



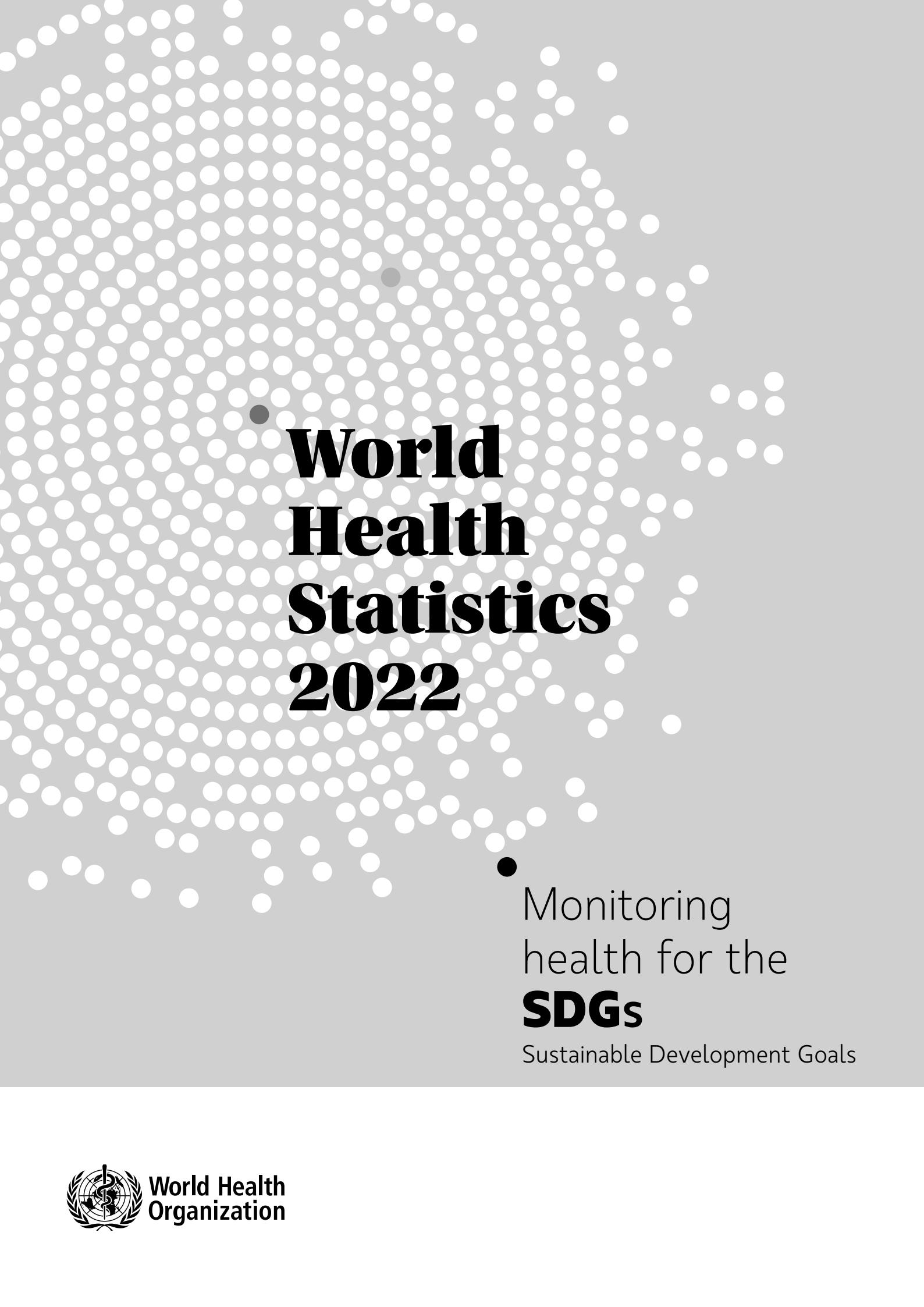
World Health Statistics **2022**

Monitoring
health for the
SDGs

Sustainable Development Goals



World Health
Organization



World Health Statistics **2022**

Monitoring
health for the
SDGs

Sustainable Development Goals



World Health
Organization

World health statistics 2022: monitoring health for the SDGs, sustainable development goals

ISBN 978-92-4-005114-0 (electronic version)

ISBN 978-92-4-005115-7 (print version)

© World Health Organization 2022

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (<http://www.wipo.int/amc/en/mediation/rules/>).

