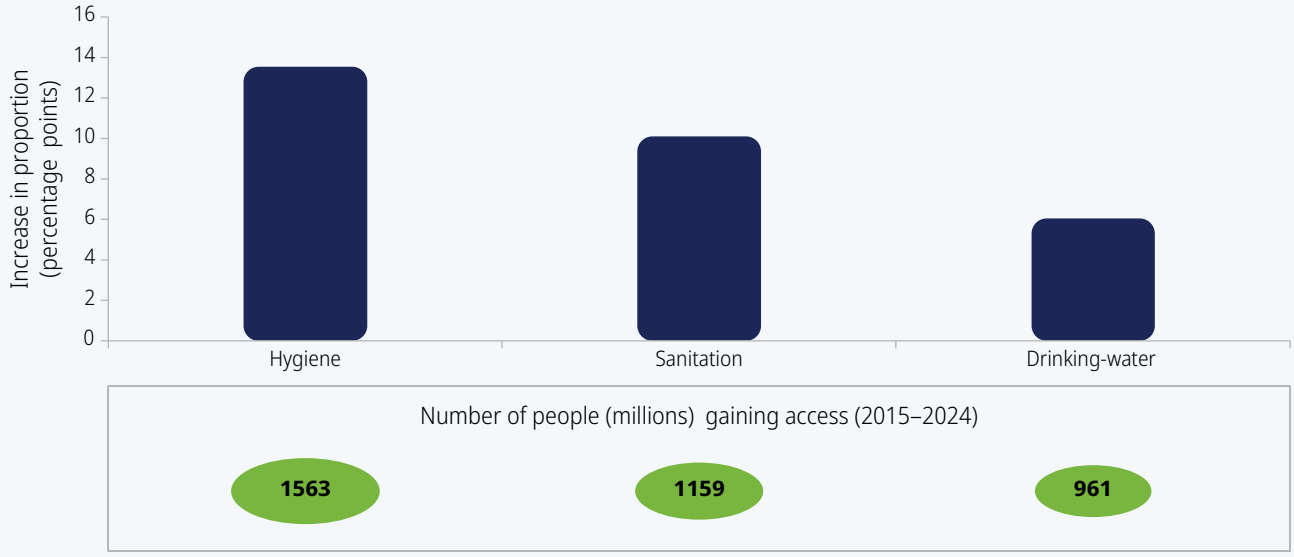
[3] Progress was assessed by applying constant average annual rate of change from 2024 to 2030. The average annual rate of change was calculated using the latest available value and the baseline value, assuming an exponential trend. Assessment using different methods may yield different results.

However, persistent gaps remain; for example, rural areas, despite notable improvements, continue to lag urban areas. To achieve the SDG target of universal access by 2030, the overall rate of progress for all three areas of WASH will need to accelerate *(20)*. Access to WASH services impacts mortality and morbidity, which is also measured and monitored in the SDG framework (see also section 1.4.4).

Coverage of safely managed drinking-water services (SDG indicator 6.1.1) increased globally from 68% in 2015 to 74% in 2024, meaning that 961 million more people gained access to services that are on the premises and safe (Fig. 1.5). Rural areas saw important coverage gains (from 50% to 60%), whereas urban coverage remained high at about 83%. Despite this progress, around one in four people globally (2.1 billion people) still lacked safely managed drinking-water in 2024, including about 106 million people who relied on untreated surface water. The global coverage of safely managed sanitation services (SDG indicator 6.2.1) rose from 48% to 58% between 2015 and 2024, corresponding to an increase of about 1.2 billion people with access to improved sanitation that safely disposes of waste. Nonetheless, as of 2024, 3.4 billion people still lacked safely managed sanitation services, including 354 million who had to practise open defecation *(20)*.

Basic hygiene services (SDG indicator 6.2.1, i.e. a handwashing facility with soap and water on the premises) rose from 66% to 80% globally over the period 2015–2024, meaning about 1.6 billion more people gained access to this facility. In rural areas, coverage increased substantially by almost 20 percentage points to 71% in 2024, while urban coverage remained around 86%. In 2024, one in five people (1.7 billion people) still lacked basic hygiene services, with about 1 billion people having only limited services and 611 million having no services at all *(20)*.

Fig. 1.5. Increase in the proportion of the global population with access to water, sanitation and hygiene services, and the number of people who gained access, 2015–2024



Source: World Health Organization and United Nations Children's Fund; 2025 *(20)*.

At the global level, the share of household wastewater safely treated (SDG indicator 6.3.1) remained stagnant, 56% and 58% in 2020 and 2024, respectively. The WHO European Region and Western Pacific Region are estimated to have the highest levels of safe wastewater treatment, around 70%, sustained over the same period. The Region of the Americas showed the most notable improvement overall, increasing by about 12% to reach around 70% in 2024. The other three WHO

regions remained below 50% and no region was able to show steady sustained progress over the 4-year period *(21)*.

Official development assistance to the water sector (SDG indicator 6.a.1), which includes water supply and sanitation as well as agricultural water resources and hydroelectric power plants, has fluctuated in recent years. Disbursements increased from US$ 8.9 billion in 2023 to US$ 9.6 billion in 2024, while commitments rose slightly from US$ 10.3 billion in 2023 to US$ 11.0 billion in 2024. This increase was driven primarily by higher commitments for agricultural water resources and hydroelectric power. However, commitments for water supply and sanitation declined by 6.7% compared with 2023 *(22)*.

Air pollution

In 2024, an estimated 75% (95% UI: 71–78%) of the world's population had access to clean cooking fuels and technologies (SDG indicator 7.1.2). Compared with the 2015 baseline, this access level represents an increase of 11 percentage points and has enabled 1.4 billion more people to gain access to clean cooking fuels and technologies. However, under the current trajectory, the SDG target of universal access will not be achieved. An estimated 2.0 billion (95% UI: 1.8–2.4 billion) people worldwide still had to rely on polluting cooking fuels and technologies in 2024 *(23)*.

Access in urban areas remains higher than in rural areas. However, the absolute gap has slightly narrowed globally and in all WHO regions, except in the African Region where the absolute gap between the two areas has widened. This situation is particularly concerning as the African Region continued to have the lowest access overall: in 2024, even in urban areas, access (47%, 95% UI: 43–51%) was still lower than in rural areas in other regions. An estimated 91% (95% UI: 89–92%) of people living in rural areas in the African Region had to rely on polluting cooking fuels and technologies, while 92% (95% UI: 86–96%) of people living in rural areas in the European Region had access to clean cooking fuels and technologies *(23)*.

Almost all the global population (99%) is exposed to unhealthy levels of fine particulate matter. From 2015, there was a steady decrease in the global average population-weighted exposure fine particulate matter ≤ 2.5 μm^3 ($PM_{2.5}$) until 2020. From 2020 to 2023, the levels have remained largely unchanged with an annual concentration of 26 μg/m^3 (95% UI: 25–27 μg/m^3) in 2023, which was still markedly higher than the recommended air quality standard for preserving human health (5 μg/m^3) *(24)*.

In cities, the global average population-weighted exposure to $PM_{2.5}$ (SDG indicator 11.6.2) was 28 μg/m^3 (95% UI: 27–29 μg/m^3) in 2023. Cities in the European Region and the Region of the Americas had the lowest air pollution on average in 2023, with exposure to $PM_{2.5}$ at 11 μg/m^3 (95% UI: 10–11 μg/m^3) and 14 μg/m^3 (95% UI: 14–15 μg/m^3), respectively. However, exposure varies greatly between and within countries. Although measures aimed at reducing air pollution have historically concentrated on cities, in some settings, rural areas and towns can be as polluted as cities *(24)*.

Both household and ambient air pollution lead to high levels of mortality and morbidity, making it one of the major threats to population health globally (see also section 1.4.4).

1.2.4 Risks to girls' and women's health

Adolescent pregnancy

The global number of births to teenage girls aged 10–19 years fell by 12% from 14.0 million in 2015 to 12.3 million in 2025. This decrease is larger than the 8% decline of total births from 144.3 million to 132.4 million during the same period, indicating substantial progress in reducing adolescent pregnancies. Nevertheless, births to teenage girls still accounted for 9.3% of all births globally in 2025, putting them and their babies at risk of health, social and economic impacts. The adolescent birth rate (SDG indicator 3.7.2) in girls aged 10–14 years globally fell by one third between 2015 and 2025, from 1.5 births per 1000 girls to 1.0 birth per 1000 girls, while the rate among girls aged 15–19 years declined by 18% from 45.9 births per 1000 girls to 37.6 births per 1000 girls. Further reductions are expected by 2030. The African Region continued to have the highest adolescent birth rate across all WHO regions: in 2025, there were 2.9 births per 1000 girls aged 10–14 years and 88.9 births per 1000 girls aged 15–19 years *(12)*.

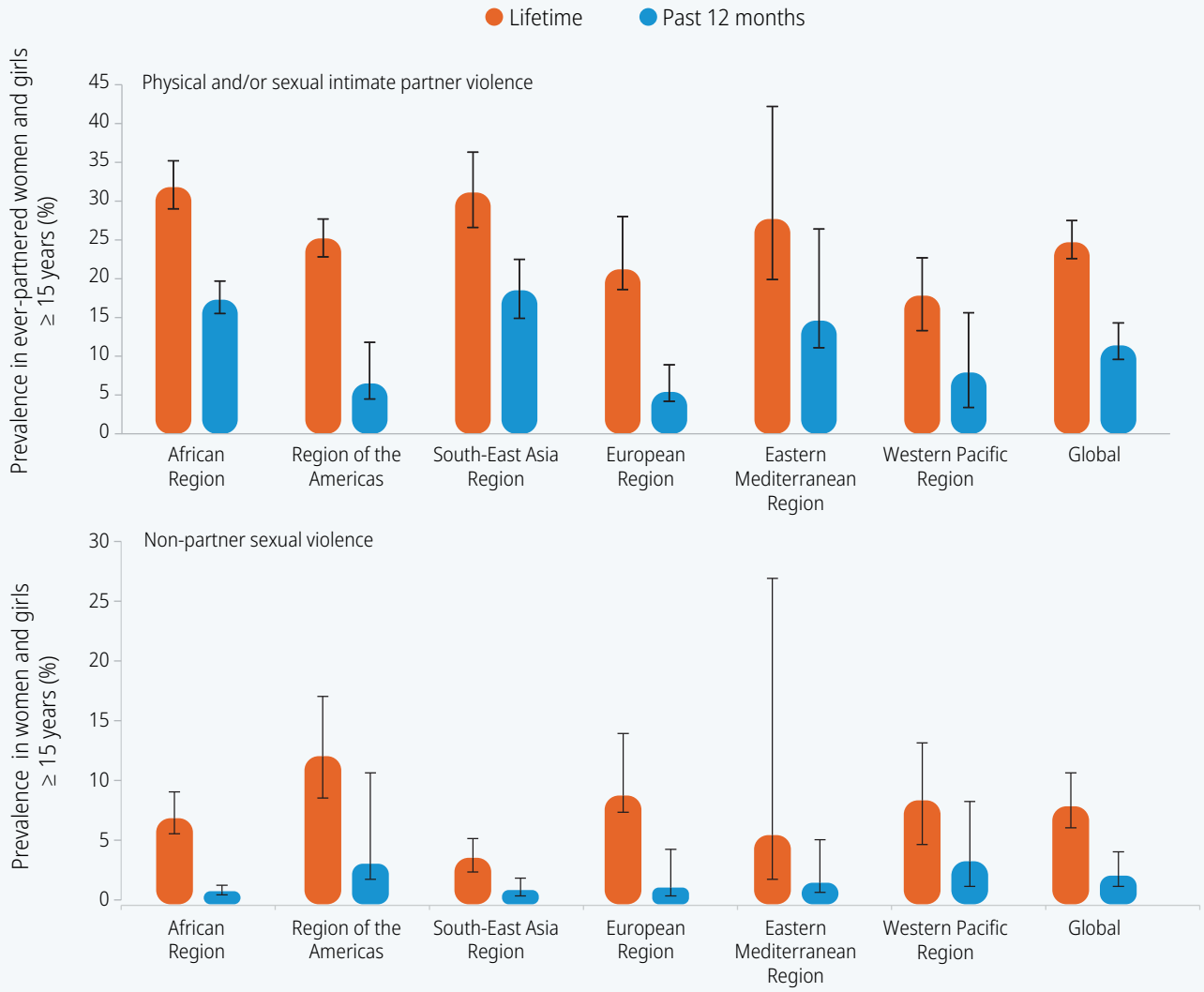
Violence against women and girls

Intimate partner violence is one of the most common forms of violence against women globally. An estimated 682 million (24.7%, 95% UI: 22.6–27.5%) ever-partnered women 15 years and older in 2023 had been subjected to physical and/or sexual intimate partner violence at least once in their lifetime. This figure included 316 million women (11.4%, 95% UI: 9.6–14.3%) who had experienced intimate partner violence in the 12 months preceding the survey (SDG indicator 5.2.1). The global prevalence had barely changed since 2000, which means the world is not on track to reach the target of eliminating this form of violence by 2030. This global average also masks regional and country-specific variations, with the prevalence of intimate partner violence increasing in some contexts *(25)*.

Another common form of violence against women is non-partner sexual violence. An estimated 263 million women and girls 15 years and older in 2023 had been subjected to non-partner sexual violence at least once in their lifetime. This number equates to a global prevalence of lifetime non-partner sexual violence of 8.2% (95% UI: 6.4–11.0%) and includes 2.4% (95% UI: 1.5–4.4%) who had experienced this violence within the past 12 months (SDG indicator 5.2.2). Sexual violence is particularly stigmatizing, with disclosure often leading to further harm to the victims in many settings. This reporting barrier, coupled with data and measurement gaps, means that the true prevalence of non-partner sexual violence is likely much higher *(25).*

The prevalence of violence against women and girls varies widely across regions and countries. The SDG region of Oceania (excluding Australia and New Zealand) *(26)* had the highest prevalence of intimate partner violence and non-partner sexual violence in the past 12 months in 2023: 43.4% (95% UI: 38.7–48.4%) and 5.7% (95% UI: 4.1–7.4%), respectively. Across WHO regions, the prevalence of both lifetime and past-12-month intimate partner violence were higher on average in the African Region, South-East Asia Region and Eastern Mediterranean Region. In contrast, the Region of the Americas and the Western Pacific Region had a higher prevalence of lifetime and past-12-month non-partner sexual violence (Fig. 1.6). It should be noted, however, that important reporting and measurement problems exist that limit comparability of prevalence estimates across regions and countries *(25)*.

Fig. 1.6. Prevalence of physical and/or sexual intimate partner violence in ever-partnered women and girls ≥ 15 years, and prevalence of non-partner sexual violence in women and girls ≥ 15 years, globally and by WHO region, 2023



WHO: World Health Organization.
Note: Error bars represent 95% uncertainty intervals.
Source: WHO; 2025 *(25)*.

1.3 UHC and health systems

UHC means that everyone, everywhere can access quality health services when they need them across the life course without experiencing financial hardship. Progress towards UHC depends on strong, adequately funded, affordable and integrated health systems that deliver essential good quality services – such as immunization, maternal and newborn care, and emergency preparedness – through a well trained health workforce. When service coverage, financing and system capacity work together, health systems reduce preventable illness and death, protect people from financial hardship and improve population health.

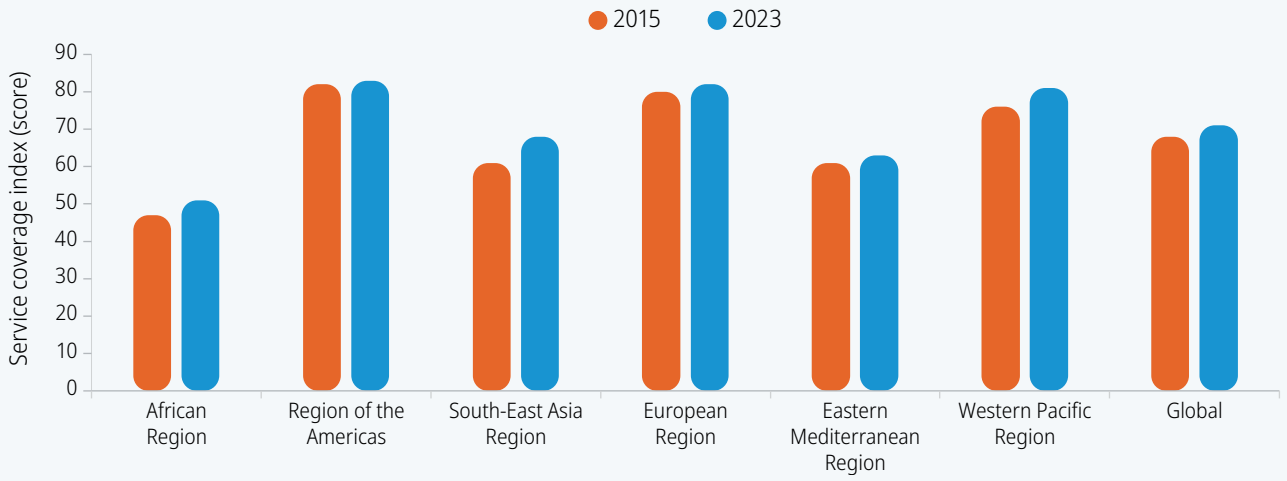
1.3.1 Service delivery

Service coverage

Between 2015 and 2023, the UHC service coverage index (SDG indicator 3.8.1) rose by three points globally, from 68 to 71 (Fig. 1.7). This increase represents only about one third of the annualized rate of gains achieved between 2000 and 2015, where the service coverage index started at a baseline of 54. If this slower rate of progress persists, the index is projected to climb only another three points to 74 points by 2030 *(27)*.

All WHO regions have experienced gains in the service coverage index since 2015. The largest increase occurred in the South-East Asia Region and Western Pacific Region, which rose by 7 and 5 points, respectively. In contrast, the Region of the Americas, European Region and the Eastern Mediterranean Region recorded smaller gains of 2 points and less. For the Region of the Americas and the European region, this is consistent with their already high service coverage index (≥ 80 points) at the start of 2015 *(27)*.

Fig. 1.7. Universal health coverage service coverage index, globally and by WHO region, 2015 and 2023



WHO: World Health Organization.
Source: WHO and The World Bank; 2025 *(27)*.

Globally, coverage of family planning services among women of reproductive age (SDG indicator 3.7.1) increased slightly by less than one percentage point over the past decade, rising from 76.4% in 2015 to 77.2% in 2025, with increases in five of the six WHO regions. The African Region showed the largest absolute increase of 6.1 percentage points since 2015, a substantial improvement. The Western Pacific Region remains the region with the highest coverage of family planning services, but experienced a slight decline from 86.8% in 2015 to 86.2% in 2025 *(28)*. The global proportion of births attended by skilled health personnel (SDG indicator 3.1.2) increased by 7 percentage points

between 2015 and 2025, to 87%, but is still less than the *Every Woman Every Newborn Everywhere* target of 90% by 2025 *(29,30)*. An estimated 17 million births in 2025 occurred without skilled assistance, exposing newborns and mothers to preventable complications. By WHO region, the coverage ranged from 74% to near universal at 99% in 2025 *(30)*.

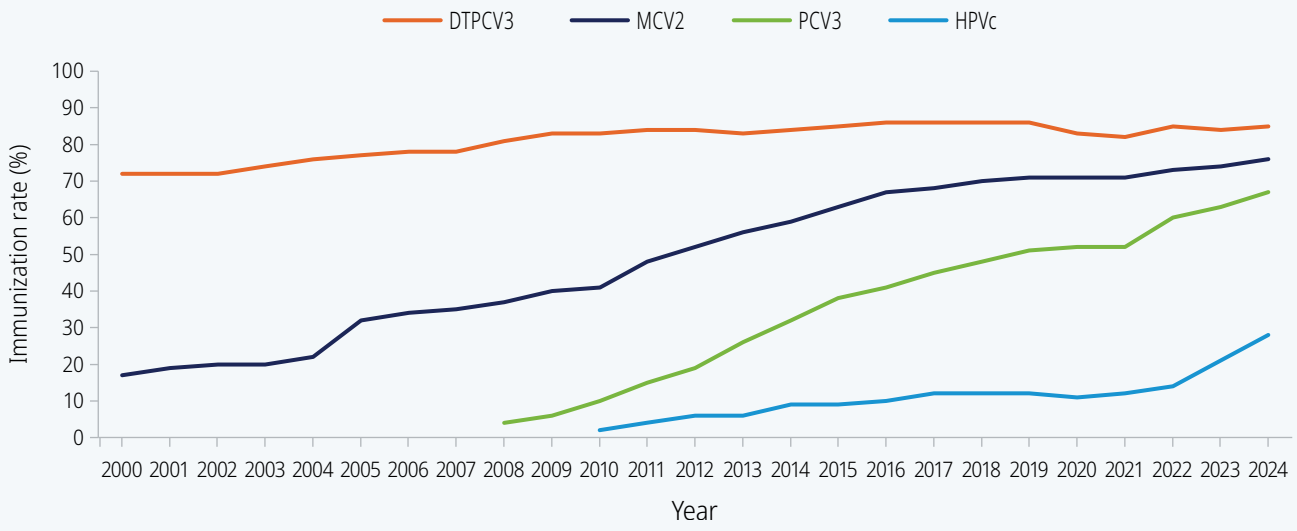
Routine immunization coverage for core childhood vaccines (SDG indicator 3.b.1), including vaccines against diphtheria-tetanus-pertussis, measles, pneumococcal disease caused by *Streptococcus pneumoniae* and human papillomavirus, has largely stalled and remains lower than the Immunization Agenda 2030 global target of 90% *(31,32)*. Progress across most of these indicators is too slow to close immunity gaps. As immunization coverage increases, sustaining these gains becomes increasingly challenging, as closing the last remaining gaps requires disproportionately more effort, resources and tailored strategies to reach children who are consistently missed.

Coverage with the third dose of diphtheria-tetanus-pertussis-containing vaccines (DTPCV3) has plateaued at around 85%. Meanwhile, the second dose of measles-containing vaccines (MCV2) lagged behind at 76% in 2024, far below the levels needed to prevent outbreaks. As immunity gaps persist, several regions are reporting rising measles transmission *(32)*.