Suggested citation. *World health statistics 2022: monitoring health for the SDGs, sustainable development goals*. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at <http://apps.who.int/iris>.

Sales, rights and licensing. To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <https://www.who.int/copyright>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

• Contents

• Foreword.....	vi
• Abbreviations and acronyms	vii
• Introduction	viii
• Key messages	ix
• Progression and impact of the COVID-19 pandemic.....	1
• Healthy life expectancy and burden of disease.....	19
• Risk factors for health	41
• Pathway to Universal Health Coverage.....	59
• Annex 1 - Regional highlights	75
• Annex 2 - Country, WHO region and global health estimates.....	91
• Annex 3 - Regional groupings	127

• Foreword



Over two years since it first began, the COVID-19 pandemic continues to cause major disruptions to health systems around the world. Not only is the delivery of essential health services delayed, the pandemic has also interrupted global efforts to monitor and track health data, depriving analysts and researchers of key information at a very critical time.

Many national statistical offices and ministries of health employed new data collection methods to circumvent catastrophe. Unfortunately, not all Member States had the resources or capacity to adapt, leaving their statistical and informational systems even further behind.

At the time of writing, more than 500 million COVID-19 cases and 6 million deaths have been reported to WHO. But limitations in testing and many countries' health information systems mean the true toll is much higher. For this reason, WHO has also produced estimates of excess mortality associated directly or indirectly with the COVID-19 pandemic.

WHO's *World health statistics 2022* includes an analysis of the epidemiological evolution of the pandemic over the last two years, including the impact of excess mortality, along with a summary of disruptions to health services worldwide.

The report also presents the latest data for more than 50 health-related indicators for the Sustainable Development Goals and WHO's "Triple Billion" targets, and provides comprehensive country-level statistics for both burden of disease and service delivery for the first year of the pandemic.

It shows overall increases in life expectancy and healthy life expectancy over the last 20 years, as a result of reductions in maternal and child mortality and in premature mortality due to noncommunicable diseases, which have both had a positive impact on global health.

The report also includes data on the two main indicators for universal health coverage: the extent to which people have access to essential health services; and the extent to which they face financial hardship as a result of having to pay for those services out of their own pockets. While health service coverage has improved since 2000, catastrophic health expenditure has worsened. We expect that the COVID-19 pandemic will slow the progress made in service coverage, and worsen financial protection, particularly for the most vulnerable populations.

Despite these setbacks, WHO remains committed to supporting countries to improve health data and information systems, to show who is being left behind and where countries can make the best investments for the biggest health gains.

A handwritten signature in blue ink, appearing to read "Tedros Adhanom Ghebreyesus".