Coverage with the third dose of pneumococcal conjugate vaccines (PCV3) has steadily increased to 67% in 2024, reflecting its introduction in more countries. Human papillomavirus (HPV) vaccination has shown the fastest growth – primarily driven by recent introduction in some countries – with global coverage increasing from 12% in 2021 to 28% in 2024. However, this rapid progress starts from a very low baseline (Fig. 1.8) *(32)*.

Between 2015 and 2024, immunization progress varied markedly across WHO regions, with trends linked to countries' baseline coverage levels and timing of vaccine introduction. Regions that started with lower coverage – notably the African Region and South-East Asia Region – made the largest gains as new vaccines were rolled out and uptake improved. In contrast, regions that historically maintained high coverage experienced stagnation or even declines. The Region of the Americas now reports lower coverage for three of the four core vaccines compared with 2015, while the Western Pacific Region has seen declines in one of the four vaccines. These setbacks highlight that sustaining high coverage is increasingly difficult, particularly in the context of health system disruptions. Importantly, these two regions – and the world as a whole – have not yet fully recovered from the declines associated with the COVID-19 pandemic *(32)*.

Fig. 1.8. Global immunization rates against diphtheria, tetanus and pertussis, measles, pneumococcal infections, and human papillomavirus, 2000–2024



DTPCV3: third dose of diphtheria-tetanus-pertussis-containing vaccine; HPVc: final dose of human papillomavirus vaccine; MCV2: second dose of measles-containing vaccine; PCV3: third dose of pneumococcal conjugate vaccine.
Source: World Health Organization; 2025 *(32)*.

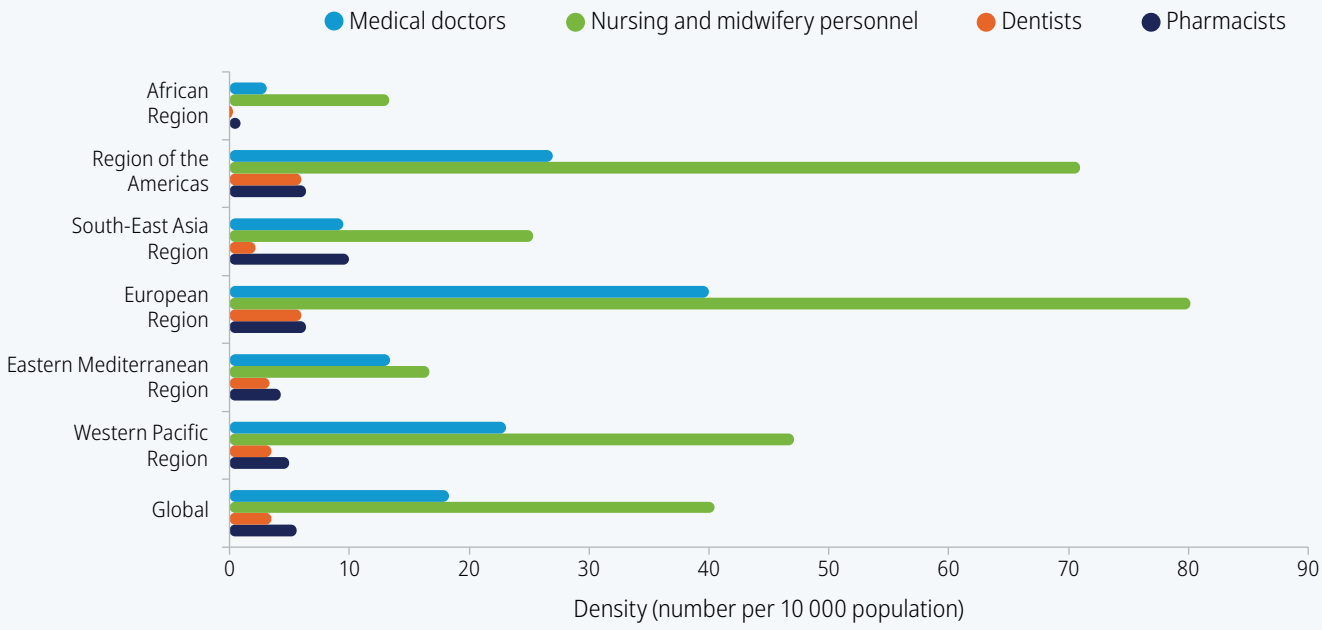
About one third of countries lack data on the epidemiology, service provision and service utilization to enable robust monitoring of the coverage of treatment interventions for substance use disorders (SDG indicator 3.5.1). To address this gap, the Service Capacity Index for Substance Use Disorders was introduced in 2024 as a complementary tool to assess and monitor the capacity of the health and social care system to treat alcohol and drug use disorders globally. Index scores vary widely across countries with more than 20-fold differences, ranging from scores as low as 1% to as high as 80% of the optimal health system elements needed for effective treatment of substance use disorders in 2019 *(33)*.

Access to essential health products (SDG 3.b.3), including medicines, diagnostics, medical devices and assistive products, is fundamental to UHC as good quality health services cannot be delivered without them. To better monitor the SDG 3.b.3 indicator, the Health Product Access Index was approved by the UN Statistical Commission in March 2025 *(34)* and will provide a comprehensive measure of access to essential health products. The first index scores will be reported within the next year.

Health workforce

Health workers are the cornerstone of a resilient health system. Demand for health workers continues to increase as global health challenges become more complex and the world's population demographics evolve. To make progress towards UHC, it is vital to reduce the global shortage of skilled health workers and ensure that the numbers and skills of health workers are aligned with population health needs and they are available where they are needed (SDG indicator 3.c.1). Nurses represent 57% of the five health occupations globally (medical doctors, nursing and midwifery personnel, dentists and pharmacists) *(35)*. The global distribution of nurses is highly skewed. The density of nursing and midwifery personnel in the WHO European Region and Region of the Americas is still the highest in the world for the period 2016–2024, at 80.2 nursing and midwifery personnel per 10 000 population and 71.0 per 10 000 population, respectively. These levels are close to twice the global average of 40.5 per 10 000 population and more than five times the density in the African Region. The estimated density of medical doctors is 40.0 doctors per 10 000 population in the European Region, but as low as 9.5 per 10 000 population in the South-East Asia Region and 3.1 per 10 000 population in the African Region. The global and regional densities of dentists and pharmacists is lower than 6.5 per 10 000 population for all except pharmacists in the South-East Asia Region (Fig. 1.9) *(36)*.

Fig. 1.9. Density of health professionals, globally and by WHO region



WHO: World Health Organization.
Note: Latest available country values for 2016–2024 were used.
Source: WHO; 2026 *(36)*.

Latest available data from 144 countries since 2016 show that the male-to-female ratio of medical doctors varies considerably between and within WHO regions. This ratio ranges from 1.12:1, to 1.19:1 in the South-East Asia Region, from 0.34:1 to 3.18:1 in the Region of the Americas, European Region and Eastern Mediterranean Region, and from 0.63:1 to 12.00:1 in the African Region, the highest variation. Latest available data from 163 countries since 2016 show that nursing personnel in all countries in the Region of the Americas and European Region and almost 90% of the countries in the other WHO regions had low male-to-female ratio (<1.00) compared with the wider range seen among medical doctors *(36)*. The nursing workforce globally is 85% female and relatively young, but age patterns vary by region and income group. Worldwide, 33% of nurses are younger than 35 years compared with 19% who are 55 years and older (i.e. for every 100 nurses nearing retirement globally, there are 174 young nurses) *(35)*.

In 2025, WHO conducted a rapid assessment of the impact of reductions in official development assistance for health on health systems in 108 low- and lower middle-income countries. The findings showed that 63% of the responding countries reported job-related impacts on health and care workers, such as job losses, temporary leave, salary suspension and salary reduction. Nearly one fifth (18%) of the countries reported disruptions in education and training opportunities and 69% anticipated future recruitment challenges. Community health workers, medical doctors and nursing and midwifery personnel were among the most frequently affected occupations *(37)*. Reduced official development assistance further exacerbates the existing inequities in age and sex distribution and remuneration of health workers and continues to hinder progress toward achieving UHC.

International Health Regulations

The International Health Regulations (IHR) (2005) oblige State Parties to develop and maintain minimum core capacities to detect, assess, report and respond to any potential public health events of international concern. Overall, the highest and lowest areas of the 15 core capacities measured in the IHR States Parties self-assessment annual reporting tool (SDG indicator 3.d.1) remained largely stable from 2021 to 2025. Surveillance (C5) consistently scored the highest and was the only core capacity to maintain a global average of more than 75 in any year in the period. Chemical events (C14) and policy, legal and normative instruments to implement the IHR (C1) remained among the lowest-scoring areas, with scores lower than 58. However, the score for C1 improved 4 points between 2021 and 2025 from 52 to 56, the largest increase seen in any of the capacities *(38)*.

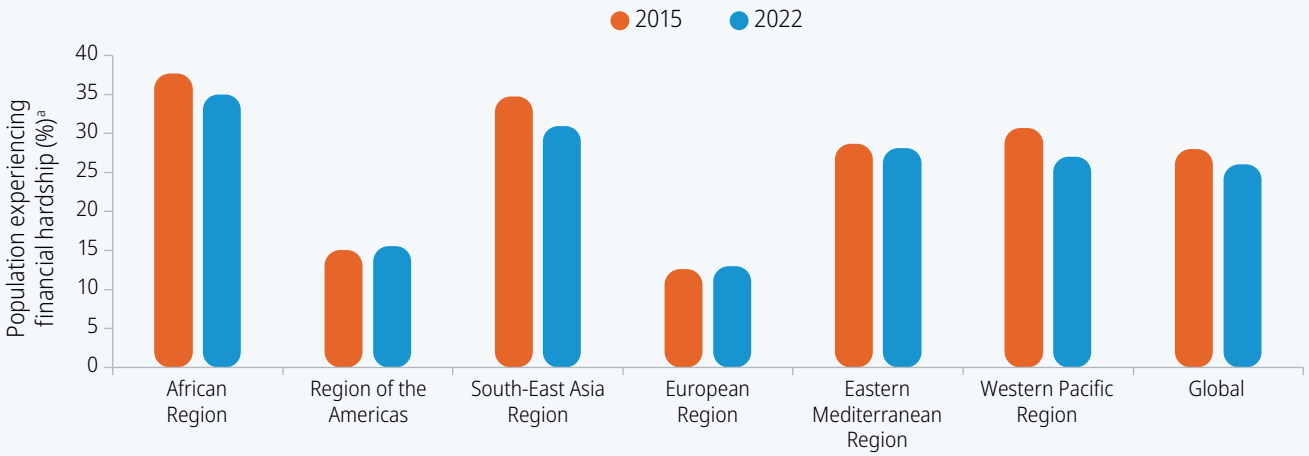
Across all WHO regions, surveillance (C5) was rated as the highest scoring core capacity in 2025, as it was also in 2021. However, compared with 2021, the score dropped in most regions. In 2025, the lowest scoring core capacity varied by region: split between policy, legal and normative instruments to implement the IHR (C1), chemical events (C14) and radiation emergencies (C15) *(38)*.

1.3.2 Health financing

Financial hardship from out-of-pocket health spending shows how direct health care payments limit people's ability to cover basic needs or to afford other goods and services. The share of the global population experiencing financial hardship due to out-of-pocket health spending (SDG indicator 3.8.2) declined from 28% in 2015 to 26% in 2022 (Fig. 1.10). However, due to population growth, the reduction in the number of people was just 4.5 million during the same period. This left 2.1 billion people facing financial hardship due to health spending in 2022, including 1.6 billion people living in poverty or pushed into poverty due to out-of-pocket health expenses. If the 2015–2022 average annual rate of reduction continues, nearly one in four people worldwide is projected to still experience health-related financial hardship in 2030 *(27)*.

WHO regional progress on financial protection has been uneven. While all WHO regions show long-term reductions in the share of their respective population facing financial hardship (since 2000), from 2015 onwards only three of the WHO regions continued that progress: the African Region, South-East Asia Region and Western Pacific Region. The Region of the Americas and European Region saw no change, reflecting lower (≤15%) initial levels of financial hardship *(27)*.

Fig. 1.10. Population experiencing financial hardship due to out-of-pocket health spending, globally and by WHO region, 2015 and 2022

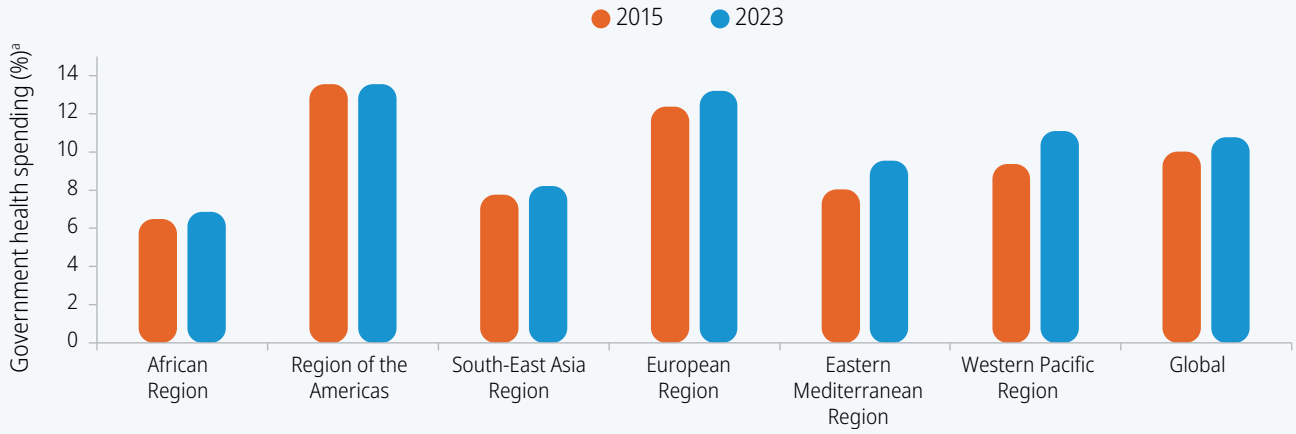


WHO: World Health Organization.
[a] Measured as population with positive out-of-pocket household expenditure on health exceeding 40% of household discretionary budget.
Source: WHO and The World Bank; 2025 *(27)*.

Domestic public and international funding

From 2015 to 2023, government health spending from domestic sources (as a percentage of total government expenditure, the health component of SDG indicator 1.a.2) generally rose globally and across most WHO regions, reflecting an increase in the priority given to health in general government spending (Fig. 1.11). The WHO Eastern Mediterranean Region and Western Pacific Region saw the largest net increases on average (> 1 percentage point) over the period. For the WHO African Region, Region of the Americas and European Region, public spending on health as share of total government spending also rose after 2015 but peaked in 2021 and has since declined for 2 consecutive years *(39)*.

Fig. 1.11. Government health spending from domestic sources, globally and by WHO region, 2015 and 2023



WHO: World Health Organization.
[a] Measured as health spending from domestic sources as a percentage of general government spending, unweighted average.
Source: WHO; 2025 *(39)*.

Low-income countries, especially in the WHO African Region and in fragile settings, receive on average higher official development assistance for medical research and the basic health sectors per capita (SDG indicator 3.b.2). However, substantial variation in the level of assistance exists even within low-income countries, ranging from US$ 0.02 to US$ 14.85 per capita in 2023. This variation indicates differences in donor priorities and fragility *(40)*.

1.3.3 Summary of UHC progress

As shown in this section, since 2015, progress towards UHC has weakened. Improvements in service coverage have slowed by 67% and reductions in financial hardship have declined by 23%. Fewer than four in 10 countries continue to make progress in both *(27)*. Shortages in and the uneven distribution of the health workforce continue to limit countries' ability to expand essential services, while global immunization progress has stalled, leaving immunity gaps.

Progress towards UHC was already slowing before the COVID-19 pandemic, with modest gains in service coverage and continued financial hardship. The COVID-19 pandemic further disrupted services and exposed underlying weaknesses in health systems and financing. Renewed action is now essential: countries must strengthen health systems oriented to primary health care and expand equitable coverage to ensure free essential health care for the poor, expand publicly funded prepaid coverage and restore momentum towards UHC.

1.4 Cause-specific mortality

1.4.1 Maternal and child mortality

Maternal mortality

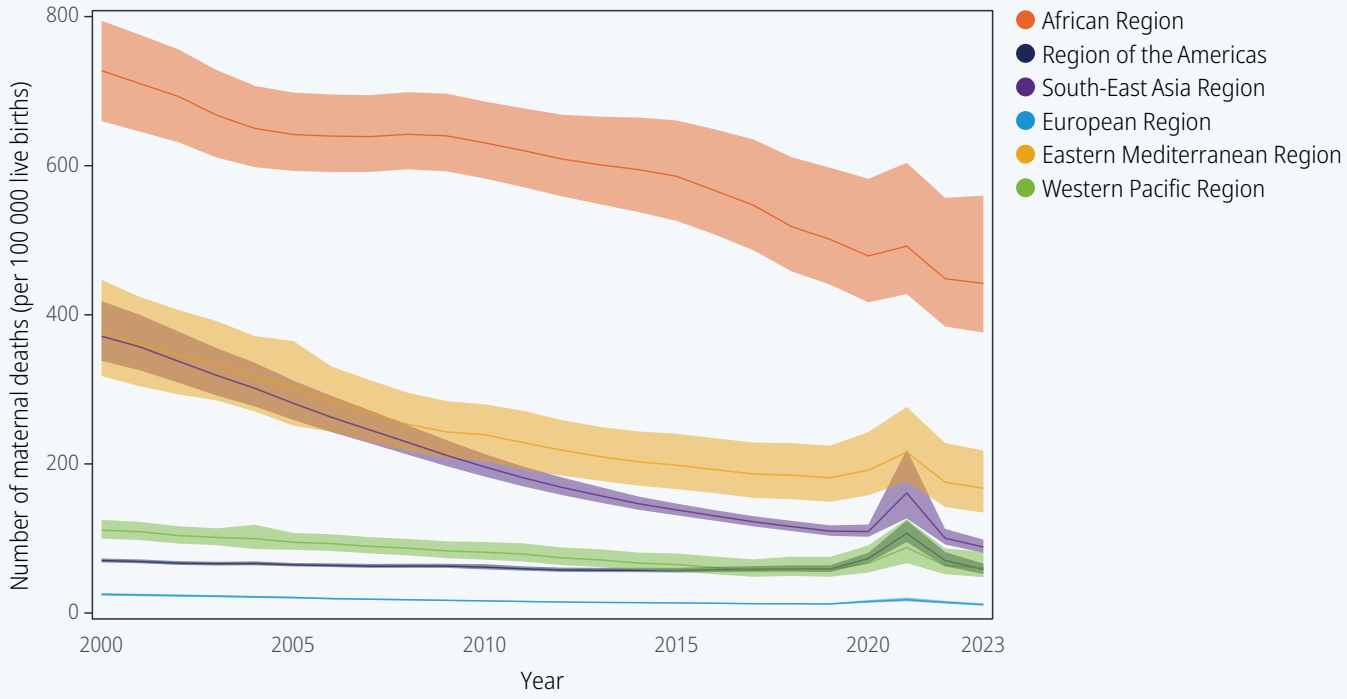
Remarkable progress has been made globally in reducing maternal mortality. The global maternal mortality ratio (SDG indicator 3.1.1) fell by 40%, from 328 (80% UI: 308–349) deaths per 100 000 live births in 2000 to 197 (80% UI: 174–234) deaths per 100 000 live births in 2023, equivalent to an average annual rate of reduction of 2.2% (80% UI: 1.4–2.8%). This decline led to a reduction in global maternal deaths from 443 000 in 2000 to 260 000 in 2023. However, the level remains unacceptably high, corresponding to 712 maternal deaths every day, or one death every 2 minutes *(41)*.

Striking disparities persist across WHO regions. The WHO African Region has consistently recorded the highest maternal mortality ratio over the past 2 decades and remains the only region classified as having a high maternal mortality ratio, at 442 (80% UI: 376–560) deaths per 100 000 live births in 2023 (Fig. 1.12). In that year, 178 000 women died from maternal causes in the region, accounting for about two thirds of global maternal deaths. By contrast, the South-East Asia Region has experienced the steepest decline, reducing its maternal mortality ratio from 371 (80% UI: 338–418) deaths per 100 000 live births in 2000 to 88 (80% UI: 81–98) deaths per 100 000 live births in 2023, while maintaining an annual rate of reduction of 5.5% during the SDG era *(41)*.[4]

Despite overall progress, the global maternal mortality ratio in 2023 is still nearly three times the SDG target of fewer than 70 maternal deaths per 100 000 live births by 2030. Progress has also slowed since 2015, with a global average annual rate of reduction of only 1.6% (80% UI: 0.04–2.70%) during the first 8 years of the SDG era, indicating that the target will be missed without accelerated action. Given the 2023 global maternal mortality ratio, achieving SDG target 3.1 will require an annual rate of reduction of 14.8% between 2024 and 2030 – more than nine times the rate achieved between 2000 and 2023. Meeting this target would mean preventing nearly 700 000 maternal deaths by 2030. Accelerated, coordinated and equitable action is therefore essential to reduce preventable maternal deaths and advance a sustainable future for all *(41)*.

[4] In accordance with resolution WHA78.25 (2025), Indonesia was reassigned to the WHO Western Pacific Region as of 27 May 2025. The Western Pacific and South-East Asia regional aggregates were recalculated and may differ from source.

Fig. 1.12. Maternal mortality ratio, by WHO region, 2000–2023



WHO: World Health Organization.
Notes: In accordance with resolution WHA78.25 (2025), Indonesia was reassigned to the WHO Western Pacific Region as of 27 May 2025. The Western Pacific and South-East Asia regional aggregates were recalculated and may differ from source. Shaded areas represent 80% uncertainty intervals.
Source: WHO; 2025 *(41)*.

Under-5 and neonatal mortality

Improvement in child survival over the past 2 decades is one of the success stories of global public health. In 2024, there were 4.9 (95% UI: 4.7–5.2) million deaths in children younger than 5 years, equivalent to a global under-5 mortality rate of 37.4 (95% UI: 36.0–40.2) deaths per 1000 live births. When compared with the death of 10.1 (95% UI: 9.9–10.2) million children younger than 5 years in 2000 and a rate of 76.7 (95% UI: 75.7–77.9) deaths per 1000 live births (Fig. 1.13), remarkable survival gains have been achieved in a relatively short time *(42)*.

Children face unequal chances of survival depending on where they are born. The African Region remains the region with the highest rates of newborn and child mortality in the world. This region alone accounted for nearly 60% (2.8 million deaths, 95% UI: 2.6–3.0 million) of all deaths in children younger than 5 years but only around 30% of global live births in 2024. Globally, country-level under-5 mortality rates ranged from 2.0 to 115.6 per 1000 live births, with a child born in the highest-mortality country facing a 57-fold higher risk of dying before age 5 years than a child in the lowest-mortality country *(42)*.

Neonatal conditions and infectious diseases remain the leading causes of under-5 mortality. In 2024, prematurity (18%), lower respiratory tract infections (pneumonia, 13%) and birth asphyxia/trauma (10%) together accounted for over 40% of deaths. Cause patterns differ by age: among neonates, prematurity, intrapartum events (birth asphyxia and trauma), lower respiratory tract infections (pneumonia) and sepsis accounted for nearly 80% of deaths, whereas malaria, pneumonia and diarrhoea caused almost half of deaths in children aged 1–59 months *(42)*.

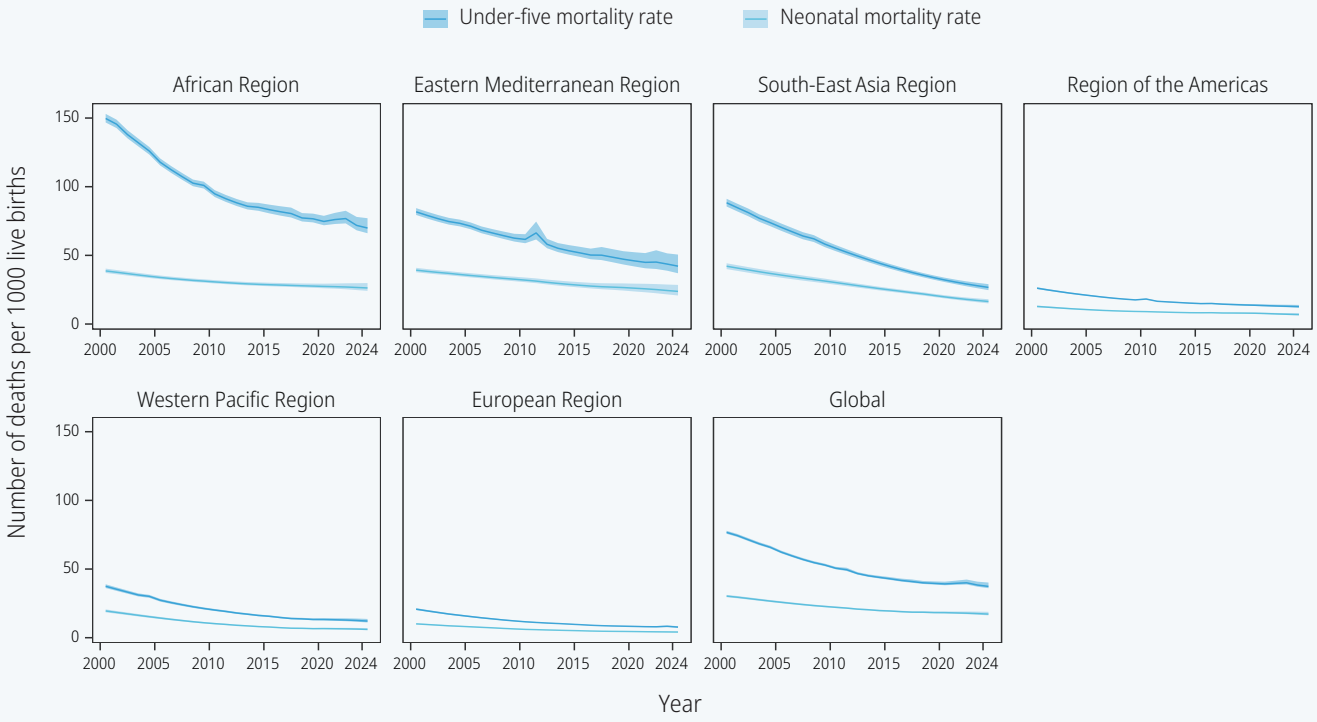
With the number of under-5 deaths declining faster in children aged 1–59 months (57% reduction) than in neonates (45% reduction) between 2000 and 2024, neonatal deaths now account for an increasing share of the total under-5 mortality, rising from 41% to 47% for the same period. In 2024, 2.3 (95% UI: 2.1–2.5) million of the 4.9 million deaths in children younger than 5 years occurred in the first month of

life. The neonatal mortality rate (SDG indicator 3.2.2) fell by 43%, from 30.3 (95% UI: 29.5–31.2) deaths per 1000 live births to 17.2 (95% UI: 16.3–18.8) deaths per 1000 live births between 2000 and 2024 *(42)*.

The African Region recorded the highest neonatal mortality rate at 26.3 (95% UI: 24.1–29.8) deaths per 1000 live births, followed by the Eastern Mediterranean Region at 23.8 (95% UI: 20.8–28.5) deaths per 1000 live births. A neonate in Africa is more than five times more likely to die in the first month of life than a neonate in Europe. Country-level neonatal mortality rates ranged from 0.7 to 39.5 deaths per 1000 live births, representing a 53-fold difference between the highest- and lowest-mortality countries *(42)*.

Progress in the SDG era (2015–2024) has slowed relative to the period of the Millennium Development Goals (2000–2015). Global annual rate of reduction for under-5 mortality declined from 3.9% (95% UI: 3.7–4.0%) to 1.5% (95% UI: 0.8–1.9%), and neonatal mortality annual rate of reduction decreased from 3.0% (95% UI: 2.7–3.2%) to 1.3% (95% UI: 0.5–1.9%). If trends persist, 60 countries, representing 42% of the global population younger than 5 years, will not meet the SDG target for the under-5 mortality rate. Fifty of these countries will need to more than double their current progress or reverse upward trends to achieve the 2030 target. For neonatal mortality, 66 countries will need accelerated reductions, with 62 countries needing to more than double their current decline. Achieving these targets could avert more than 8 million deaths in children younger than 5 years between 2025 and 2030, nearly 40% of which would be among neonates *(42)*.

Fig. 1.13. Under-5 and neonatal mortality, globally and by WHO region, 2000–2024



WHO: World Health Organization.
Notes: WHO regions are sorted in descending order of their under-5 mortality rate as of 2023. Shaded areas represent 95% uncertainty intervals.
Source: United Nations Children's Fund; 2026 *(42)*.

1.4.2 Mortality due to noncommunicable diseases

Since 2000, efforts to reduce premature mortality from noncommunicable diseases have led to notable shifts, reflecting both progress in prevention and the persistent challenges posed by the four major noncommunicable diseases (cardiovascular disease, cancer, chronic respiratory disease and diabetes). Globally, a 30-year-old in 2000 had a 22.5% (95% UI: 18.6–27.0%) risk of dying from one of these conditions before the age of 70 years (SDG indicator 3.4.1). This risk fell to 18.4% (95% UI: 14.8–22.6%) in 2015 and further to 18.0% (95% UI: 14.1–22.7%) in 2019 (Fig. 1.14), representing an overall reduction of 20% between 2000 and 2019 *(43)*.

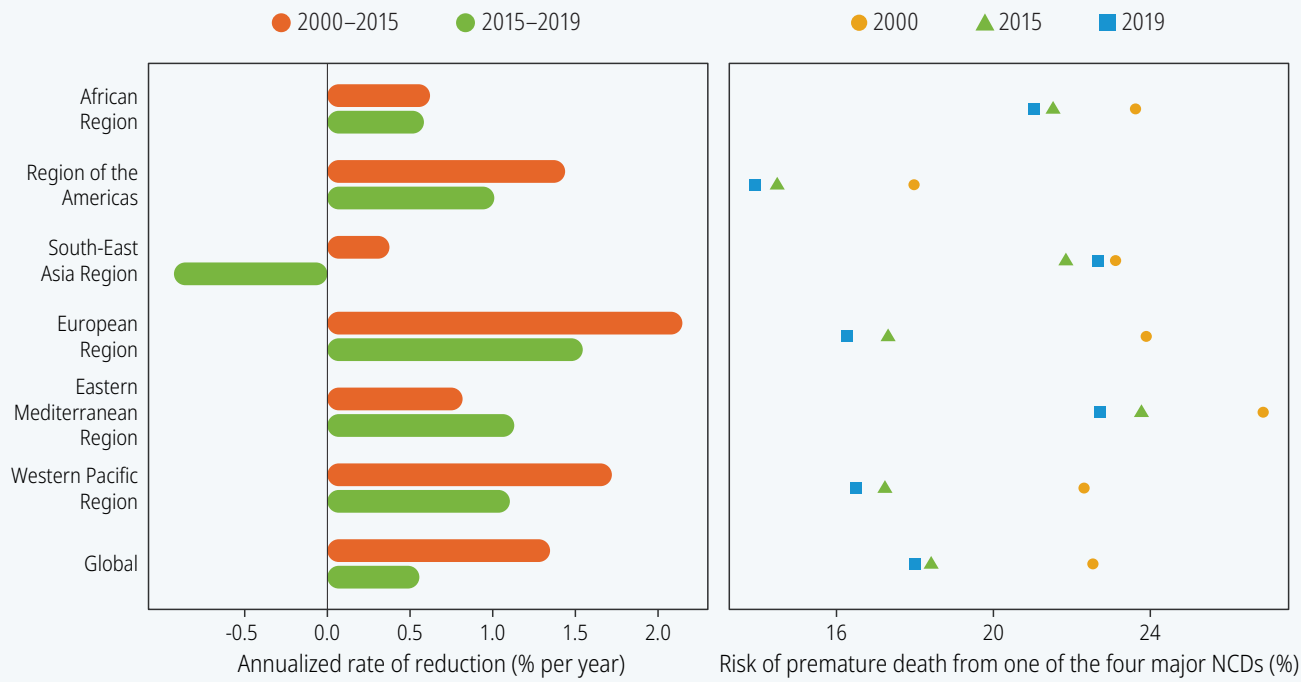
However, progress has been uneven across regions, both in levels and pace of decline. The Eastern Mediterranean Region had the highest risk in 2000 (26.9%, 95% UI: 18.9–35.5%) and, despite a sizable reduction, still recorded a relatively high level (22.7%, 95% UI: 15.8–30.9%) in 2019. In contrast, the Region of the Americas had the lowest risk in 2000 (18.0%, 95% UI: 16.7–19.8%) and maintained the lowest levels in 2019 (13.9%, 95% UI: 12.5–15.6%), a reduction of about 22%. Other regions started at similar levels in 2000 (roughly 22–24%) but experienced different trajectories. *(43)*.[5]

Despite these gains, the pace of improvement has slowed sharply since the start of the SDG era in 2015. Globally, the annual rate of reduction declined from 1.3% during 2000–2015 to just 0.5% in 2015–2019 which is less than half the earlier rate. This is far below the 2.7% annual reduction required to achieve the SDG target of a one third reduction in premature mortality from noncommunicable diseases by 2030 (Fig. 1.14). This indicates that recent progress amounts to only about one fifth of what is needed. Regional trends during the SDG era further highlight this slowdown. Most regions experienced substantial declines in annual rate of reduction. The Eastern Mediterranean Region was the only region to show some acceleration after 2015, although its annual rate of reduction (1.2%) remained less than half of rate required to meet the SDG target. Meanwhile, the South-East Asia Region is of greatest concern: an already slow decline before 2015 shifted to a slight increase in premature mortality from noncommunicable diseases between 2015 and 2019 *(43)*.

Overall, neither the world nor any WHO region is currently on track to meet the 2030 SDG target. The COVID-19 pandemic has added further uncertainty. Disruptions to health systems and shifts in competing mortality risks during 2020–2021 may have altered trends in unexpected ways. The pandemic also affected mortality surveillance, potentially compromising data quality and causing misclassification of causes of death. A comprehensive review using up-to-date, high-quality data is essential to accurately assess premature mortality from noncommunicable diseases during the pandemic and project progress toward the 2030 target *(43)*.

[5] In accordance with resolution WHA78.25 (2025), Indonesia was reassigned to the WHO Western Pacific Region as of 27 May 2025. The Western Pacific Region and South-East Asia Region aggregates were recalculated for sections 1.4.2 and 1.4.3 and may differ from original source.

Fig. 1.14. Risk of premature deaths caused by NCDs and the annual rate of change, globally and by WHO region



NCDs: noncommunicable diseases; WHO: World Health Organization.
Note: In accordance with resolution WHA78.25 (2025), Indonesia was reassigned to the WHO Western Pacific Region as of 27 May 2025. The Western Pacific and South-East Asia regional aggregates were recalculated and may differ from source.
Source: WHO; 2024 *(43)*.

1.4.3 Mortality due to injuries

Road injury

In 2021, an estimated 1.18 million (95% UI: 1.05–1.32 million) people died due to road traffic crashes globally. The Western Pacific Region bore the largest share of this burden, with 27.7% of global deaths, or 327 000 deaths (95% UI: 303 000–351 000 deaths). The South-East Asia Region also experienced a high burden, with 287 000 deaths (95% UI: 256 000–322 000 deaths), representing about 24.3% of the global total. Together, these two regions accounted for more than half of all road traffic deaths worldwide. *(43,44)*.

Despite population growth and increasing vehicle numbers, road traffic deaths declined by 5.4% between 2010 and 2021, from 1.25 million (95% UI: 1.11–1.39 million). This corresponds to a drop in the crude global death rate (SDG indicator 3.6.1) from 17.9 (95% UI: 15.7–19.9) deaths per 100 000 population to 14.9 (95% UI: 13.2–16.6) deaths per 100 000 population (Fig. 1.15). All regions experienced declines, although progress was uneven. This indicates that while efforts to enhance road safety are making progress, they are still insufficient to achieve the UN Decade of Action for Road Safety 2021–2030 goal of reducing fatalities by half by 2030. The African Region still had the highest death rate in 2021 (19.5 (95% UI: 15.7–23.4) deaths per 100 000 population), nearly three times that of the European Region (6.8 (95% UI: 6.2–7.3) deaths per 100 000 population). The slowest decline occurred in the Region of the Americas at 8.9% between 2010 and 2021. In comparison, a 20.3% and 38.0% decline, respectively, was observed in the Western Pacific Region and European Region over the same period. Differences by sex show an additional layer of inequality. Males were at substantially higher risk than females, with a global male-to-female ratio of about 3.0:1, ranging from roughly 2.3:1 in the African Region to more than 3.5:1 in the Region of the Americas and the South-East Asia Region *(43,44)*.

Suicide

Globally, suicide deaths have generally declined since 2000. The total number of deaths fell from

nearly 771 000 (95% UI: 597 000–901 000) in 2000 to 715 000 (95% UI: 548 000–894 000) in 2020, before rising slightly to an estimated 727 000 (95% UI: 551 000–923 000) in 2021 *(43)*.

The crude death rate (CDR) from suicide (SDG indicator 3.4.2) declined by 36.0% in the Western Pacific Region between 2000 and 2021, corresponding to a reduction in the number of suicide deaths from 251 000 deaths (95% UI: 172 000–289 000 deaths) to 187 000 deaths (95% UI: 139 000–241 000 deaths). As a result, the South-East Asia Region overtook the Western Pacific Region as the region with the highest number of suicide deaths in 2021, recording 205 000 deaths (95% UI: 151 000–255 000 deaths), although this was a decline of 20.0% in CDR over this period. The European Region had the highest suicide death rate among all regions in 2000 (21.5 (95% UI: 19.9–23.0) deaths per 100 000 population) but experienced a substantial decline of more than two fifths to reach 12.4 (95% UI: 10.3–14.5) deaths per 100 000 population by 2021 (Fig. 1.15). In contrast, a slight increase was observed in the African Region, where the CDR rose by about 5%, from 6.9 (95% UI: 4.5–10.0) deaths per 100 000 population in 2000 to 7.3 (95% UI: 4.5–10.7) deaths per 100 000 population in 2021. Meanwhile, the Region of the Americas showed a concerning upward trend, with the suicide rate increasing by nearly 30%, from 7.6 (95% UI: 7.0–8.3) deaths per 100 000 population in 2000 to 9.9 (95% UI: 8.9–11.0) deaths per 100 000 population in 2021 *(43)*.

Males consistently face a higher risk of suicide than females, with a global male-to-female CDR ratio of more than 2:1 (12.4 versus 5.9 deaths per 100 000 population). However, this sex disparity varies across regions, with the lowest ratio observed in the South-East Asia Region at 1.4:1 and the highest in the Region of the Americas at 3.7:1 and the European Region at 3.4:1 in 2021 *(43)*.

Homicide

In 2021, an estimated 484 000 people (95% UI: 360 000–648 000 people) were victims of homicide worldwide. While the absolute number of deaths increased slightly from 480 000 deaths (95% UI: 400 000–578 000 deaths) in 2000, the global CDR (SDG indicator 16.1.1) fell by 21.7%, from 7.8 (95% UI: 6.5–9.4) deaths per 100 000 population to 6.1 (95% UI: 4.5–8.2) deaths per 100 000 population. About 80% of homicide victims were male in 2021 *(43)*.

Substantial regional variation in homicide deaths was observed. The WHO Region of the Americas had the highest burden in 2021, with an estimated 198 000 deaths (95% UI: 170 000–234 000 deaths) and a CDR of 19.3 (95% UI: 16.4–22.6) deaths per 100 000 population, more than three times the global average (Fig. 1.15). This region accounted for 40.9% of global homicide deaths, while representing 13.0% of the global population. In contrast, the Western Pacific Region accounted for about a quarter of the global population but only 8.5% of homicide deaths, with a CDR of 1.9 (95% UI: 1.3–2.5) deaths per 100 000 population. The African Region had the second highest homicide mortality burden, with an estimated 114 000 deaths (95% UI: 68 400–176 000 deaths) and a CDR of 9.7 (95% UI: 5.9–15.0) deaths per 100 000 population. Homicide mortality rates were substantially lower in the European, South-East Asia and Eastern Mediterranean regions, with CDRs between 2.6 and 5.6 deaths per 100 000 population *(43)*.

Homicide mortality disproportionately affected males in all regions, although the magnitude of sex disparities varied. Globally, the male-to-female ratio of homicide CDRs was 4.0:1 in 2021, with the highest ratio observed in the Region of the Americas at 7.0:1, followed by the African Region at 3.3:1, while the other regions each reported ratios of around 2.9:1. Homicide mortality also showed a pronounced age gradient, with the highest rates observed among young adults aged 20–29 years. In this age group, mortality exceeded 12 deaths per 100 000 population globally and nearly 40 deaths per 100 000 population in the Region of the Americas *(43)*.

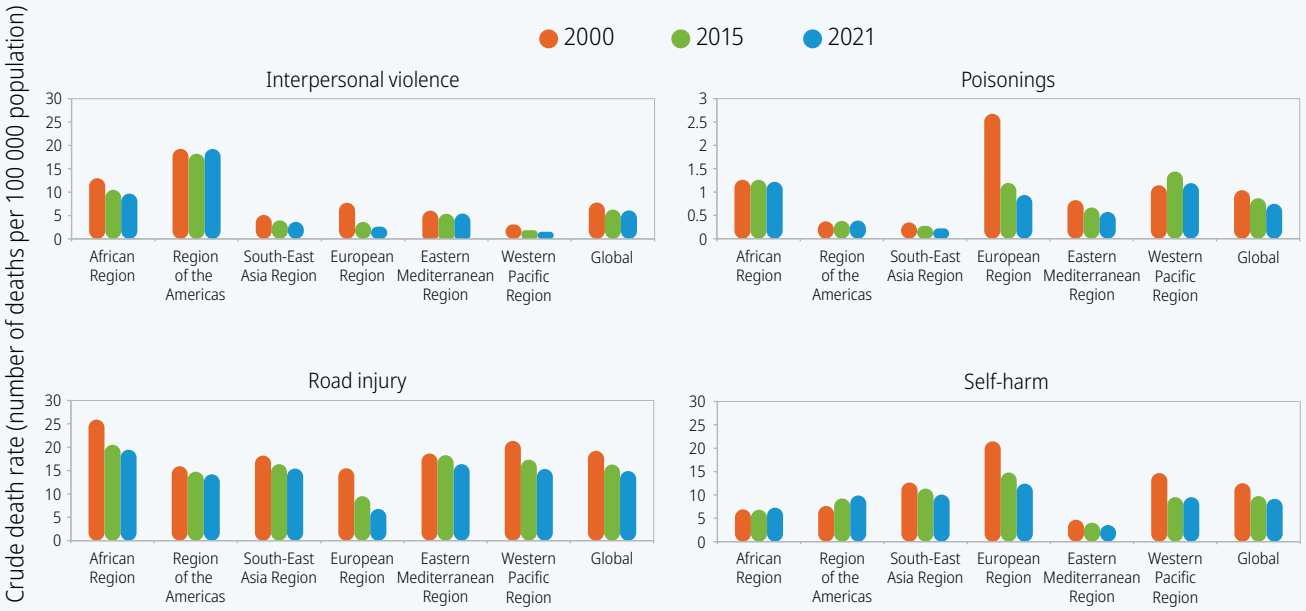
Unintentional poisoning

In 2021, an estimated 59 000 deaths (95% UI: 32 000–91 000 deaths) were attributable to unintentional poisoning globally, a decrease from 64 000 deaths (95% UI: 47 000–92 000 deaths) in 2000. This corresponds to a 28% decline in the global CDR (SDG indicator 3.9.3), from 1.0 (95% UI: 0.8–1.5) deaths per 100 000 population to 0.7 (95% UI: 0.4–1.1) deaths per 100 000 population (Fig. 1.15) *(43)*.

In 2021, the highest CDRs were observed in the WHO African Region (1.2 (95% UI: 0.7–2.1) deaths per 100 000 population) and the Western Pacific Region (1.1 (95% UI: 0.5–1.5) deaths per 100 000 population). The largest reductions in CDR between 2000 and 2021 occurred in the European Region, a 65% decline, followed by the South-East Asia Region and Eastern Mediterranean Region, with decreases of 35% and 30%, respectively. In contrast, trends were relatively stable in the African Region and Western Pacific Region, while slight increases were observed in the Region of the Americas *(43)*.