Dr Tedros Adhanom Ghebreyesus
Director-General
World Health Organization

• Abbreviations and acronyms

AIDS	acquired immunodeficiency syndrome
AFR	African Region
AMR	Region of the Americas
BMI	body mass index
COVID-19	coronavirus disease 2019
DALY	disability-adjusted life year
DOTS	directly-observed treatment, short course
DTP3	third dose of diphtheria, tetanus toxoid and pertussis-containing vaccine
EMR	Eastern Mediterranean Region
EUR	European Region
GPW13	WHO's Thirteenth Global Programme of Work
HALE	healthy life expectancy
HIC	high-income country
HIV	human immunodeficiency virus
HPV	human papillomavirus
IHR	International Health Regulations (2005)
ITN	insecticide-treated nets
LIC	low-income country
LMIC	lower-middle-income country
MCV2	second dose of measles-containing vaccine
MNS	mental, neurological and substance use disorders
NCD	noncommunicable disease
NTD	neglected tropical disease
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
PCV3	third dose of pneumococcal-containing vaccine
PHC	primary health care
PM2.5	particulate matter 2.5 micrometres or less in diameter
SAGE	Strategic Advisory Group of Experts on Immunization
SARS-CoV-2	severe acute respiratory syndrome coronavirus 2
SDG	Sustainable Development Goal
SEAR	South-East Asia Region
SPAR	State party self-assessment annual reporting tool
TAG	Technical Advisory Group (on COVID-19 Mortality Assessment)
TB	tuberculosis
UHC	universal health coverage
UI	uncertainty interval
UMIC	upper-middle-income country
UN DESA	United Nations Department of Economic and Social Affairs
UNICEF	United Nations Children's Fund
WASH	water, sanitation and hygiene
WHO	World Health Organization
WPR	Western Pacific Region

• Introduction

The *World health statistics* report is the World Health Organization's (WHO) annual compilation of health and health-related indicators for its 194 Member States, which has been published since 2005. The Division of Data, Analytics and Delivery for Impact produces this report, in collaboration with WHO technical departments and Regional Offices. The 2022 edition reviews more than 50 health-related indicators from the Sustainable Development Goals (SDGs) and WHO's Triple Billion targets, with a focus on the impact of the coronavirus disease 2019 (COVID-19) pandemic.

Since early 2020, the COVID-19 pandemic has posed a major threat to global health and the functioning of health systems. Essential health services have experienced widespread disruption due to pandemic-related social restrictions, high patient caseloads, under-resourced health facility infrastructures, and shortages of medical equipment, medicines, diagnostics and staff, with health care workers placed under an enormous strain.

This report summarizes the impact of COVID-19 on SDG indicators using currently available data. Chapter 1 presents the most recent data on COVID-19 cases, deaths, excess mortality, vaccinations and the pandemic's impact on essential health services. It also describes key patterns and disparities in the distribution of COVID-19 cases, deaths and vaccine access. Chapter 2 summarizes global and regional trends in life expectancy and healthy life expectancy, together with the global burden of diseases and injuries. Chapter 3 presents the latest available data for a wide range of behavioural, environmental and metabolic risk factors that constitute important determinants of health. Chapter 4 focuses on universal health coverage (UHC) and describes recent trends in service coverage and financial protection, as well as key aspects of health systems.

The information presented in *World health statistics* 2022 is based on data available from global monitoring as of late April 2022. These data have been compiled primarily from databases managed by WHO or United Nations partner entities and supplemented with data and analyses from peer-reviewed publications.

• Key messages

Coronavirus disease (COVID-19) continues to be a global threat to health more than two years after being declared a public health emergency of international concern by WHO. As of 20 April 2022, there had been 50.4 million confirmed cases of COVID-19, including 6.2 million deaths directly attributable to COVID-19. The WHO Region of the Americas and the European Region accounted for almost 72% of all reported cases and 75% of reported COVID-19 deaths. However, many countries have limited testing capacity and lack functioning vital statistics or registration systems to provide accurate and complete mortality data and causes of death. Consequently, the global number of COVID-19 cases and deaths is underreported.

WHO excess mortality estimates show that the actual death toll associated directly or indirectly with the COVID-19 pandemic between 1 January 2020 and 31 December 2021 was approximately 14.9 million worldwide—or 9.5 million more deaths than the initially reported 5.4 million COVID-19 deaths during that period.