Sex and age disparities were evident; the global CDR for males was 67% higher than for females in 2021. The highest male-to-female ratios were observed in the European Region (2.6:1) and the Region of the Americas (2.2:1), while the lowest ratios were observed in the African Region (1.4:1) and Eastern Mediterranean Region (1.5:1). Mortality rates were highest in children younger than 5 years and adults 65 years and older. Although these groups accounted for 18% of the global population, they represented 38% of all deaths from unintentional poisoning *(43)*.

Fig. 1.15. Crude death rates by cause of injury, globally and by WHO region, 2000, 2015 and 2021



WHO: World Health Organization.
Note: In accordance with resolution WHA78.25 (2025), Indonesia was reassigned to the WHO Western Pacific Region as of 27 May 2025. The Western Pacific and South-East Asia regional aggregates were recalculated and may differ from source. The Y axis scale for poisonings differs from the others charts because of the smaller number of poisonings.
Source: WHO; 2024 *(43)*.

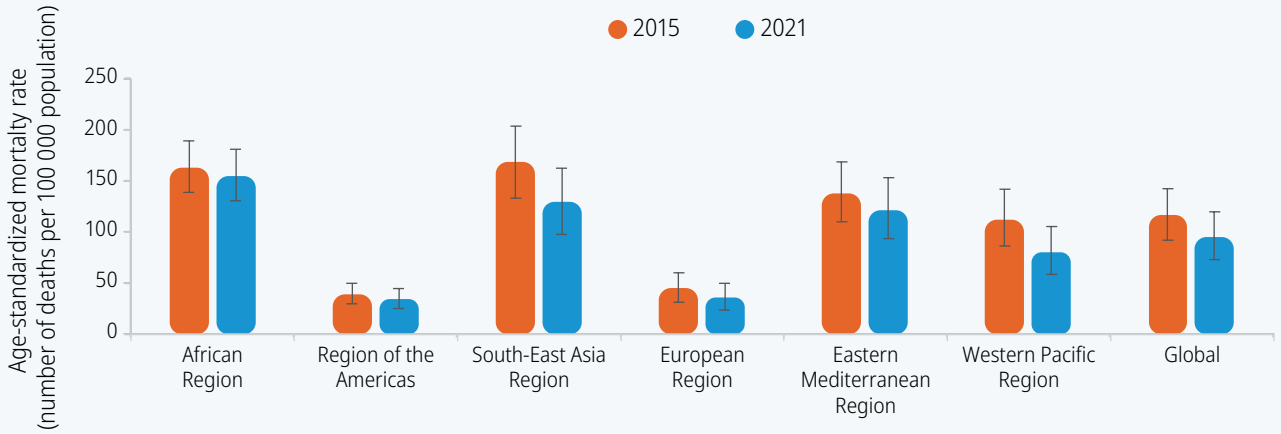
1.4.4 Mortality attributable to environmental risk factors

Mortality attributed to air pollution

Air pollution continues to pose a major public health burden globally. In 2021, exposure to household and ambient air pollution from particulate matter jointly led to an estimated 6.6 million deaths (95% UI: 4.9–8.4 million deaths) and 184 million disability-adjusted life years (DALYs) (95% UI: 142–228 million DALYs) from acute lower respiratory infections, chronic obstructive pulmonary disease, ischemic heart disease, lung cancer and stroke *(45)*.

The global age-standardized mortality rate attributed to joint household and ambient air pollution (SDG indicator 3.9.1) declined by 18% from 116 (95% UI: 92–142) deaths per 100 000 population in 2015 to 95 (95% UI: 73–120) deaths per 100 000 population in 2021. The Western Pacific Region made the largest improvement and have reduced their mortality rates by over a quarter since 2015. The Region of the Americas and the European Region maintained the lowest mortality rates (Fig. 1.16), consistent with their lower average exposure to particulate matter from household and ambient sources *(45)*. See also section 1.2.3.

Fig. 1.16. Age-standardized mortality rates attributed to joint household and ambient air pollution, globally and by WHO region, 2015 and 2021



WHO: World Health Organization
Note: Error bars represent 95% uncertainty intervals.
Source: WHO; 2026 *(45)*.

Mortality attributed to unsafe water and sanitation and lack of hygiene

Globally in 2019, an estimated 1.4 million deaths (95% UI: 1.3–1.5 million deaths) and 74 million DALYs (95% UI: 68–80 million DALYs) from acute respiratory infections, diarrhoeal diseases, soil-transmitted helminthiasis and undernutrition could have been prevented with adequate WASH services. Diarrhoeal diseases accounted for most of the burden, with 1.0 million deaths (95% UI: 0.9–1.2 million deaths) and 55 million DALYs (95% UI: 50–60 million DALYs) *(46)*.

The African Region and South-East Asia Region had the highest mortality rates attributed to inadequate WASH services (SDG indicator 3.9.2), with an estimated 46.7 deaths per 100 000 population and 31.8 deaths per 100 000 population, respectively, in 2019. In contrast, the Region of the Americas, the European Region and the Western Pacific Region had lower mortality rates—5.0, 3.6 and 5.7 deaths per 100 000 population, respectively, reflecting greater access to WASH services *(46)*.[6] See also section 1.2.3.

[6] In accordance with resolution WHA78.25 (2025), Indonesia was reassigned to the WHO Western Pacific Region as of 27 May 2025. The aggregates for the Western Pacific Region and South-East Asia Region were recalculated and may differ from source.

1.5 SDG progress to date

With fewer than 5 years to 2030, progress towards the health-related SDGs remains uneven and insufficient. Of the 52 health-related SDG indicators[7] reviewed in this report, more than half have numeric SDG or other global targets and none is on track to meet the target at the global level. Most indicators are moving in the right direction globally, but progress is too slow. For some indicators, trends cannot be adequately assessed due to persistent data gaps (Table 1.1).

Global aggregates were available for at least half of the years in the 2015–2025 assessment period for about 75% of the health-related indicators in this report. A further 13% of indicators had only a single global average or none over this period, preventing assessment of time trends. Recent data[8] were not available for four indicators – the only data available by country and globally were from before 2020.

Overall, the current evidence points to slow and uneven progress, compounded by constraints in data availability that limit robust trend analysis for several health-related indicators.

Table 1.1. Health and health-related SDG indicators with targets and global trend

SDG indicator	Indicator name	Has numeric SDG or other global target	Global trend improving[a]
1.a.2	Domestic general government health expenditure (GGHE-D) as percentage of general government expenditure (GGE) (%)	No	Yes
2.2.1	Prevalence of stunting in children under 5 (%)	Yes	Yes
2.2.2	Prevalence of wasting in children under 5 (%)	Yes	Yes
	Prevalence of overweight in children under 5 (%)	Yes	No
2.2.3	Prevalence of anaemia in women of reproductive age (15–49 years) (%)	Yes	No
3.1.1	Maternal mortality ratio (per 100 000 live births)	Yes	Yes
3.1.2	Proportion of births attended by skilled health personnel (%)	Yes	Yes
3.2.1	Under-five mortality rate (per 1000 live births)	Yes	Yes
3.2.2	Neonatal mortality rate (per 1000 live births)	Yes	Yes
3.3.1	New HIV infections (per 1000 uninfected population)	Yes	Yes
3.3.2	Tuberculosis incidence (per 100 000 population)	Yes	Yes
3.3.3	Malaria incidence (per 1000 population at risk)	Yes	No
3.3.4	Hepatitis B surface antigen (HBsAg) prevalence among children under 5 years (%)	Yes	Yes
3.3.5	Reported number of people requiring interventions against NTDs	Yes	Yes

[7] Includes 41 SDG indicators with unique indicator numbers. Seven of these indicators consist of multiple sub-indicators.

[8] In the 5-year period, 2020–2024, based on data included in SDG reporting for WHO.

Table 1.1. Health and health-related SDG indicators with targets and global trend (cont.)

SDG indicator	Indicator name	Has numeric SDG or other global target	Global trend improving[a]
3.4.1	Probability of dying from any of CVD, cancer, diabetes, CRD between age 30 and exact age 70 (%)	Yes	Yes
3.4.2	Suicide mortality rate (per 100 000 population)	Yes	Yes
3.5.1	Contact coverage of treatment services for alcohol use disorders (%)	No	–
	Contact coverage of treatment services for drug use disorders (%)	No	–
3.5.2	Total alcohol per capita (≥ 15 years of age) consumption (litres of pure alcohol)	Yes	Yes
3.6.1	Road traffic mortality rate (per 100 000 population)	Yes	Yes
3.7.1	Proportion of women of reproductive age who have their need for family planning satisfied with modern methods (%)	No	Yes
3.7.2	Adolescent birth rate (per 1000 women aged 15–19 years)	No	Yes
	Adolescent birth rate (per 1000 women aged 10–14 years)	No	Yes
3.8.1	UHC service coverage index	No	Yes
3.8.2	Proportion of population with positive out-of-pocket household expenditures on health exceeding 40 per cent of household discretionary budget (%)	No	Yes
3.9.1	Age-standardized mortality rate attributed to household and ambient air pollution (per 100 000 population)	No	Yes
3.9.2	Mortality rate attributed to exposure to unsafe WASH services (per 100 000 population)	No	–
3.9.3	Mortality rate from unintentional poisoning (per 100 000 population)	No	Yes
3.a.1	Age-standardized prevalence of tobacco use among persons 15 years and older (%)	Yes	Yes
3.b.1	Diphtheria-tetanus-pertussis (DTP3) immunization coverage among 1-year-olds (%)	Yes	No
	Measles-containing-vaccine second-dose (MCV2) immunization coverage by the locally recommended age (%)	Yes	Yes
	Pneumococcal conjugate 3rd dose (PCV3) immunization coverage among 1-year olds (%)	Yes	Yes
	Human papillomavirus (HPV) immunization coverage estimates among primary target cohort (9-14 years old girls) (%)	Yes	Yes
3.b.2	Total net official development assistance to medical research and basic health sectors per capita (US$), by recipient country	No	–
3.b.3	Health product access index	No	–

Table 1.1. Health and health-related SDG indicators with targets and global trend (cont.)

SDG indicator	Indicator name	Has numeric SDG or other global target	Global trend improving[a]
3.c.1	Density of medical doctors (per 10 000 population)	No	Yes
	Density of nursing and midwifery personnel (per 10 000 population)	No	Yes
	Density of dentists (per 10 000 population)	No	Yes
	Density of pharmacists (per 10 000 population)	No	Yes
3.d.1	Average of 15 International Health Regulations core capacity scores	No	Yes
3.d.2	Percentage of bloodstream infections due methicillin-resistant *Staphylococcus aureus* (MRSA) (%)	No	–
	Percentage of bloodstream infection due to *Escherichia coli* resistant to 3rd-generation cephalosporin (%)	No	–
5.2.1	Proportion of ever-partnered women and girls aged 15 years and older subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months (%)	Yes	No
5.2.2	Proportion of women and girls aged 15 years and older subjected to non-partner sexual violence in the previous 12 months (%)	Yes	–
6.1.1	Proportion of population using safely-managed drinking-water services (%)	Yes	Yes
6.2.1	Proportion of population using safely-managed sanitation services (%)	Yes	Yes
	Proportion of population using a hand-washing facility with soap and water (%)	Yes	Yes
6.3.1	Proportion of safely treated domestic wastewater flows (%)	Yes	Yes
6.a.1	Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan (constant 2020 US$ millions)	No	–
7.1.2	Proportion of population with primary reliance on clean fuels and technology (%)	Yes	Yes
11.6.2	Annual mean concentrations of fine particulate matter ($PM_{2.5}$) in cities ($\mu g/m^3$)	No	Yes
16.1.1	Mortality rate due to homicide (per 100 000 population)	No	Yes

SDG: Sustainable Development Goal.

[a] Global trend was assessed based on the latest year for which data were available as of March 2026 and the baseline year as stated in the SDG or other global target. If no baseline year was specified for the target, 2015 was used, or the nearest available year after 2015 when 2015 data were not available. Trend improving does not equate to being on track.

Note: N-dash (–) indicates that no trend data were available or not applicable.

Chapter 2

COVID-19 pandemic related excess mortality and trends in healthy longevity

2.1 COVID-19 pandemic related excess mortality

Excess mortality from all causes – defined as the number of deaths above those expected based on historical trends – is a key measure for assessing the full impact of crises such as the COVID-19 pandemic. Unlike officially reported COVID-19 death counts, excess mortality from all causes captures both deaths directly attributable to the virus and indirect deaths resulting from the broader societal and health system disruptions caused by the pandemic. Earlier WHO estimates focused on monthly excess mortality for the period 2020–2021. The updated analysis presented here provides annual estimates by age and sex for 2020–2023, reflecting methodological improvements and the availability of additional data. This period of analysis corresponds to the time during which COVID-19 was declared a Public Health Emergency of International Concern, although the disease has continued to pose a substantial global health threat *(47,48)*. This chapter presents estimates of excess mortality at the global, regional and income-group levels, as well as by age and sex.

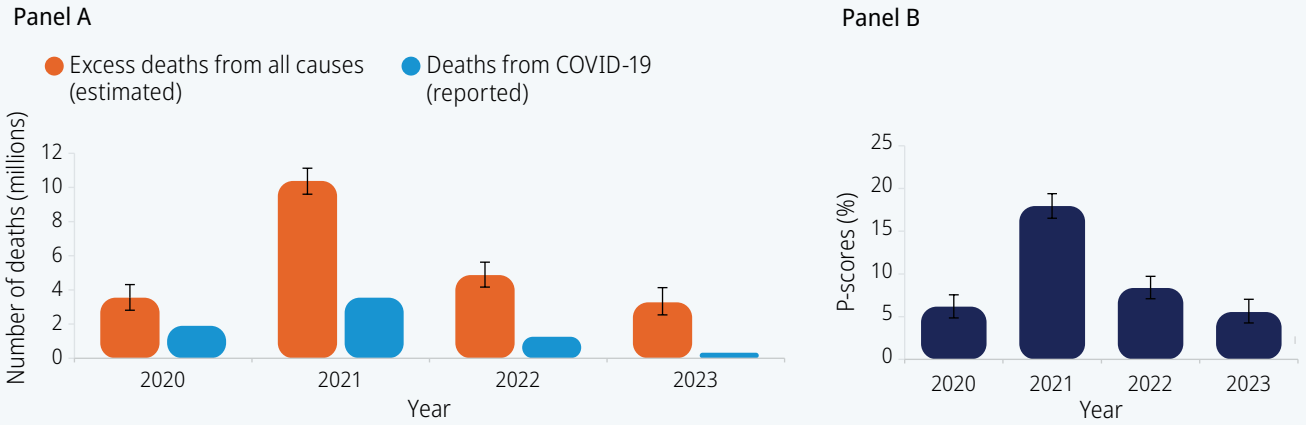
2.1.1 Global excess mortality

From 2020 to 2023, global excess deaths from all causes were estimated at 22.1 million (95% UI: 20.6–23.6 million), compared with 7.0 million reported COVID-19 deaths. This implies that for every reported COVID-19 death, there were around two additional excess deaths related to the pandemic *(49)*. This finding highlights both the underreporting of deaths directly caused by the virus and the indirect deaths driven by health care disruptions, economic challenges and other social factors during this period.

Global excess deaths peaked in 2021 at 10.4 million (95% UI: 9.6–11.1 million) – mainly due to the emergence of more deadly variants of the coronavirus such as Delta and the substantial strain on health care – and then declined to 3.3 million (95% UI: 2.5–4.1 million) in 2023 *(50)*. Over time, the ratio of excess deaths to reported COVID-19 deaths increased markedly. In 2020, nearly one additional excess deaths occurred for every COVID-19 reported death; in 2023, this had risen to about nine. In 2021, this increase appears to have been driven by a high proportion of indirect deaths due to strains on health care, although underreporting also played an important role. After 2022, when many countries stopped widespread testing, the further increase in the ratio of excess deaths to reported COVID-19 deaths seems to be increasingly attributable to underreporting (Fig. 2.1, panel A) *(49)*.

Compared with expected levels, global deaths were 6.2% (95% UI: 4.8–7.6%) higher in 2020 and peaked at 17.9% (95% UI: 16.5–19.4%) higher in 2021. Excess mortality declined sharply in 2022, returning by 2023 to levels broadly similar to those observed in 2020 (Fig. 2.1, panel B) *(49)*.

Fig. 2.1. Global excess deaths from all causes and reported COVID-19 deaths (panel A) and P-scores (panel B), 2020–2023



COVID-19: coronavirus disease 2019; WHO: World Health Organization.
Notes: Error bars represent 95% uncertainty intervals. The P-score is the percentage difference between observed and expected deaths, calculated as (observed – expected)/(expected) x 100. The global level includes 183 WHO Member States, plus the occupied Palestinian territory, including east Jerusalem.
Source: WHO; 2026 *(49)*.

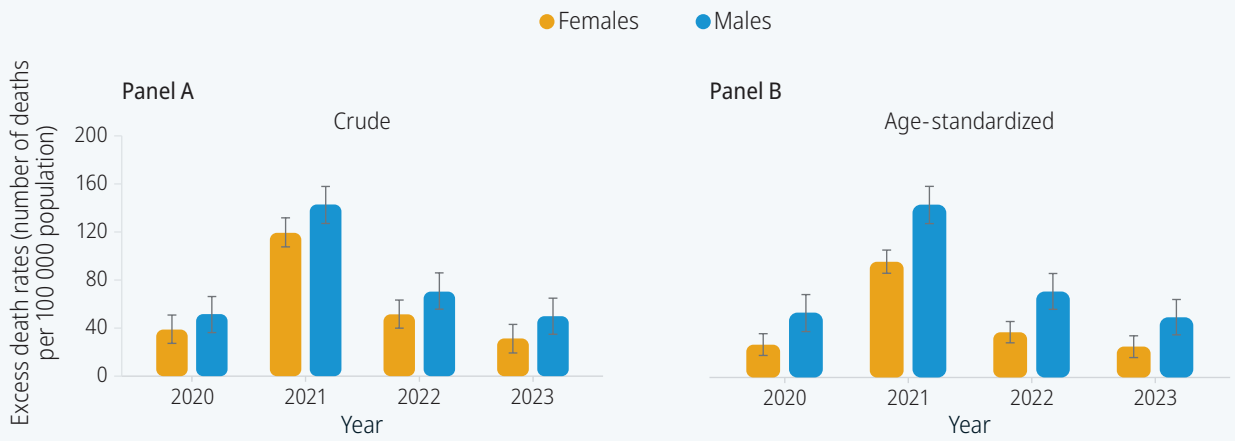
2.1.2 Sex and age patterns of excess mortality

Of the global mean excess deaths estimated over 2020–2023, a larger share occurred in males (57%) than females (43%), indicating a substantial sex difference in pandemic-related mortality *(49)*.

Excess mortality differed markedly by sex throughout the pandemic period, with males consistently experiencing higher death rates than females in both crude and age-standardized measures. Crude excess death rates rose sharply for both sexes in 2021, peaking at 143 per 100 000 in males (95% UI: 127–158 per 100 000) and 119 per 100 000 in females (95% UI: 108–132 per 100 000), before declining in 2022 and 2023, although remaining above baseline levels. At the 2021 peak, the crude excess mortality rate in males was about 20% higher than in females (Fig 2.2, panel A) *(49)*.

After adjusting for population age structure, the difference became even more pronounced: age-standardized excess death rates reached 144 per 100 000 in males (95% UI: 128–159 per 100 000) and 96 per 100 000 in females (95% UI: 87–106 per 100 000) in 2021, a roughly 50% higher rate in males (Fig. 2.2, panel B) *(49)*.

Fig. 2.2. Global excess death rates (crude and age-standardized), by sex, 2020–2023



Note: Error bars represent 95% uncertainty intervals.
Source: World Health Organization; 2026 *(49)*.

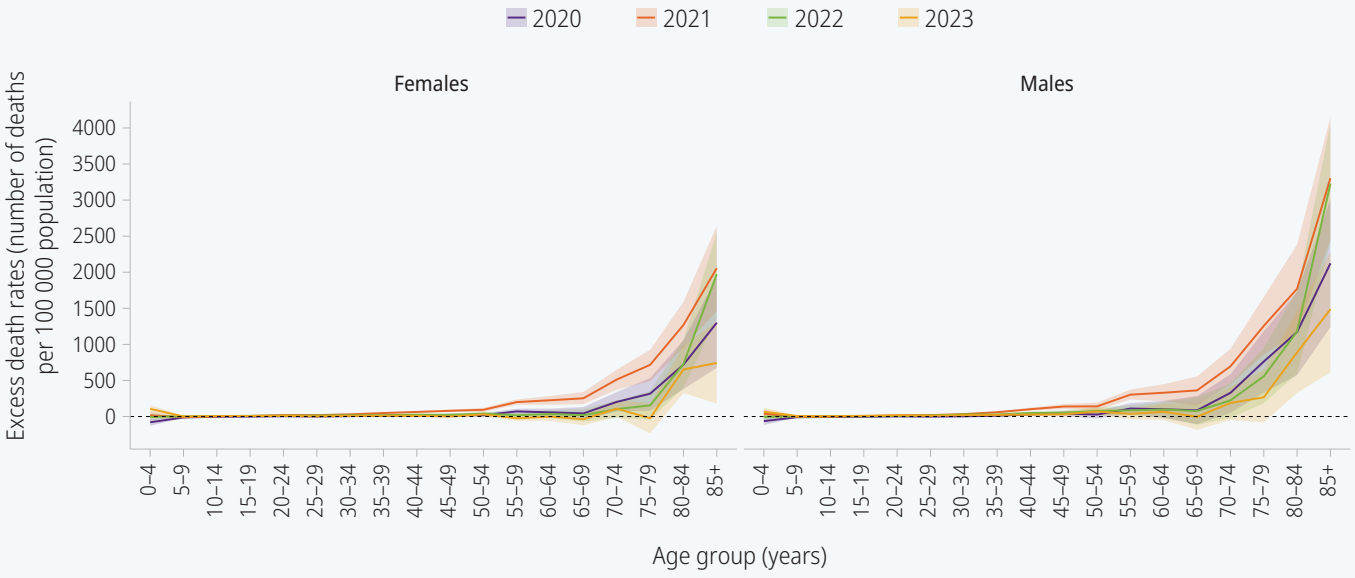
The persistence and widening of the gap after standardization indicates that differences in age composition do not explain the higher excess mortality in males. Instead, the gap points to a real excess risk affecting males. Several factors may contribute to this pattern. Biological differences in immune response, a higher prevalence of certain pre-existing health conditions, occupational and behavioural exposure risks, and differences in health-seeking behaviour may all have increased male vulnerability both to the COVID-19 virus and to indirect pandemic effects. The consistency of the sex gap every year suggests that these structural and biological factors operated throughout the pandemic period rather than being confined to a single wave or variant phase *(49)*.

The age distribution of global excess deaths during 2020–2023 was heavily concentrated in older adults. Nearly two thirds (65%) of total excess deaths occurred in people 65 years and older, while 23% were among those aged 45–64 years. In contrast, younger age groups accounted for a comparatively small share (about 10% among those aged 25–44 years and 3% among those aged 0–24 years) *(49)*.

Fig. 2.3 shows a pronounced age gradient in excess mortality. Rates remained close to zero at younger ages before beginning to rise gradually in early adulthood and then increasing much more steeply from ages 55–59 years onward for both males and females. The escalation became particularly steep at older ages, which led to very high levels of excess mortality in people 85 years and older. In 2021, the peak year globally, excess mortality in the 85+ years age group reached 3305 per 100 000 population in males (95% UI: 2452–4147 per 100 000) and 2056 per 100 000 in females (95% UI: 1459–2641 per 100 000), more than 10-fold the rates observed in people aged 55–59 years. This marked acceleration with advancing age underscores the extreme vulnerability of the oldest populations. Although excess death rates declined in 2022 and further in 2023, mortality in people 85 years and older remained substantially elevated relative to younger age groups throughout the pandemic period *(49)*.

Across all adult age groups, males consistently experienced higher excess mortality than females. The gap emerged in midlife and widened progressively with advancing age. Although the difference was most pronounced at older ages during the 2021 peak, it remained evident throughout the pandemic period, indicating a persistent and structural male disadvantage *(49)*.

Fig. 2.3. Global excess crude death rate, by sex and age group, 2020–2023



Note: Shaded areas represent 95% uncertainty intervals.
Source: World Health Organization; 2026 *(49)*.

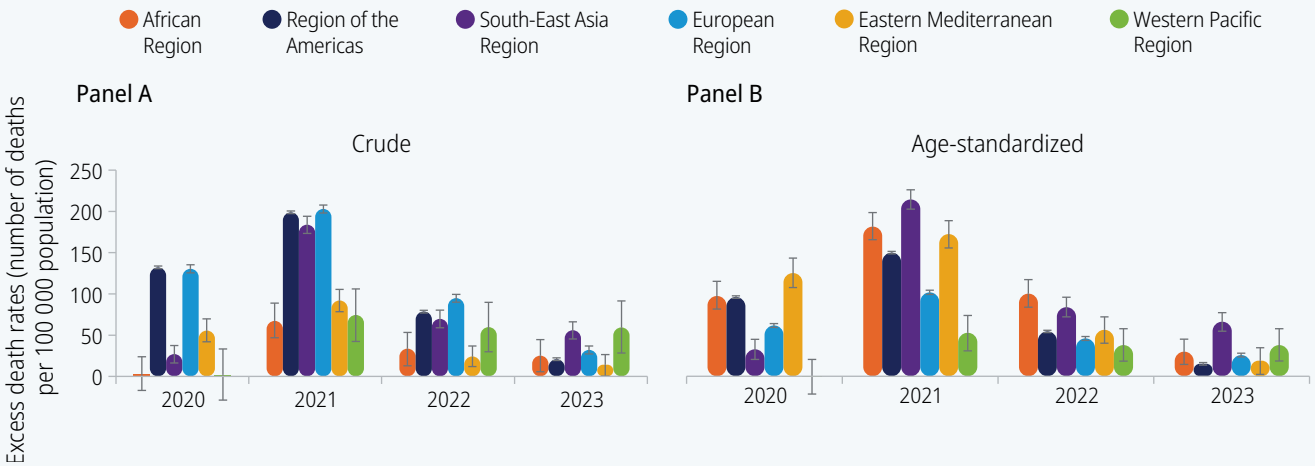
2.1.3 Excess mortality across WHO Regions

The distribution of global mean excess deaths over the period 2020–2023 varied markedly among WHO regions. The South-East Asia Region accounted for the largest share of the global total (27%), followed by the Region of the Americas, the European Region and the Western Pacific Region (about 20% each). The African Region and the Eastern Mediterranean Region contributed comparatively smaller shares (about 7% each) *(49)*.

Following the identification of the first COVID-19 cases in Wuhan, China in December 2019, the virus spread rapidly worldwide. In 2020, the highest crude excess death rates were seen in the Region of the Americas and the European Region, indicating that these regions were initially most affected. In 2021, excess mortality intensified sharply in nearly all regions, coinciding with the emergence and global spread of the highly transmissible Delta variant and the mounting pressure on health systems. The South-East Asia Region experienced a particularly pronounced surge in 2021, reaching levels comparable to those observed in the Americas and Europe (about 200 excess deaths per 100 000 population). The African Region and the Eastern Mediterranean Region followed broadly similar trajectories, with increases in 2021 at comparatively lower levels before declining thereafter. The Western Pacific Region showed heterogeneous trajectories: excess mortality peaked in 2021 in some countries whereas in others it remained low in 2020–2021 due to strict containment measures, before rising in 2022 as restrictions eased and the Omicron variant spread. By 2023, crude excess death rates had declined markedly across all regions (Fig. 2.4, panel A) *(49)*.

After adjusting for differences in population age structure, regional comparisons shifted. The South-East Asia Region stood out more prominently in 2021, recording the highest age-standardized excess mortality. The African Region and Eastern Mediterranean Regions also showed substantially higher excess mortality after age-standardization, particularly in 2020–2021. In contrast, the European Region's age-standardized rates were notably lower than its crude rates, reflecting the influence of its older population structure on crude mortality levels (Fig. 2 4, panel B) *(49)*.

Fig. 2.4. Excess death rates (crude and age-standardized), by WHO region, 2020–2023



WHO: World Health Organization.
Note: Error bars represent 95% uncertainty intervals.
Source: WHO; 2026 *(49)*.

2.1.4 Excess mortality across World Bank income groups

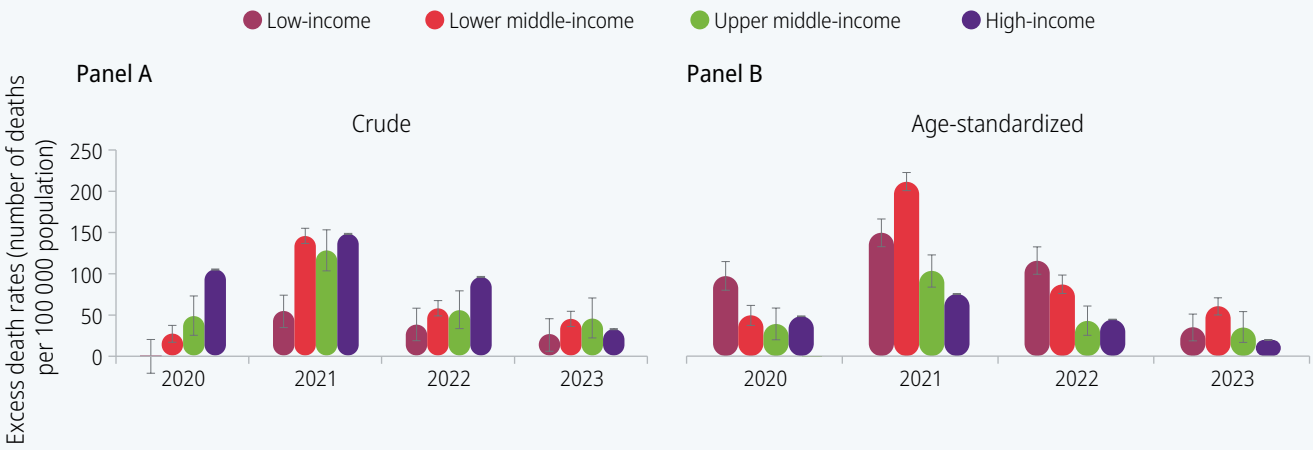
Global mean excess deaths over the 2020–2023 period were unevenly distributed among income groups. Excess mortality was heavily concentrated in middle-income countries, which together accounted for nearly three quarters of the global total (about 37% in lower middle-income and 35%

in upper middle-income countries). High-income countries represented nearly 24% and low-income countries 4% *(49)*.

Crude excess death rates show clear differences across income groups during the pandemic. In 2020, the high-income group recorded the highest crude excess death rate, whereas other income groups appeared to have substantially lower rates. In 2021, excess mortality peaked across all income groups. The high-income and lower middle-income groups had the highest crude rates (around 150 excess deaths per 100 000 population), followed closely by the upper middle-income group, while the crude rate in the low-income group remained comparatively low. In 2022 and 2023, crude excess death rates declined across all income groups, although they were still not negligible in several income categories. By 2023, rates had become more convergent, although still uneven (Fig. 2.5, panel A) *(49)*.

After adjusting for differences in age – an important consideration given the older population structure of the high-income group – the picture shifted markedly. In the high- and upper middle-income group, age-standardized rates were substantially lower than crude rates, indicating that the elevated crude mortality was partly driven by their older demographic profile. In contrast, the low- and lower middle-income group showed considerably higher age-standardized rates relative to their crude figures. This finding suggests that, despite having a younger overall population, those groups experienced relatively higher excess mortality once demographic differences were accounted for, potentially reflecting more limited health system capacity and delayed public health interventions (Fig. 2.5, panel B) *(49)*.

Fig. 2.5. Excess death rates (crude and age-standardized), by World Bank income group, 2020–2023



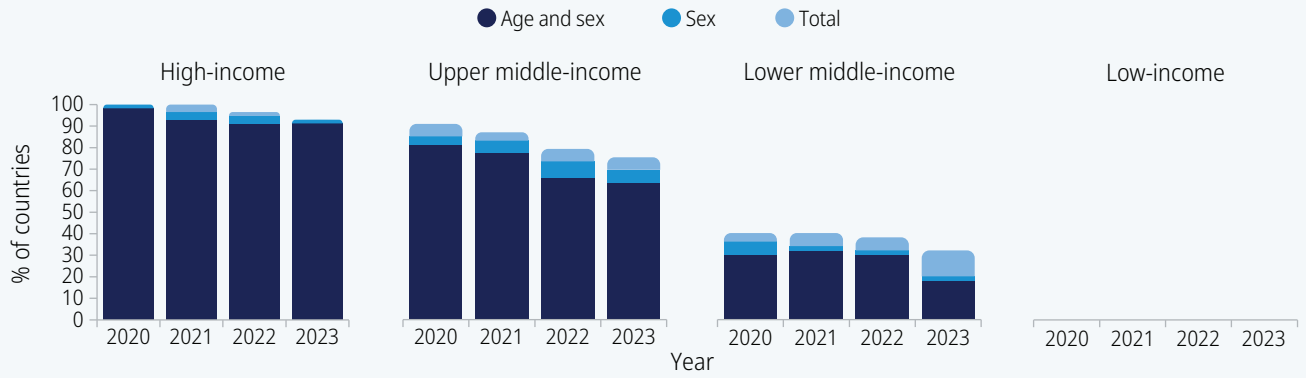
Note: Countries are categorized according to the World Bank income group classification for the 2026 fiscal year. Error bars represent 95% uncertainty intervals.
Source: World Health Organization; 2026 *(49)*.

2.1.5 All-cause mortality data gaps

Accurately measuring excess mortality requires high-quality mortality data and robust statistical methods. Yet, many countries, particularly those with weaker health information systems, face challenges in tracking and reporting deaths. As shown in Fig. 2.6, the percentage of countries with all-cause mortality data (at least 50% complete relative to WHO estimated total all-cause mortality in 2019) declined with the level of income. More than 90% of high-income countries reported data throughout the pandemic period, compared with fewer than 50% of lower middle-income countries and none of the low-income countries. Availability of mortality data also declined over time. At the time of data collection, fewer countries were reporting all-cause mortality data in 2023 than in 2020. These gaps are even more pronounced for data disaggregated by both age and sex. This lack of timely high-quality disaggregated data, especially in low- and lower middle-income

countries, underscores the need for stronger mortality surveillance and faster data collection to enhance pandemic preparedness and response strategies. To address these gaps, model-based estimation approaches and indirect methods have been used *(51)*, utilizing historical mortality trends and additional indicators related to the COVID-19 burden and response *(49)*.

Fig. 2.6. Availability of all-causes mortality data, by World Bank income group and disaggregation 2020–2023



WHO: World Health Organization.
Note: Countries are categorized according to the World Bank income group classification for the 2026 fiscal year. All-cause mortality data for this analysis were collected from various sources, including but not limited to the WHO Mortality Database.
Source: WHO; 2026 *(49)*.

These findings reveal substantial variation in excess mortality across regions, income groups, age and sex during the pandemic period. The pronounced differences across regions and income groups highlight the importance of a more equitable pandemic response, one that directs resources and support to areas most in need. Additionally, the observed differences in excess mortality across age and sex – especially the heightened vulnerability of older populations and males – emphasize the need for targeted interventions to protect the most at-risk groups *(49)*.

At the same time, the analysis highlights substantial gaps in the availability of timely and high-quality mortality data, particularly in low- and lower middle-income countries. Strengthening CRVS systems and broader health information systems is therefore essential to ensure timely, high-quality, complete and disaggregated mortality data. Investments in robust mortality surveillance will not only enhance the ability to measure the true impact of crises such as the COVID-19 pandemic, but also support more effective public health decision-making and preparedness for future health emergencies (see Chapter 3) *(49)*.

2.2 Life expectancy and healthy life expectancy

Population health has experienced uneven and often fragmented progress worldwide over the past 25 years. Improvements in the prevention, diagnosis and treatment of diseases and injuries have contributed to a sustained decline in mortality rates and a corresponding increase in overall life expectancy. Advances in public health infrastructure, vaccination programmes, maternal and child health services, and the management of infectious and noncommunicable diseases have all played a significant role in extending lives in many regions.

However, these gains have not been uniform and, in some cases, have been reversed or slowed by major global and regional health shocks. The COVID-19 pandemic, in particular, disrupted health systems, strained economies and led to substantial excess mortality in many countries (see also section 2.1). In addition, natural disasters, such as earthquakes, tsunamis and extreme weather events, have caused sudden and severe health impacts, especially in vulnerable populations. Armed conflicts and political instability have further compounded these challenges by displacing populations, limiting access to care and undermining health infrastructure.

As a result, large disparities persist both between and within countries, shaped by differences in income, geography, governance and access to health care. This section examines long-term trends in key global health outcomes and the inequalities that influence them, with a focus on life expectancy and HALE since 2000.

2.2.1 Global trends

Before the COVID-19 pandemic, global life expectancy at birth had been steadily rising since the start of the 21st century, increasing from 67 years in 2000 to 73 years in 2019. Over this period, life expectancy for males increased from 65 to 71 years, while life expectancy for females rose from 70 to 76. In parallel, globally, HALE at birth also improved, rising from 58 years in 2000 to 63 years in 2019. For males, HALE increased from 57 to 62 years and for females from 59 to 64 years (Fig. 2.7) *(52)*.

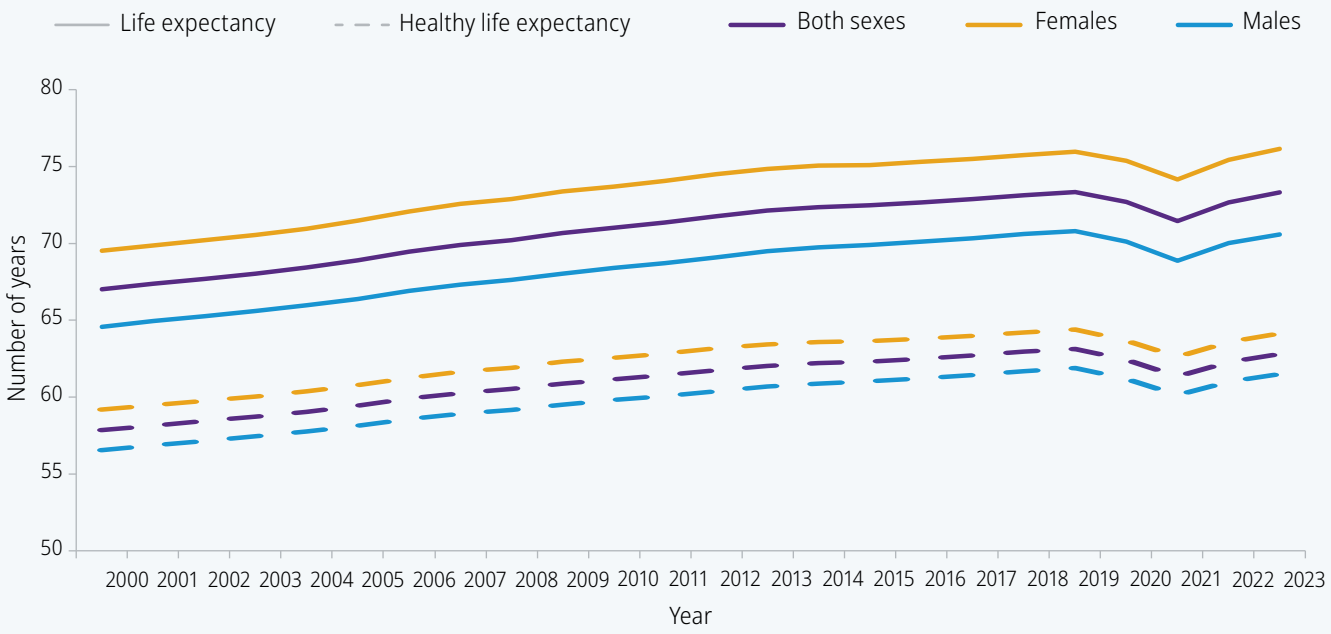
However, the COVID-19 pandemic reversed this upward trend, erasing nearly a decade of progress in just 2 years. Global life expectancy at birth fell by less than 1 year to 73 years in 2020, and further to 71 years in 2021 – returning to levels last seen in 2011. It then rebounded to 73 years in 2022 and 2023. A similar pattern was observed for HALE, which declined to 62 years in 2020 and 61 years in 2021 (also reverting to 2011 levels), before recovering to 62 years in 2022 and 63 years in 2023 *(52)*.

Life expectancy for both males and females declined by about 2 years between 2019 and 2021, falling to 69 years for males and 74 years for females. Between 2021 and 2022, both sexes experienced a rebound of about 1 year, followed by a further increase of nearly 1 year between 2022 and 2023, bringing life expectancy to nearly 71 years for males and 76 years for females in 2023.

A similar trend was observed for HALE: both males and females saw declines of nearly 2 years between 2019 and 2021, followed by a recovery of about 1 year between 2021 and 2022, and a further recovery between 2022 and 2023, with HALE for females and males in 2023 nearly reaching the pre-pandemic levels at 64 years and 62 years, respectively *(52)*.

By 2023, only female global life expectancy at birth (76 years) had returned to its pre-pandemic 2019 level. In contrast, female HALE, male life expectancy and male HALE at birth had not yet fully recovered to their 2019 levels by 2023, although the gaps were less than 0.5 years. *(52)*.

Fig. 2.7. Global trends in life expectancy and healthy life expectancy at birth, 2000–2023



Source: World Health Organization; 2026 *(52)*.

2.2.2 Trends by WHO region and World Bank income group

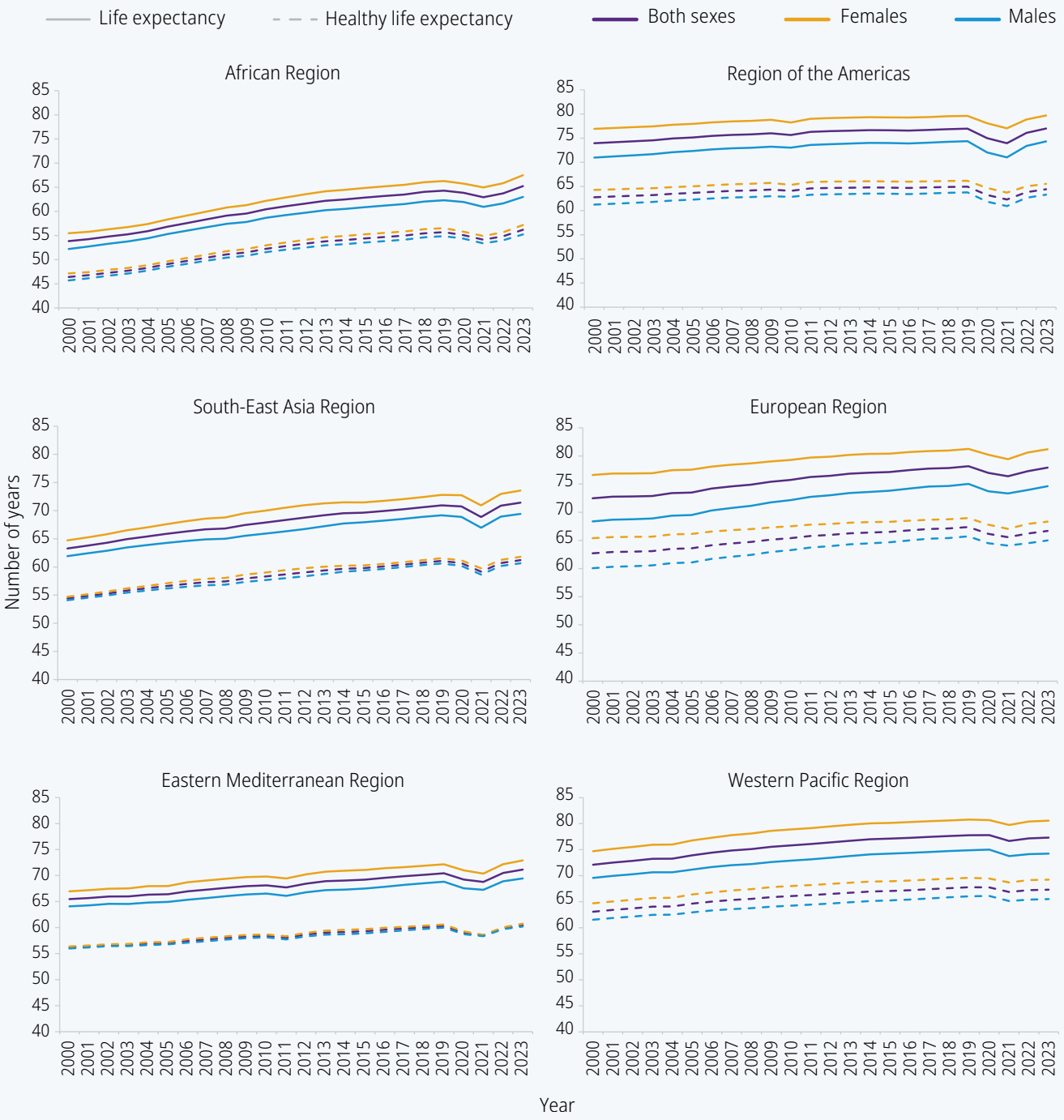
Before the onset of the COVID-19 pandemic in 2019, life expectancy and HALE had continued to increase in all WHO regions and World Bank income groups since the year 2000. The greatest gains occurred in resource-constrained regions that started off with the lowest life expectancy and HALE at birth, including the African Region (10-year gain in life expectancy and 9-year gain in HALE) and the South-East Asia Region (8-year gain in life expectancy and 7-year gain in HALE). Other WHO regions experienced about a 5–6-year gain in life expectancy and a 4–5-year gain in HALE, except the Region of the Americas where the gains were smallest (3 years in life expectancy and 2 years in HALE; Fig. 2.8). By World Bank income groups, the greatest gains were seen in low-income countries (9-year gain in life expectancy and 8-year gain in HALE) and lower middle-income countries (7-year gain in life expectancy and 6-year gain in HALE; Fig. 2.9). Populations in high-income and upper middle-income countries continued to live longer and healthier lives than those in low- and lower middle-income countries, yet the pace of improvement was comparatively slower *(52)*.