Significant inequalities underpin the distribution of COVID-19 cases and deaths, as well as access to vaccinations. **COVID-19 has disproportionately affected vulnerable populations, including those who are economically disadvantaged, the elderly and people with existing underlying health conditions, and the unvaccinated. Higher-risk populations need better protection against severe illness, more transmissible variants of coronavirus and death due to COVID-19 infection. Yet, they remain critically underserved by vaccination programmes in many countries.**

In the latter part of 2021 and in early 2022, the global vaccine supply increased to such a degree that supply was no longer a constraint. In early 2022, there were enough vaccine doses to protect every adult and adolescent (12 years and older) in the world with a three-dose regimen. As of 25 April 2022, 74% of persons in high-income countries (HICs) and 74% in upper-middle-income countries (UMICs) were vaccinated (that is, they had completed their primary series of vaccination), as were 51% in lower-middle-income (LMICs) countries, compared with only 12% of persons in low-income countries (LICs). In LICs, only three in 10 health care workers had been fully vaccinated against COVID-19 by April 2022, compared with a global average of 80%. Only 25% of adults aged over 60 years were fully vaccinated in African countries and only 11% of people with comorbidities had completed the primary series. Research shows that vaccine hesitancy is not the main challenge holding back vaccination programmes in low- and lower-income countries.

The pandemic continues to affect health systems worldwide, in some cases severely. Conducted during the final quarter of 2021 and with inputs of 129 countries, the third round of the WHO global pulse survey on continuity of essential health services during the COVID-19 pandemic found little to no improvement in service disruptions since early 2021 when the previous survey was conducted. In more than one half of surveyed countries, day-to-day primary and community care for the prevention and management of some of the most common health conditions were badly affected. Elective, critical and operative care was disrupted in 38% of reporting countries and close to one half of countries reported that routine immunization services were disrupted in the final quarter of 2021. Lower-income countries generally reported more disruption to services than HICs. The main reasons for disruptions were temporary closures or postponement of services (40% of countries), as well as shortages of staff, essential medicines and diagnostics, and of health facility infrastructure and space (36% of countries). Many millions of people have missed out on vital health care. If these disruptions are allowed to persist, they will have potentially major implications for morbidity and mortality and for the evolution of other communicable disease epidemics.

People continue to live longer and live more years in good health. Global life expectancy at birth increased from 66.8 years in 2000 to 73.3 years in 2019, and healthy life expectancy (HALE) increased from 58.3 years to 63.7 years. However, health inequalities continue to claim a disproportionate toll on life and health in lower-resource settings. Both life expectancy and HALE were at least 10 years lower in LICs than in HICs in 2019, despite the dramatic improvements observed since 2000, with gains of 11 and 10 years, respectively. Both indicators were consistently higher for women than men by approximately 5 and 2.4 years, respectively.

The overall gains in life expectancy and HALE reflect profound changes in mortality and morbidity. Indeed, associated inequalities in mortality and morbidity profiles since 2000 are the main drivers for the patterns of life expectancy and HALE. In the past 20 years, gains have been made in maternal and child health, with the global maternal mortality ratio and under-five mortality rate falling by nearly 40% and 60%, respectively, since

2000. Additionally, major investments and improvements in communicable disease programmes, such as those dedicated to human immunodeficiency virus (HIV), tuberculosis (TB) and malaria, have led to declines in incidence and mortality for these diseases at the global level. Consequently, the global share of deaths attributable to noncommunicable diseases (NCDs) increased from almost 61% in 2000 to almost 74% in 2019. Despite this, communicable diseases were still responsible for nearly one half of all deaths in LICs. Low- and middle-income countries also continue to bear most of the burden of communicable diseases, including TB, HIV, malaria, neglected tropical diseases and hepatitis B. At the current pace of improvement, many indicators—including premature mortality due to NCDs, the incidence of TB, malaria and new HIV infections—will not meet their Sustainable Development Goal targets by 2030.