In addition, the impact of the COVID-19 pandemic was unequal across regions and income groups. The Region of Americas was the hardest hit, with both life expectancy and HALE dropping by about 3 years between 2019 and 2021. The loss in life expectancy and HALE in other regions ranged from 1 to 2 years *(52)*.

All regions experienced recovery in both life expectancy and HALE between 2021 and 2023. In the African Region, life expectancy and HALE rebounded and surpassed the pre-pandemic levels by 2023. However, a deficit in HALE in 2023 compared to 2019 is still evident in the European Region and the Region of the Americas, with almost a 1-year gap remaining *(52)*.

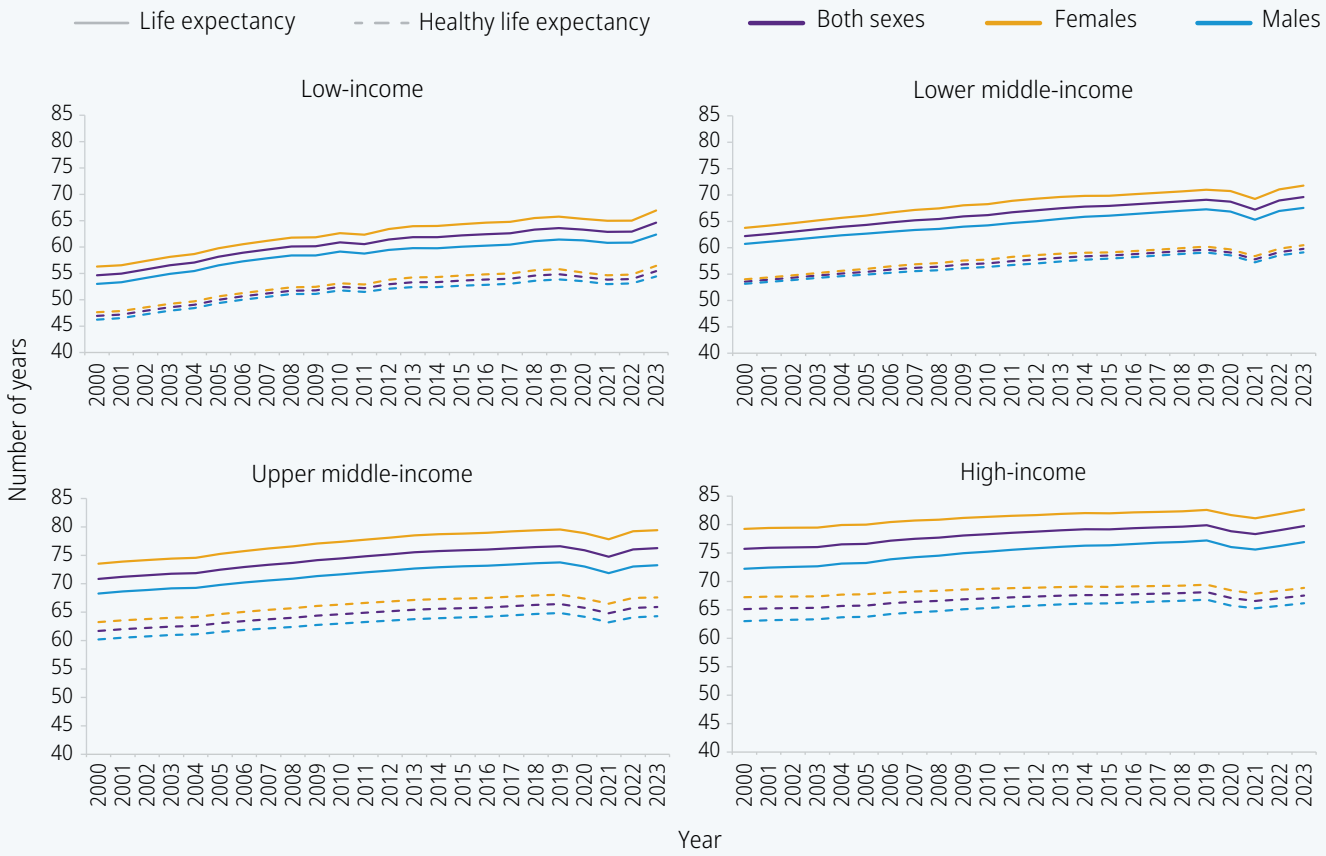
By World Bank income groups, middle- and high-income countries were hardest hit by the COVID-19 pandemic, losing nearly 2 years in life expectancy and HALE. In contrast, low-income countries saw about 1-year drop in life expectancy and HALE in 2019–2021, and a full recovery by 2023, which exceeded the 2019 life expectancy by 1 year and HALE by less than 1 year. A full recovery by 2023 was also seen in lower middle-income countries, but not yet in upper middle-income countries (and high-income countries, with almost a 1-year gap remaining for HALE. *(52)*.

Fig. 2.8. Life expectancy and healthy life expectancy at birth, by WHO region, 2000–2023



WHO: World Health Organization.
Source: WHO; 2026 *(52)*.

Fig. 2.9. Life expectancy and healthy life expectancy at birth, by World Bank income group, 2000–2023



Note: Countries are categorized according to the World Bank income group classification for the 2026 fiscal year.
Source: World Health Organization; 2026 *(52)*.

Chapter 3

Progress and gaps in CRVS systems: a focus on mortality

3.1 Strengthening mortality data systems to enhance mortality surveillance

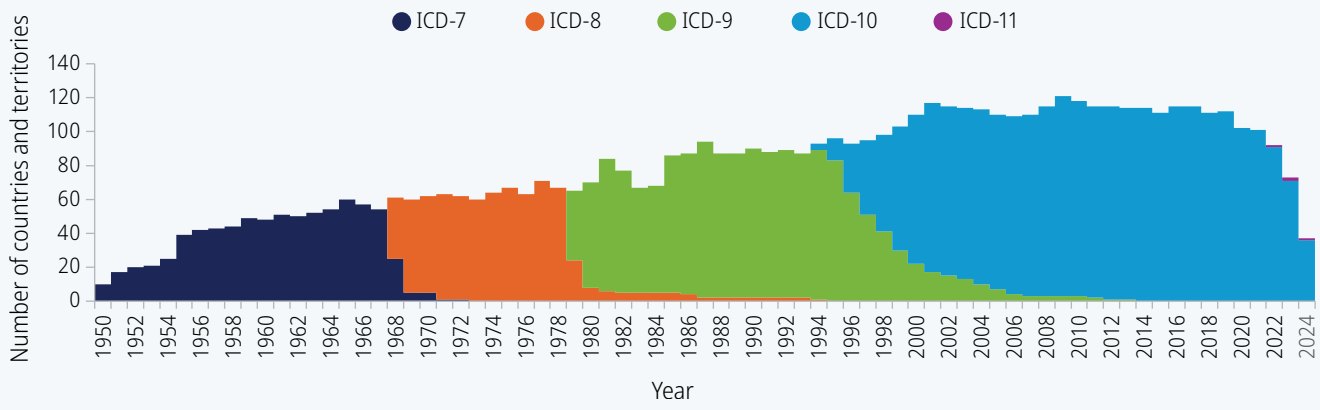
CRVS systems are a cornerstone of national health information systems. Civil registration records vital events such as births and deaths and provides individuals with official documentation that establishes legal identity and enables access to essential services. The information generated through these systems forms the basis for vital statistics that underpin evidence-based policy-making. These data are essential for: routine public health planning and tracking progress towards national and global development goals such as the SDGs; and strengthening health security by enabling countries to detect and respond to shocks including pandemics, conflicts and environmental crises. Robust CRVS systems also support the analysis of inequalities in population health and help guide the design of effective policies, programmes and resource allocation.

Within these systems, death registration data – when supported by medical certification of cause of death and coding according to the ICD – are the gold standard for monitoring mortality patterns by age, sex and cause and for understanding demographic and epidemiological transitions. Strengthening mortality surveillance within CRVS systems therefore requires enhancing the timeliness and completeness of death registration, as well as the quality and interoperability of mortality data. Achieving this objective depends not only on technical improvements but also on strong governance, institutional capacity and sustainable financing to ensure that mortality data systems remain reliable and responsive over time.

3.1.1 Global cause-of-death data reporting since 1950

Since 1950, the number of countries and territories providing mortality data to WHO has increased steadily, rising from 10 reporting entities in 1950 to around 115 countries and territories (Fig. 3.1) *(53)*. Countries and territories adopted successive ICD revisions over time, with the pace of transition varying depending on the revision. This sustained expansion reflects WHO's constitutional mandate requesting Member States to provide mortality statistics *(54)*, reinforced by the 1967 WHO Nomenclature Regulations *(55)*, which reaffirmed the importance of compiling and publishing statistics on mortality and morbidity in comparable form. Following the adoption of ICD-11 at the World Health Assembly in 2019 (effective from 2022), a small number of countries have begun submitting mortality data coded using this latest revision, marking the beginning of the next transition in international cause-of-death classification.

Fig. 3.1. Number of countries and territories submitting cause-specific mortality data to WHO, by year, 1950–2024



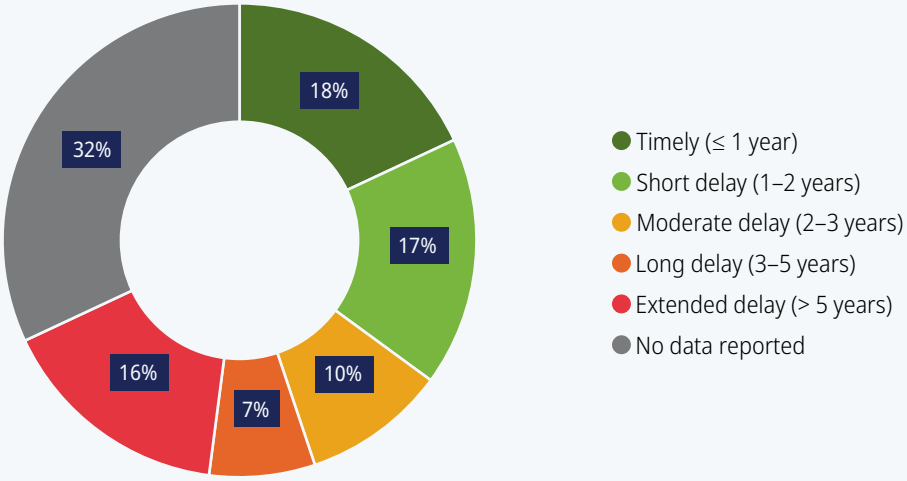
ICD: International Classification of Diseases; WHO: World Health Organization.
Note: The decline in recent years reflects reporting lags rather than fewer countries reporting mortality data.
Source: WHO; 2026 *(53)*.

Over the period 2019–2023, marked disparities in reporting coverage were evident across income groups. Restricting the analysis to WHO Member States, 91% of high-income countries and 63% of upper middle-income countries submitted cause-of-death data, but only 30% of lower middle-income countries and 8% of low-income countries submitted these data. These differences indicate that, despite overall growth in reporting participation, current global coverage remains heavily concentrated among higher-income countries, while substantial gaps persist in lower-income settings *(53)*.

3.1.2 Delays and gaps in cause-of-death reporting

While notable progress has been made in generating and reporting mortality data over the past 8 decades, substantial delays in data submission are still a challenge. As of the end of 2025, only 18% of Member States had reported their 2024 mortality data, corresponding to a 1-year delay or less relative to 2025, the latest reportable year. A further 17% reported older data with a delay of 1–2 years and 10% experienced moderate delays of 2–3 years. Of note, 7% of countries had long delays of 3–5 years in reporting mortality data and 16% had delays of > 5 years *(53)*. These findings indicate that timely reporting remains the exception rather than the norm, which means a considerable number of Member States operate with outdated mortality data. Such delays limit the availability of up-to-date mortality information. This issue was particularly consequential during the COVID-19 pandemic when rapid access to cause-of-death information was essential to guide public health decision-making. In addition, 32% of Member States have never reported cause-of-death data to WHO, indicating a large share of countries still face significant barriers to the regular submission of mortality statistics (Fig. 3.2). These barriers often stem from weaknesses in CRVS systems, including incomplete death registration coverage, shortages of trained medical certifiers of cause of death, or limited capacity and resources for data processing and reporting *(53)*.

Fig. 3.2. Timeliness of WHO Member States in reporting cause-of-death data, 2025



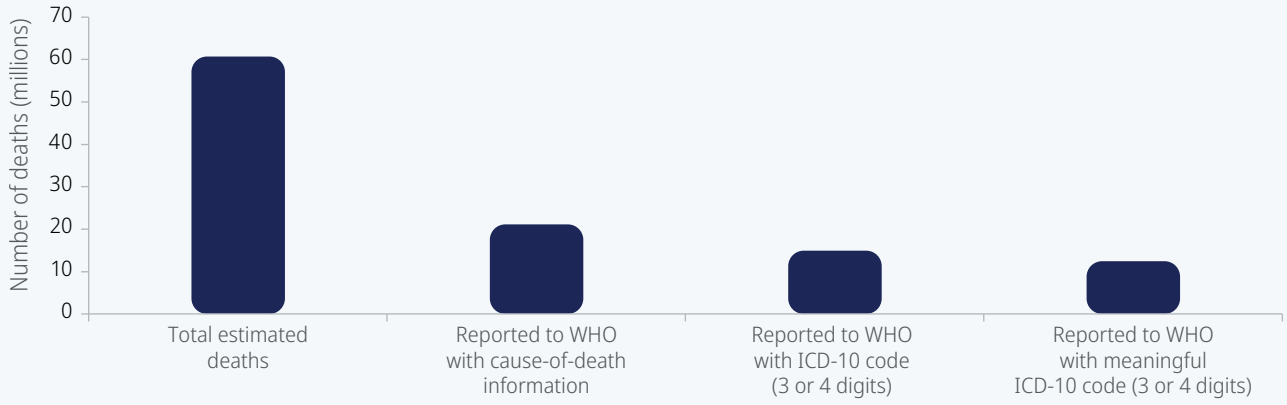
WHO: World Health Organization.
Note: Timeliness is defined as the difference between 2025 and the latest year of mortality data reported to WHO.
Source: WHO; 2026 *(53)*.

3.1.3 From death occurrence to meaningful registered cause-of-death data

Beyond reporting delays, critical shortcomings also remain in the completeness and quality of death registration data. Completeness refers to the proportion of all deaths in a population that are registered and reflects the coverage and reach of national CRVS systems. When data are incomplete, mortality levels cannot be reliably assessed. However, even where completeness is high, deficiencies in medical certification of the cause of death and ICD coding may compromise data quality. Missing, ill-defined or incorrectly assigned underlying causes of death – often recorded as non-specific or so-called garbage codes – reduce the precision and policy relevance of mortality statistics, limiting their usefulness for monitoring trends and informing public health decision-making.

In 2023, an estimated 61 million deaths occurred globally *(52)*. Of these, only around 21 million deaths were reported to WHO with cause-of-death information, representing about one third of all estimated deaths. When restricting to deaths reported using detailed ICD coding (with 3 or 4 digits), the number declines further to about 15 million deaths. After accounting for deaths assigned to ill-defined, vague or unspecified causes of death, only about 12 million deaths – one fifth of all estimated number of global deaths – have meaningful cause-of-death information (Fig. 3.3) *(53)*.

Fig. 3.3. Number of estimated deaths globally and number with cause-of-death information, 2023

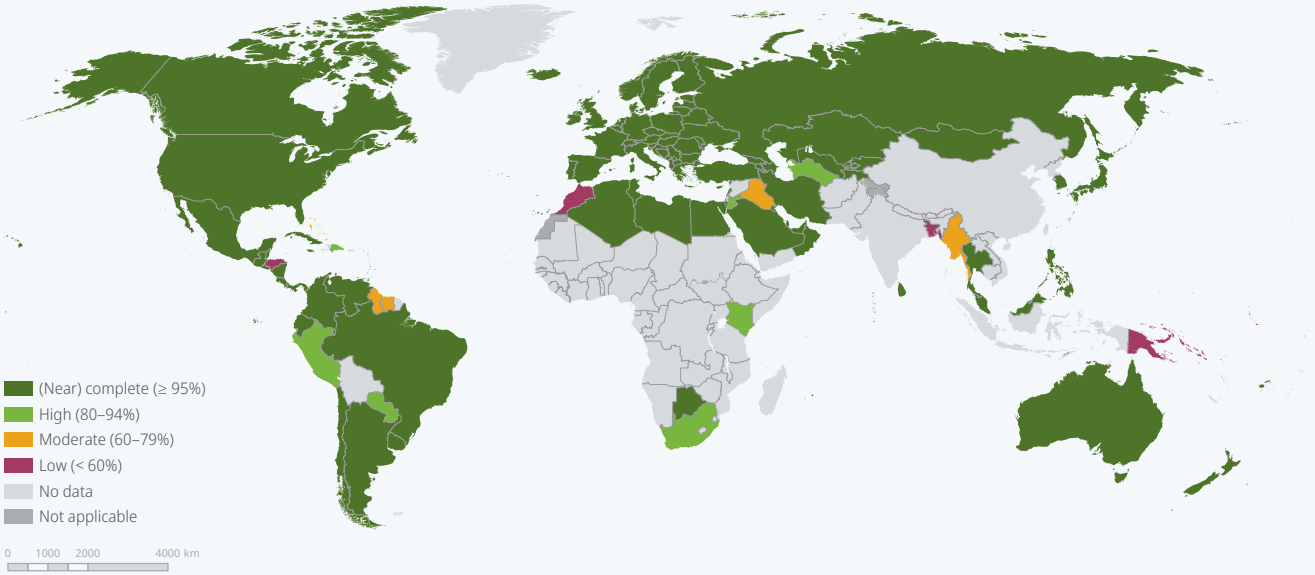


ICD: International Classification of Diseases; WHO: World Health Organization.
Note: The analysis was restricted to countries with reported cause-of-death data available for 2019 or later. For these countries, reported deaths were projected using log-linear trends fitted to 2000–2019 mortality data to allow for reporting lag. Projections assume a return to underlying pre-coronavirus disease 2019 mortality patterns by 2023.
Source: WHO; 2026 *(52,53)*.

3.1.4 Completeness of death registration

The latest estimates of the completeness of death registration in WHO Member States show noticeable geographic disparities. Complete or near-complete registration (≥ 95%) is largely seen in the Region of the Americas and the European Region, with a number of countries reaching similar levels in other WHO regions. High or moderate completeness (60–94%) is observed in several regions. In contrast, many countries in the African Region and the South-East Asia Region have incomplete data (< 60%) or lack recent data (Fig. 3.4) *(52,53)*. Overall, the pattern reflects persistent structural inequities in CRVS systems, with the strongest performance generally observed in high-income settings and the largest gaps in countries with the highest mortality burden.

Fig. 3.4. Completeness of death registration, by WHO Member State, 2013–2023



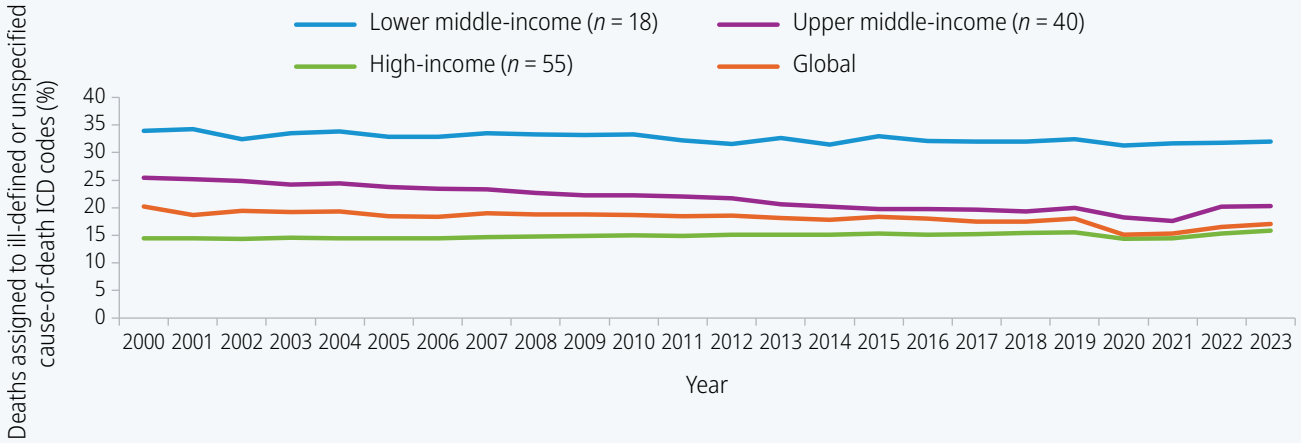
WHO: World Health Organization.
Note: Completeness of death registration was estimated until 2023 using death distribution methods and it applies to deaths of people 15 years and older.
Source: WHO; 2026 *(52,53)*.

3.1.5 Ill-defined or non-specified causes of death

Globally, about 17% of total deaths were assigned to ill-defined or non-specified causes of death[9] in 2023, down from about 20% in 2000, with a marked dip observed in 2020–2021, likely reflecting the highest attribution of deaths due to COVID-19 in elderly people during the pandemic period. However, trends over time differ substantially by country income level. High-income countries have remained stable over time, with ill-defined or unspecified cause-of-death coding levels consistently around 15% since 2000, suggesting a floor effect in mature civil registration systems. By around 2000, most countries had already transitioned to ICD-10 and established good medical certification, standardized coding practices and mechanism to query unclear diagnosis on death certificates, limiting further reductions in ill-defined or non-specified causes of death. Any remaining such coding likely reflects structural factors, such as multimorbidity at older ages and challenges in identifying a single underlying cause of death, rather than weaknesses in the classification system itself. In contrast, upper middle-income countries have experienced substantial declines in the proportion of deaths assigned to ill-defined or non-specified causes of death, with levels falling from about 25% in 2000 to around 20% by 2023. Lower middle-income countries showed higher levels in 2023 (around 30%) with only slight improvement over time, although these estimates are based on a relatively small number of countries and should therefore be interpreted with caution (Fig. 3.5) *(52,53)*.

[9] A selected set of ICD-10 ill-defined and unspecified codes were considered in this analysis: A40–A41 (streptococcal and other septicemia); C76, C80 and C97 (ill-defined cancer sites); D65 (disseminated intravascular coagulation); E86 (volume depletion – for example, dehydration); I10, I26.9, I46, I47.2, I49.0, I50, I51.4–I51.6, I51.9, I70.9, I95.9 and I99 (ill-defined cardiovascular); J81 and J96 (ill-defined respiratory); K72 (ill-defined hepatic failure); N17–N19 (ill-defined renal failure); P28.5 (respiratory failure of newborn); R00–R94 and R96–R99 (signs and symptoms not elsewhere classified); and Y10–Y34 and Y87.2 (injuries of undetermined intent).

Fig. 3.5. Percentage of deaths assigned to selected ill-defined or unspecified cause-of-death ICD codes, World Bank income group, 2000–2023

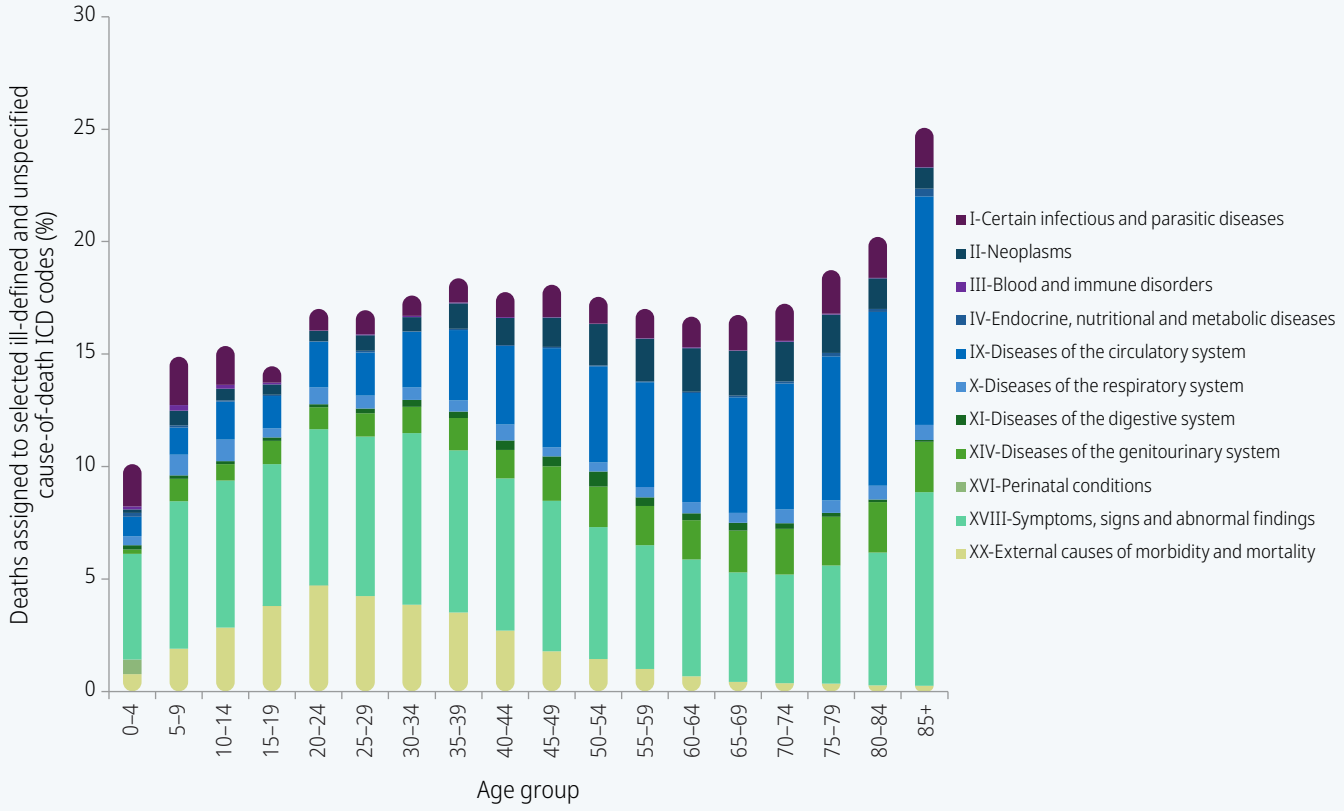


ICD: International Classification of Diseases; WHO: World Health Organization.
Note: The analysis was restricted to WHO Member States reporting detailed ICD-10 codes (3 or 4 digits) with at least two data points over the full period. Per cent of total deaths assigned to ill-defined or unspecified causes-of-death coding were weighted by the total number of estimated deaths from WHO global health estimates 2023; missing values were imputed using linear interpolation between observed data points and constant extrapolation beyond the observed range. Countries are categorized according to the World Bank income group classification for the 2026 fiscal year.
Source: WHO; 2026 *(52,53)*.

Beyond these overall trends, both the level and composition of ill-defined or unspecified cause-of-death coding vary markedly. Levels are low in early childhood and broadly stable through most adult ages, before increasing from mid-life and rising sharply after the age of 75 years. In adolescence and young adulthood, a relatively larger share of cause of death is external causes, reflecting challenges in certifying injury-related deaths. Up to 55–59 years, ill-defined or unspecified cause-of-death coding is mainly driven by symptoms, signs and abnormal findings, which indicates reliance on ill-defined causes in younger and middle-aged adults, potentially due to insufficient investigation. From 65 years onwards, circulatory diseases become increasingly prominent and eventually dominate at older ages, consistent with growing multimorbidity and greater difficulty in identifying a single underlying cause (Fig. 3.6). Overall, the pattern shows that ill-defined or unspecified cause-of-death coding increases with age and shifts in nature across the life course, reflecting distinct certification challenges at different stages *(53)*.

Deaths assigned to ill-defined or unspecified cause-of-death coding are also largely concentrated in a small number of ICD-10 chapters, with diseases of the circulatory system, and symptoms, signs and abnormal findings accounting for the largest shares (33% and 32%, respectively), followed by diseases of the genitourinary system (10%). Certain infectious and parasitic diseases, neoplasms and external causes account for 5–8% of ill-defined or unspecified cause-of-death coding, while most other chapters account for small proportions (0–3%) *(53)*. This concentration suggests that targeted improvements in certification and coding practices – particularly for circulatory system conditions and non-specific symptom-based diagnoses – could substantially reduce ill-defined or unspecified cause-of-death coding and enhance the usability of cause-of-death data for public health monitoring.

Fig. 3.6. Percentage of deaths assigned to selected ill-defined or unspecified cause-of-death ICD codes, by age group, latest available year during 2013–2023



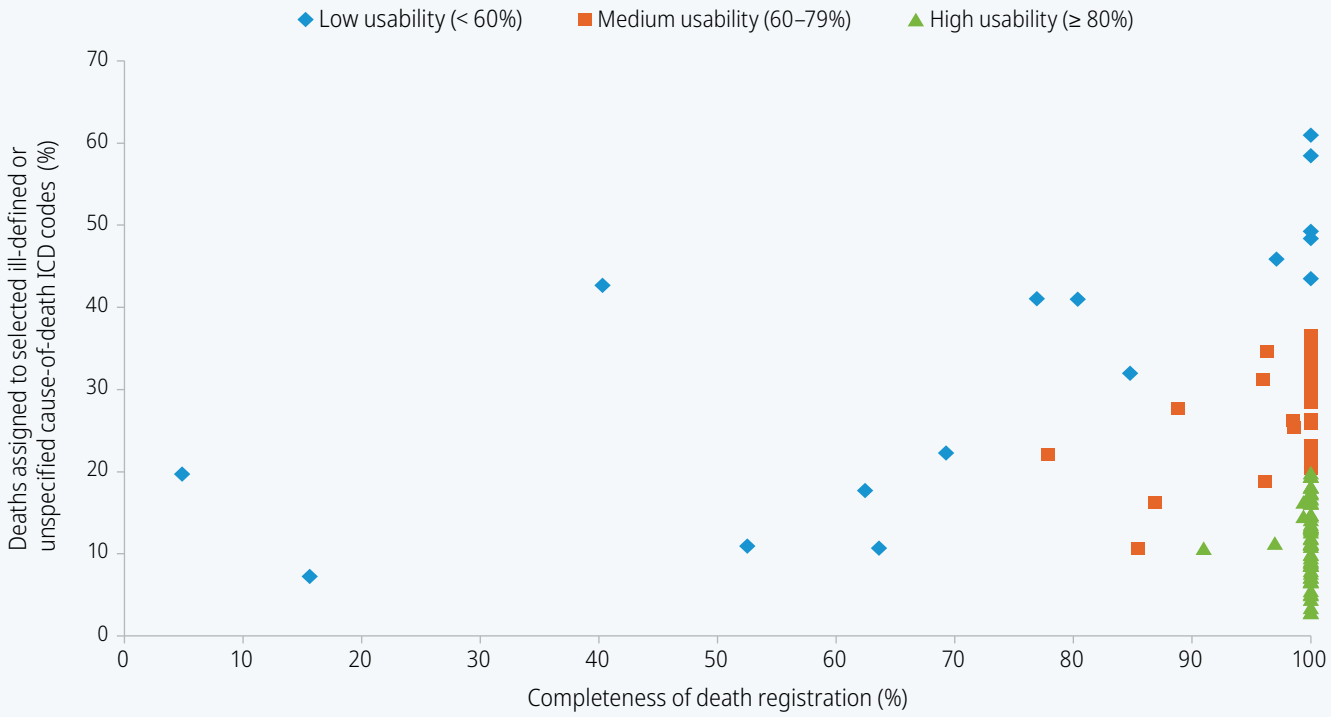
ICD: International Classification of Diseases; WHO: World Health Organization.
Note: The analysis was restricted to WHO Member States reporting detailed ICD-10 codes (3 or 4 digits). The percentage is the mean of the percentage of deaths assigned to selected ill-defined or unspecified cause-of-death ICD codes across countries by age.
Source: WHO; 2026 *(53)*.

3.1.6 Usability of cause-of-death data

Completeness of death registration and the quality of cause-of-death information vary markedly across countries. As shown in Fig. 3.7, countries are distributed across both measures, with substantial heterogeneity in the proportion of deaths assigned to ill-defined or unspecified cause-of-death codes even at similar levels of completeness. While higher completeness is often associated with lower ill-defined or unspecified cause-of-death coding, the relationship is not uniform. Several countries with near-complete registration still record moderate levels of ill-defined or unspecified cause-of-death codes, indicating that broad coverage does not automatically ensure precise cause-of-death information *(52,53)*.

To reflect this joint performance, WHO introduced the concept of usability, defined as the proportion of all deaths registered with a meaningful cause of death. Countries in the bottom-right corner of Fig. 3.7 – characterized by high completeness and low ill-defined or unspecified cause-of-death coding – are in the high usability category (57% of countries). In contrast, countries with either incomplete registration, high levels of ill-defined or unspecified cause-of-death coding, or both, fall into medium or low usability categories (28% and 15%, respectively) *(52,53)*. This finding underscores that strengthening mortality surveillance requires improvements not only in registration coverage but also in medical certification and coding practices.

Fig. 3.7. Percentage of cause-of-deaths assigned to selected ill-defined or unspecified cause-of-death ICD codes, by completeness of death registration and WHO usability category, latest year available during 2013–2023



ICD: International Classification of Diseases. WHO: World Health Organization
Note: The analysis was restricted to WHO Member States reporting detailed ICD-10 codes (3 or 4 digits). Completeness of death registration was estimated until 2023 using death distribution methods and applies to deaths in people 15 years and older.
Source: WHO; 2026 *(52,53)*.

3.1.7 Quality of cause-of-death data

Together with information on reporting status, WHO uses usability metrics to classify national death registration data reported into four quality categories: very low, low, medium and high.[10] The assessment for the period 2013–2023 shows substantial regional disparities in the overall quality of mortality data available to WHO. Globally, only 33% of Member States met the criteria for high-quality data – defined by sustained reporting, submission of the most recent year using ICD coding, and strong performance across key data quality dimensions – while a further 13% were classified as medium quality. In contrast, 54% of Member States were assessed as having low- or very-low-quality data or no data. Countries with high-quality mortality data are concentrated in the Region of the Americas and the European Region, whereas countries with low-quality data tend to be in the African Region, Eastern Mediterranean Region and South-East Asia Region due to weak or absent systems (Table 3.1) *(52,53)*. This uneven distribution constrains the global availability of reliable cause-of-death statistics and limits the capacity to monitor health trends equitably across regions.

[10] Countries considered to have high-quality mortality data are those reporting at least 5 years of data to WHO, reporting latest year of data by ICD code and with an average usability during this period of ≥ 80%. Countries considered to have medium-quality mortality data are those reporting at least 5 years of data to WHO, reporting latest year of data by ICD code and with an average usability between 60% and 79%; or are those reporting at least 5 years of data to WHO, reporting with a condensed cause-of-death list and average usability ≥ 80%. Countries considered to have low-quality mortality data are those reporting any data by ICD code with average usability between 40% and 59%; or are those reporting any data with a condensed cause-of-death list and average usability between 60% and 79%. All other countries reporting death registration to WHO are considered to have very- low-quality mortality data.

Table 3.1. Quality of cause-of-death registration data reported to WHO by Member States, by WHO region, 2013–2023

WHO region	Number of Member States providing:				Total
	Very-low-quality or no data	Low-quality data	Medium-quality data	High-quality data	
African Region	43	1	2	1	47
Region of the Americas	3	7	6	19	35
South-East Asia Region	7	1	2	0	10
European Region	2	4	12	35	53
Eastern Mediterranean Region	8	10	1	2	21
Western Pacific Region	13	6	2	7	28
Global	76 (39%)	29 (15%)	25 (13%)	64 (33%)	194 (100%)

WHO: World Health Organization.
Source: WHO; 2026 *(52,53)*.

A number of countries have now made substantial improvements in both completeness and quality of cause-of-death assignment in death registration data, and a few examples are highlighted in section 3.2.

Strengthening mortality surveillance requires sustained investment in robust CRVS systems, improved medical certification of cause of death and consistent implementation of ICD standards. The COVID-19 pandemic further highlighted the critical importance and vulnerability of mortality surveillance systems worldwide. In many countries, delays in death registration and limited availability of cause-of-death data hindered the ability to rapidly assess the full mortality impact of the pandemic and guide timely public health responses. The forthcoming WHO global strategy for strengthening national mortality systems *(56)* emphasizes the need for stronger institutional capacity for governance, sustainable financing, and improvements in the timeliness, completeness and reliability of mortality data. Such data are not only essential for monitoring trends in population health, but also for informing equitable policy decisions, allocating resources effectively and responding to emerging and future public health challenges.

In many low-income and some lower middle-income countries, routine mortality data systems are still developing and data remain incomplete. In these cases, governments and global health agencies often rely on complementary sources such as household surveys, sample registration systems and verbal autopsy studies to fill information gaps. While these sources provide valuable insights, they are typically periodic and cannot substitute for continuous, nationally owned mortality data systems. Recent funding disruptions have affected major international survey programmes, which further highlights the vulnerability of health information systems that rely heavily on externally funded data collection. This underscores the broader need for resilient essential data and digital health infrastructure capable of producing reliable, timely and actionable information even during instability. Investments in digital health infrastructure, such as interoperable platforms, secure data architecture and scalable digital tools, help ensure countries can collect and integrate health data continuously. Strengthening CRVS systems is therefore both a technical priority for improving mortality measurement and a key component of national data sovereignty, enabling countries to generate and use their own data to guide public health action.

3.2 CRVS strengthening in action: selected country experiences across WHO regions

Strong CRVS systems are essential for producing timely, reliable and internationally comparable mortality data for health planning, monitoring and accountability. WHO has established and maintains the global binding standards *(55)* for medical certification of cause of death, including the ICD and the international form of the medical certificate of cause of death, and supports their implementation within CRVS systems. WHO develops and maintains ICD-11 — a fully digital, multilingual, free, and Application Programming Interface (API)-accessible classification that embeds the international mortality coding rules, supports post-coordination, and enables direct integration into national electronic death registration systems — alongside an end-to-end suite of tools: the Verbal autopsy instrument for deaths occurring outside health facilities, a common dataset definition for electronic medical certificates of cause of death (eMCCD) data, the Digital open rule integrated cause of death selection (DORIS) for automated selection of the underlying cause of death *(57)*, CodEdit for quality assurance *(63)*, and Analysing mortality and causes of death (ANACOD-3) for analysis of mortality and cause-of-death data *(64)*.

The following country experiences illustrate how applying these standards and tools, alongside digitalization and capacity-building, has led to measurable improvements in mortality data quality, coverage and use. These country experiences demonstrate how sustained commitment to CRVS strengthening, including cause of death, supported by WHO-recommended standards and tools, can translate into practical system improvements. Continued investment in standardized medical certification, classification and capacity-building remains essential to ensure mortality data are fit for use at national, regional and global levels.

Bhutan

Bhutan is strengthening its CRVS system through the nationwide integration of ICD-11 into its electronic patient information system. As such, the country has positioned itself among the first countries globally to fully adopt ICD-11 within a national digital health platform. Led by the Ministry of Health with WHO technical and financial support, Bhutan began a national ICD-11 roll-out in December 2024 to standardize morbidity and mortality coding and enable real-time digital medical certification. Implementation was supported by a robust digital platform, the use of the WHO ICD-11 API and DORIS *(57)* tool, as well as large-scale capacity-building through training of trainers that reached more than 1300 health professionals. Despite connectivity and digital literacy challenges, targeted solutions enabled service continuity during internet outages *(58)*. Early results showed improved medical certification of cause of death based on ICD-11 and more consistent mortality statistics to support health planning for a population of about 800 000 with nearly 5000 deaths occurring annually *(12)*.

Chile

Chile has integrated CRVS within its national digital government and health data modernization agenda, and has embedded birth and death registration, national identification and statistical production within a coherent legal and digital framework. Daily data sharing between the Ministry of Health and the civil registry has strengthened the timeliness, completeness and traceability of mortality reporting. Chile has been reporting cause-of-death data to WHO since 1954 and has adopted every revision of the ICD over the years *(53)*. Cause-of-death data are complete and of high quality *(59)*. Under the country's National Health Strategy 2021–2030, Chile established a formal national target to transition mortality statistics to ICD-11 and positioned the classification as a national data standard. A structured mortality pilot project confirmed the feasibility of ICD-11, preserved continuity with ICD-10 time series and demonstrated improved clinical specificity in underlying cause-of-death coding *(60)*. The system is supported by automated cause-of-death coding using Iris software and there are plans to transition to Iris version 6 which is based on ICD-11 *(61)*. Chile's approach highlights how adoption of ICD-11 can enhance the quality, comparability and policy relevance of mortality statistics within a sustainable CRVS system.

Democratic Republic of the Congo

The Democratic Republic of the Congo, with a population of more than 100 million *(12)*, is strengthening its CRVS system through a pilot project to implement ICD-11 for hospital-based cause-of-death surveillance. This development marks one of the early applications of ICD-11 in French-speaking countries in Africa. With WHO technical support, the country launched a structured pilot project in 2021, which involved central and provincial health authorities and integrated ICD-11 coding into the national DHIS2 platform. Capacity-building at multiple administrative levels enabled standardized medical certification and coding of underlying cause of death, generating for the first time mortality estimates based on ICD-11 *(62)*. Interpreting cause-of-death statistics from health-facility data should be done with caution as most deaths occur outside health facilities, as is the case in most countries in sub-Saharan Africa. Nevertheless, the initiative demonstrated the feasibility of applying ICD-11 within resource-constrained and French-speaking contexts, strengthened national coding capacity, and provided evidence to inform future CRVS scale-up and alignment with international standards on mortality reporting.

Kazakhstan

Kazakhstan has been producing nationally representative cause-of-death statistics for several decades with data regularly reported to WHO *(53)*. The country is further advancing its CRVS system as part of a broader national digital health transformation, including transitioning from ICD-10 to ICD-11 as a strategic priority for improving mortality and morbidity data. Led by the Ministry of Health with WHO technical support, Kazakhstan made use of high levels of digital readiness in health facilities and integration with national health registers to improve the completeness and timeliness of death registration and reporting. A structured, multiyear ICD-11 implementation roadmap, which included full translation and verification of ICD-11 into Kazakh, interagency governance, system adaptation and cascade training, has strengthened national coding capacity. WHO-supported ICD-11 training using real mortality data which has further improved consistency and sustainability of the data. These developments have positioned Kazakhstan to produce internationally comparable statistics for evidence-based decision-making.