The COVID-19 pandemic is likely to have a negative effect on both life expectancy and HALE, either slowing or reversing the progress made in some aspects of population health. For example, this was evident in the rising numbers of deaths from TB and malaria between 2019 and 2020 due to disruptions to various types of services. Strengthened disease and injury prevention and control programmes, especially in low- and middle-income countries, are needed to mitigate the impact of the pandemic and to accelerate the progress for meeting various national and international health targets.

Prior to the COVID-19 pandemic, there had been encouraging trends globally in the reduction of child stunting, alcohol consumption and tobacco use, as well as in increased access to safely managed drinking water and sanitation, basic hygiene and clean fuels and technologies for cooking. However, at the same time, obesity among people of all ages, hypertension among adults, anaemia among women, outdoor air pollution and violence against women had been either increasing or remaining at high levels.

The total number of children affected by stunting was 27% lower in 2020 than in 2000 and the prevalence rate of stunting also declined. Meanwhile, obesity has increased globally across all ages since 2000.

The average level of alcohol consumption worldwide declined slightly between 2010 and 2019, with men continuing to consume about three times more alcohol than women. Tobacco use declined more steeply: about 22% of the global population aged 15 years and older were using tobacco in 2020, down from almost 33% in 2000. The number of adults aged 30–79 years with raised blood pressure (hypertension) is estimated to have almost doubled to 1.28 billion between 1990 and 2019, mainly due to population growth and ageing. There was little change in the overall rate of hypertension globally, although the burden has shifted from high-income to low- and middle-income countries.

Safely managed drinking water services were accessible to about three quarters (74%) of the global population in 2020. Nevertheless, this translated into two billion people who still lacked access to safely managed water, while about 3.6 billion people globally had insufficient sanitation services. Achieving universal access to safely managed water, sanitation and basic hygiene services by 2030 will require a four-fold increase in the current rates of progress. Furthermore, approximately 44% of household wastewater was discharged without safe treatment in 2020.

More than two thirds (approximately 69%) of the global population were primarily using clean fuels and technologies for cooking, up from one half in 2000. However, almost the entire global population (99%) breathes unhealthy levels of fine particulate matter and nitrogen dioxide. People in low- and middle-income countries are most exposed to outdoor air pollution at levels exceeding WHO air quality limits.

Violence against women continued to be prevalent. Globally, about one in four (26%) women aged 15 years and older had been subjected to physical and/or sexual violence by an intimate male partner at least once in their lifetime. The COVID-19 pandemic is likely to have caused a major setback in efforts to reduce violence against women, with initial data indicating increases in intimate partner violence.

A more complete picture of the impact of the COVID-19 pandemic on the prevalence of these various risks awaits the collection and analysis of additional data. However, the sustained disruption of many of the relevant services point to potentially dramatic negative consequences in at least some respects. In addition, a strong body of evidence indicates that some NCD risk factors increase individuals' risk of severe outcomes due to COVID-19.

The latest global monitoring reports on universal health coverage (UHC) and financial protection in health, published by WHO and the World Bank, identified mixed trends prior to the COVID-19 pandemic. Service coverage improved steadily from an index of 45 in 2000 to 67 in 2019, while the proportion of the population

with out-of-pocket health spending exceeding 10% of their household budget grew from 9.4% in 2000 to 13.2% in 2017.

COVID-19 is expected to both halt the progress made in service coverage over the past 20 years and exacerbate the financial hardship experienced by people paying out-of-pocket for health. WHO, the World Bank Group and the Organization for Economic Co-operation and Development are urging stronger progress in three priority areas to accelerate progress towards UHC: primary health care, sustainable financing, and strengthening of health system capacities, particularly the health workforce.

Primary health care is the cornerstone of an equitable and resilient health system. Insufficient attention to the central role of primary health care slowed the effectiveness of the response to the pandemic and triggered disruptions to routine care in many countries, thus threatening progress made prior to the pandemic. On average, countries reported that about 56% of 28 tracer essential services had been disrupted in the third quarter of 2020 and 41% were still being disrupted in early 2021. All health care settings and service delivery platforms were affected, particularly first-contact services.