Malaysia

Malaysia, with nearly 200 000 deaths occurring annually *(12)*, has strengthened its CRVS system through sustained legal, institutional and digital reforms. ICD-11 has played a central role in improving the completeness, quality and use of cause-of-death data. Under the leadership of the Ministry of Health, in coordination with the civil registration authority and the national statistics office, and with support from WHO, Malaysia enhanced interagency data integration and introduced verbal autopsy to improve ascertainment of cause-of-death, particularly for deaths within the community. These efforts were reinforced by digital transformation initiatives aimed at improving interoperability, data exchange and dissemination of vital statistics. Malaysia's early and phased transition to ICD-11, supported by structured training, system mapping and quality assurance mechanisms, has increased diagnostic specificity and international comparability of mortality data, thus strengthening their use for health planning, monitoring and reporting.

Morocco

Morocco has strengthened mortality data systems through the transition from a centralized system to a decentralized digital cause-of-death reporting platform aligned with WHO standards. Previously, the system covered about 30% of the population, with a high proportion of ill-defined causes of death. In partnership with the Ministry of the Interior and with the support of Bloomberg Philanthropies Data for Health Initiative, the Ministry of Health and Social Protection developed a national web-based platform enabling decentralized data entry, automated coding using Iris software and real-time data quality controls. Since implementation, population coverage and the number of processed death certificates have increased substantially, while ill-defined causes have declined. Integration of WHO-recommended tools, including CodEdit *(63)* and ANACOD-3 *(64)*, has strengthened data quality and use. Discussions are ongoing on transitioning to ICD-11 and using its digital system to further enhance the comparability and interoperability of mortality data.

References[11]

1. World health statistics 2026. The global health observatory [online database]. Geneva: World Health Organization; 2026 (https://www.who.int/data/gho/publications/world-health-statistics).

2. AIDS, crisis and the power to transform: UNAIDS Global AIDS update 2025. Geneva: Joint United Nations Programme on HIV/AIDS; 2025 (https://www.unaids.org/en/resources/documents/2025/2025-global-aids-update).

3. HIV. The global health observatory [online database]. Geneva: World Health Organization; 2024. (https://www.who.int/data/gho/data/themes/hiv-aids).

4. The end TB strategy. Geneva: World Health Organization; 2015 (https://iris.who.int/handle/10665/331326).

5. Global tuberculosis report 2025. Geneva: World Health Organization; 2025. (https://iris.who.int/handle/10665/383364). Licence: CC BY-NC-SA 3.0 IGO.

6. World malaria report 2025: addressing the threat of antimalarial drug resistance. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/383951). Licence: CC BY-NC-SA 3.0 IGO.

7. Global technical strategy for malaria 2016–2030. Geneva: World Health Organization; 2015 (https://iris.who.int/handle/10665/176712).

8. Global health sector strategies on, respectively, HIV, viral hepatitis and sexually transmitted infections for the period 2022–2030. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/360348, accessed 1 May 2026). Licence: CC BY-NC-SA 3.0 IGO.

9. Global hepatitis report 2026. Geneva: World Health Organization; 2026 (https://iris.who.int/handle/10665/385385). Licence: CC BY-NC-SA 3.0 IGO.

10. Neglected tropical diseases. The global health observatory [online database]. Geneva: World Health Organization; 2026 (https://www.who.int/data/gho/data/themes/neglected-tropical-diseases).

11. Ending the neglect to attain the sustainable development goals: a road map for neglected tropical diseases 2021–2030. Geneva: World Health Organization; 2020 (https://iris.who.int/handle/10665/338565). Licence: CC BY-NC-SA 3.0 IGO.

12. World population prospects 2024, online edition. New York, NY: United Nations, Department of Economic and Social Affairs, Population Division; 2024 (https://population.un.org/wpp/, accessed 14 April 2026).

13. GLASS dashboard [online database]. Geneva: World Health Organization; 2026 (https://worldhealthorg.shinyapps.io/glass-dashboard/, accessed 14 April 2026).

14. World Health Organization, United Nations Children's Fund & International Bank for Reconstruction and Development/The World Bank. Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group joint child malnutrition estimates: key findings of the 2025 edition. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/381846). Licence: CC BY-NC-SA 3.0 IGO.

15. World Health Organization & United Nations Children's Fund. Global nutrition targets 2030: topical briefs on maternal, infant and young child nutrition. Geneva: World Health Organization; 2025 (https://doi.org/10.2471/B09485). Licence: CC BY-NC-SA 3.0 IGO.

16. WHO global anaemia estimates: key findings, 2025. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/382291). Licence: CC BY-NC-SA 3.0 IGO.

[11] The references were all accessed on 26 March 2026, unless otherwise noted.

17. WHO global report on trends in prevalence of tobacco use 2000–2024 and projections 2025–2030. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/383060). Licence: CC BY-NC-SA 3.0 IGO.

18. The Global Health Observatory. WHO global information system on alcohol and health [online database]. Geneva: World Health Organization; 2026 (https://www.who.int/data/gho/data/themes/global-information-system-on-alcohol-and-health).

19. Global alcohol action plan 2022–2030. Geneva: World Health Organization; 2024 (https://iris.who.int/handle/10665/376939). Licence: CC BY-NC-SA 3.0 IGO.

20. Progress on household drinking-water, sanitation and hygiene 2000–2024: special focus on inequalities. Geneva: World Health Organization and United Nations Children's Fund; 2025 (https://iris.who.int/handle/10665/383246). Licence: CC BY-NC-SA 3.0.

21. The Global Health Observatory. SDG 6.3.1 proportion of safely treated domestic wastewater flows [online database]. Geneva: World Health Organization; 2025 (https://www. who.int/data/gho/data/indicators/indicator-details/GHO/WSH_DOMESTIC_WASTE_SAFELY_TREATED).

22. CRS: Creditor Reporting System (flows). In: OECD data explorer [database]. Paris: Organisation for Economic Co-operation and Development; 2026 (https://data-explorer.oecd.org/vis?lc=en&df[ds]=DcdDisseminateFinalDMZ&df[id]=DSD_CRS%40DF_CRS&df[ag]=OECD.DCD.FSD&dq=DAC..1000.100._T._T.D.Q._T..&lom=LASTNPERIODS&lo=5&to[TIME_PERIOD]=false).

23. The Global Health Observatory. Household air pollution data [online database]. Geneva: World Health Organization; 2026 (https://www.who.int/data/gho/data/themes/air-pollution/household-air-pollution, accessed 12 May 2026).

24. The Global Health Observatory. Ambient air pollution data [online database]. Geneva: World Health Organization; 2026. (https://www.who.int/data/gho/data/themes/air-pollution/ambient-air-pollution, accessed 12 May 2026).

25. Violence against women prevalence estimates, 2023: global, regional and national prevalence estimates for intimate partner violence against women and non-partner sexual violence against women. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/383559). Licence: CC BY-NC-SA 3.0 IGO.

26. SDG indicators. Regional groupings used in report and statistical annex [internet]. New York, NY: United Nations Statistics Division; 2026 (https://unstats.un.org/sdgs/indicators/regional-groups/).

27. Tracking universal health coverage: 2025 global monitoring report. Geneva: World Health Organization, International Bank for Reconstruction and Development/The World Bank; 2025 (https://iris.who.int/handle/10665/384883). Licence: CC BY-NC-SA 3.0 IGO.

28. Estimates and projections of family planning indicators 2024 [internet]. New York, NY: United Nations, Department of Economic and Social Affairs, Population Division; 2024 (https://www.un.org/development/desa/pd/data/family-planning-indicators).

29. Our focus. Targets [internet]. Geneva: Every Woman Every Newborn Everywhere; 2024 (https://ewene.org/accelerate-maternal-and-newborn-survival/the-targets/).

30. Joint UNICEF-WHO Database on Skilled Birth Attendance 2024. New York, NY: United Nations Children's Fund and World Health Organization; 2025 (https://data.unicef.org/).

31. Immunization agenda 2030: a global strategy to leave no one behind. Geneva: World Health Organization; 2020 (https:// www.who.int/teams/immunization-vaccines-and-biologicals/strategies/ia2030).

32. Immunization dashboard: global [website]. Geneva: World Health Organization; 2025 (https://immunizationdata.who.int/).

33. Global status report on alcohol and health and treatment of substance use disorders. Geneva: World Health Organization; 2024 (https://iris.who.int/handle/10665/377960). Licence: CC BY-NC-SA 3.0 IGO.

34. Inter-Agency and Expert Group on Sustainable Development Goal Indicators. Note by Secretary-General. New York, NY: United Nations Economic and Social Council; 2024 (E/CN.3/2025/6; https://docs.un.org/en/E/CN.3/2025/6).

35. State of the world's nursing 2025: investing in education, jobs, leadership and service delivery. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/381329). Licence: CC BY-NC-SA 3.0 IGO.

36. National health workforce accounts data portal [online database]. Geneva: World Health Organization; 2026 (apps.who.int/nhwaportal).

37. The impact of suspensions and reductions in health official development assistance on health systems: rapid WHO country office stock take: summary of results from 108 WHO country offices, 7 March–2 April 2025 (10 April 2025 version). Geneva: World Health Organization; 2025 (https://www.who.int/publications/m/item/the-impact-of-suspensions-and-reductions-in-health-official-development-assistance-on-health-systems).

38. Electronic IHR State Parties self-assessment annual reporting tool. IHR Score per capacity [online database]. Geneva: World Health Organization; 2026 (https://extranet.who.int/e-spar/).

39. Global health expenditure database [online database]. Geneva: World Health Organization; 2025 (https://apps.who.int/nha/database/).

40. Official development assistance (ODA) for medical research and basic health sectors per capita, by recipient country. Global observatory on health research and development [website]. Geneva: World Health Organization; 2025 (https://www.who.int/observatories/global-observatory-on-health-research-anddevelopment/indicators/official-development-assistance-formedical-research-and-basic-health-sectors-per-capita-byrecipient-country).

41. Trends in maternal mortality estimates 2000 to 2023: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/381012). Licence: CC BY-NC-SA 3.0 IGO.

42. United Nations Inter-agency Group for Child Mortality Estimation (UN IGME). Levels & trends in child mortality: report 2025 – estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation. New York: United Nations Children's Fund (UNICEF); 2026 (https://childmortality.org/wp-content/uploads/2026/03/UNIGME-Child-Mortality-Report-2025.pdf).

43. Global health estimates 2021 [internet]. Geneva: World Health Organization; 2024 (https://www.who.int/data/global-health-estimates).

44. Global status report on road safety 2023. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/375016). Licence: CC BY-NC-SA 3.0 IGO.

45. The Global Health Observatory. Joint ambient and household air pollution: burden of disease [online database]. Geneva: World Health Organization; 2026. (https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/joint-effects-of-air-pollution, accessed 12 May 2026).

46. Burden of disease attributable to unsafe drinking-water, sanitation and hygiene, 2019 update. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/370026). Licence: CC BY-NC-SA 3.0 IGO.

47. Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV) [internet]. Geneva: World Health Organization; 2020 (https://www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)).

48. Statement on the fifteenth meeting of the International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic [internet]. Geneva: World Health Organization; 2023 (https://www.who.int/news/item/05-05-2023-statement-on-the-fifteenth-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-coronavirus-disease-(covid-19)-pandemic).

49. Global excess deaths associated with COVID-19: modelled estimates [internet]. Geneva: World Health Organization; 2026 (https://www.who.int/data/sets/global-excess-deaths-associated-with-covid-19-modelled-estimates, accessed 12 May 2026).

50. Tracking SARS-CoV-2 variants [internet]. Geneva: World Health Organization; 2026 (https://www.who.int/activities/tracking-SARS-CoV-2-variants).

51. Methods for estimating the excess mortality associated with the COVID-19 pandemic. Geneva: World Health Organization; 2023 (https://www.who.int/publications/m/item/methods-for-estimating-the-excess-mortality-associatedwith-the-covid-19-pandemic).

52. Global health estimates 2023 [internet]. Geneva: World Health Organization; 2026 (forthcoming)

53. WHO Mortality Database [online database]. Geneva: World Health Organization; 2026 (https://www.who.int/data/data-collection-tools/who-mortality-database, accessed 31 January 2026).

54. Constitution of the World Health Organization. Geneva: World Health Organization; 1948 (https://apps.who.int/gb/bd/pdf/bd47/en/constitution-en.pdf).

55. WHO Nomenclature Regulations 1967. Geneva: World Health Organization; 1967 (WHA20.18; https://iris.who.int/handle/10665/89478).

56. Strengthening national mortality data systems: a global strategy for monitoring mortality dynamics, enabling public health action, and enhancing pandemic preparedness. Geneva: World Health Organization; 2026 (forthcoming).

57. DORIS. WHO Digital Open Rule Integrated Cause of Death Selection [internet]. Geneva: World Health Organization; 2025 (https://icd.who.int/doris/).

58. Monitoring progress on universal health coverage and the health-related Sustainable Development Goals in the South-East Asia Region: 2025 update. New Delhi: World Health Organization Regional Office for South-East Asia; 2025 (https://iris.who.int/handle/10665/383066). Licence: CC BY-NC-SA 3.0 IGO.

59. WHO methods and data sources for country-level causes of death 2000–2021. Geneva: World Health Organization; 2024 (https://cdn.who.int/media/docs/default-source/gho-documents/global-health-estimates/ghe2021_cod_methods.pdf?sfvrsn=dca346b7_1).

60. Codificação da mortalidade com a CID-11 no Chile: principais resultados e perspectivas de implementação [Mortality coding with ICD-11 in Chile: main results and prospects for implementation]. Rev Panam Salud Publica. 2025:49:e50 (https://doi.org/10.26633/RPSP.2025.50) (in Spanish).

61. Iris version 6 is available for testing with ICD-11 [internet]. Bonn: Federal Institute for Drugs and Medical Devices; 2026 (https://www.bfarm.de/EN/Code-systems/Collaboration-and-projects/Iris-Institute/Iris-software/_node.html).

62. Angendu KB, Akilimali PZ, Mwamba DK, Komakech A, Magne J. Cardiovascular disease and diabetes are among the main underlying causes of death in twenty healthcare facilities across two cities in the Democratic Republic of Congo. Int J Environ Res Public Health. 2024;21(11):1450 (https://doi.org/10.3390/ijerph21111450).

63. Implementing basic checks on cause-of-death data. CodEdit tool. Geneva: World Health Organization; 2024 (https://www.who.int/standards/classifications/classification-of-diseases/services/codedit-tool).

64. Analysing mortality and causes of death 3 (ANACoD3). Geneva: World Health Organization; 2024 (https://www.who.int/standards/classifications/classification-of-diseases/services/analysing-mortality-levels-and-causes-of-death).

Annex: Summary of the methods

Chapter 1

The analysis presented in this chapter is based on data available from the global monitoring of health-related SDG indicators as of March 2026. Data were compiled from publications and databases produced and managed by WHO or UN partner entities. The method used for each indicator is available from the cited references for the chapter. The data reference years for each indicator differ as data series are updated at different times and with different time lags between the data reference year and the publication year. Unless otherwise stated, the assessment of progress towards reaching a target is determined by whether the target will be met if the current average annual rate of change applies until the target year.

Chapter 2

The analysis presented in this chapter is based on the WHO global excess mortality estimates associated with the COVID-19 pandemic and estimates on life expectancy and HALE by region and sex.

The global excess mortality estimates were produced using data from multiple sources, including national vital registration data compiled from various repositories as well as all-causes mortality estimates from the UN Inter-agency Group for Child Mortality Estimation (UN IGME) 2023 *(1)* for children younger than 15 years and the global health estimates 2021 *(2)* for adults older than 15 years. A summary of the methods used to derive the estimates can be accessed online *(3)*. The methods were developed with the support of and guidance from the Technical Advisory Group on COVID-19 Mortality Assessment (from 1 February 2021 to 31 December 2025) *(4)*. All external experts submitted to WHO a declaration of interest disclosing potential conflicts of interest that might affect, or might reasonably be perceived to affect, their objectivity and independence in relation to the subject matter of the guidance. WHO reviewed each of the declarations and concluded that none could give rise to a potential or reasonably perceived conflict of interest related to the subjects covered by the guidance.

The life expectancy and HALE estimates are part of the WHO global health estimates and were produced using data from different sources, including national vital registration data, latest estimates from UN partners and interagency groups, and the Institute for Health Metrics and Evaluation Global Burden of Disease and other scientific studies. The life expectancy and HALE estimates also incorporate the WHO estimates for the global excess deaths associated with the COVID-19 pandemic for the assessment of all-cause mortality for the years 2020–2023. The summary of the methods of the life expectancy and HALE estimates can be accessed online *(5)*.

Both the global health estimates 2023 and the global excess mortality estimates were reviewed by WHO Member States through consultation with national focal points and WHO country and regional offices.

Chapter 3

The analysis presented in this chapter is based on the WHO Mortality Database as of January 2026, which includes deaths registered in national vital registration systems, with underlying cause of death as coded by the relevant national authority. These data are official national statistics in the sense that they have been transmitted to WHO by the competent authorities of the countries concerned *(6)*. The completeness figures draw on analysis of the global health estimates 2023 which is explained in Chapter 2. The country stories were prepared in collaboration with WHO regional offices, WHO country offices and government officials.

References[1]

1. Child mortality, stillbirth, and causes of death estimates [online database]. New York, NY: UN Inter-agency Group for Child Mortality Estimation; 2025 (https://childmortality.org/).

2. WHO methods and data sources for life tables 2000–2021. Geneva: World Health Organization; 2024 (https://cdn.who.int/media/docs/default-source/gho-documents/global-health-estimates/ghe2021_lifetable_methods.pdf?sfvrsn=a21ddfdb_1).

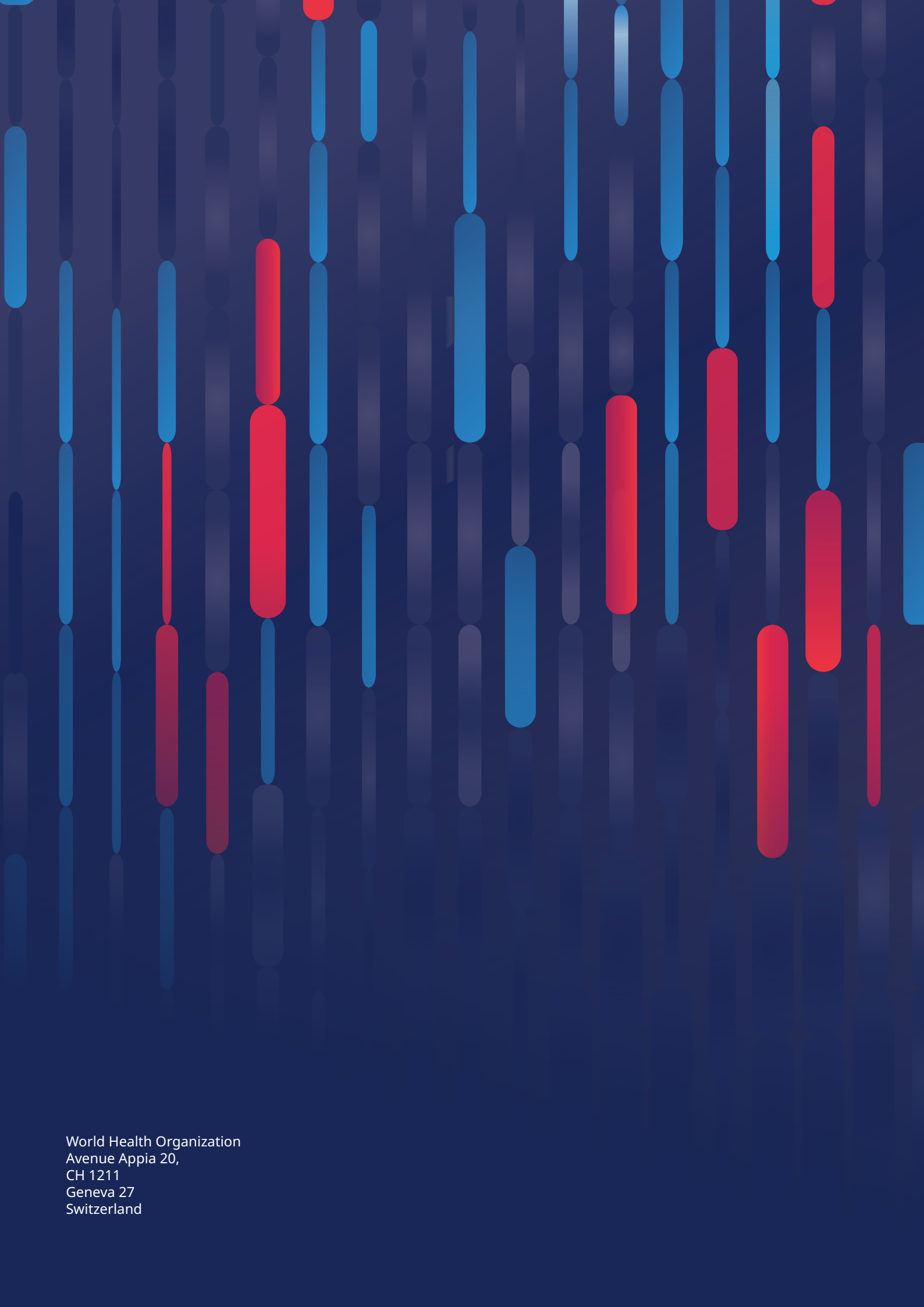
3. Methods for estimating the excess mortality associated with the COVID-19 pandemic. Geneva: World Health Organization; 2023 (https://www.who.int/publications/m/item/methods-for-estimating-the-excess-mortality-associatedwith-the-covid-19-pandemic).

4. Technical Advisory Group on COVID-19 Mortality Assessment. [internet]. Geneva: World Health Organization; 2026 (https://www.who.int/data/technical-advisory-group/covid-19--mortality-assessment/membership).

5. Global health estimates 2023. [internet]. Geneva: World Health Organization; 2026 (forthcoming).

6. WHO Mortality Database [online database]. Geneva: World Health Organization; 2026 (https://www.who.int/data/data-collection-tools/who-mortality-database, accessed 31 January 2026).

[1] The references were all accessed on 23 March 2026, unless otherwise noted.



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