Adequate and sustained health financing is a prerequisite for well-functioning health systems and for the achievement of UHC. Sustainable health financing entails having sufficient resources to fund the health system and to protect populations against financial hardship when they use health services. Global spending on health more than doubled in real terms between 2000 and 2019, reaching 9.8% of the global gross domestic product. Approximately 80% of that spending occurred in HICs, with the bulk of it (about 70%) coming from government budgets. In LICs, out-of-pocket spending was the main source of health expenditure (44%), followed by external aid (29%).

The COVID-19 pandemic has placed unprecedented pressure on health systems' capacities, particularly health workforces. Even prior to the pandemic, the capacity to deliver essential health services in many countries was limited due to persistent health workforce shortages. Already, in 2016, WHO had projected a global shortfall of 18 million health care workers by 2030, especially in the WHO African and South-East Asian regions. Notably, the African Region, which bears almost one quarter (24%) of the world's disease burden, had only 3% of the world's health care workers.

Overall, urgent actions are needed to achieve the target of having an additional one billion people enjoying UHC by 2030. Based on current trends, approximately 730 million people will miss out on UHC; if the effects of the COVID-19 pandemic and its disruptions are taken into account, that shortfall could rise to 840 million.

- **The world is off track to reach the triple billion targets from the GPW13 and most health-related Sustainable Development Goals.**

The triple billion targets embody WHO's mission to promote health and well-being, keep the world safe, and serve the vulnerable.

- **Health emergencies protection:**

One billion more people are better protected from health emergencies

Although initial projections anticipated this billion could be met by 2023, COVID-19 has revealed that no country is fully prepared for a pandemic of such scale.

- **Healthier populations:**

One billion more people are enjoying better health and well-being

Although the billion target is projected to be almost reached by 2023, progress is around 1/4 of that required to reach the Sustainable Development Goals by 2030.

- **Universal Health Coverage:**

One billion more people are benefitting from universal health coverage

The billion target will not be reached by 2023, and progress is less than 1/4 of that required to reach the Sustainable Development Goals by 2030.



01

Progression and impact of the COVID-19 pandemic

More than two years after WHO characterized COVID-19 as a public health emergency of international concern on 11 March 2020, COVID-19 continues to be a global threat to health.

The rapid development of COVID-19 vaccines had brought hopes that the pandemic's death toll could be drastically contained and the pandemic itself could be halted. However, a combination of factors upended these hopes in 2021. Erratic and hesitant public health measures, deficient health system capacities, and a highly unequal access to COVID-19 vaccines saw new variants of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) gain ascendance and drive successive waves of infection in all regions.

COVID-19 continues to claim large numbers of lives worldwide. In addition, the long-term impact of infection on people's health is not yet fully understood. Preliminary indications are that significant proportions of people who acquire the infection experience a wide range of complications (some possibly chronic) for at least several weeks after the initial infection.

Both study evidence and anecdotal reports indicate that survivors of SARS-CoV-2 infection may be subject to a multitude of long-lasting symptoms. Reports of the prevalence of ongoing symptoms vary (1-3). A recent systematic review reported a prevalence of persistent symptoms in patients after mild COVID-19 infection ranged from 10% to 35% (4). Cognitive impairment, various neuropsychiatric symptoms, fatigue, headaches and other complaints are among the conditions reported four or more weeks after the initial infection (5). A detailed understanding of these long-lasting symptoms has not yet been achieved.

Compounding the impact on the health of individuals is the pandemic's disruption of social life, economic activity and, in some cases, political stability (including anti-masking protests in some countries), as well as essential health services. Shortages of health care staff, diagnostics and medicines have been reported in numerous countries, while immunization services and the diagnosis and treatment of other health conditions have also been disrupted or delayed (6-7).

Epidemiological analysis of the COVID-19 pandemic

COVID-19 cases

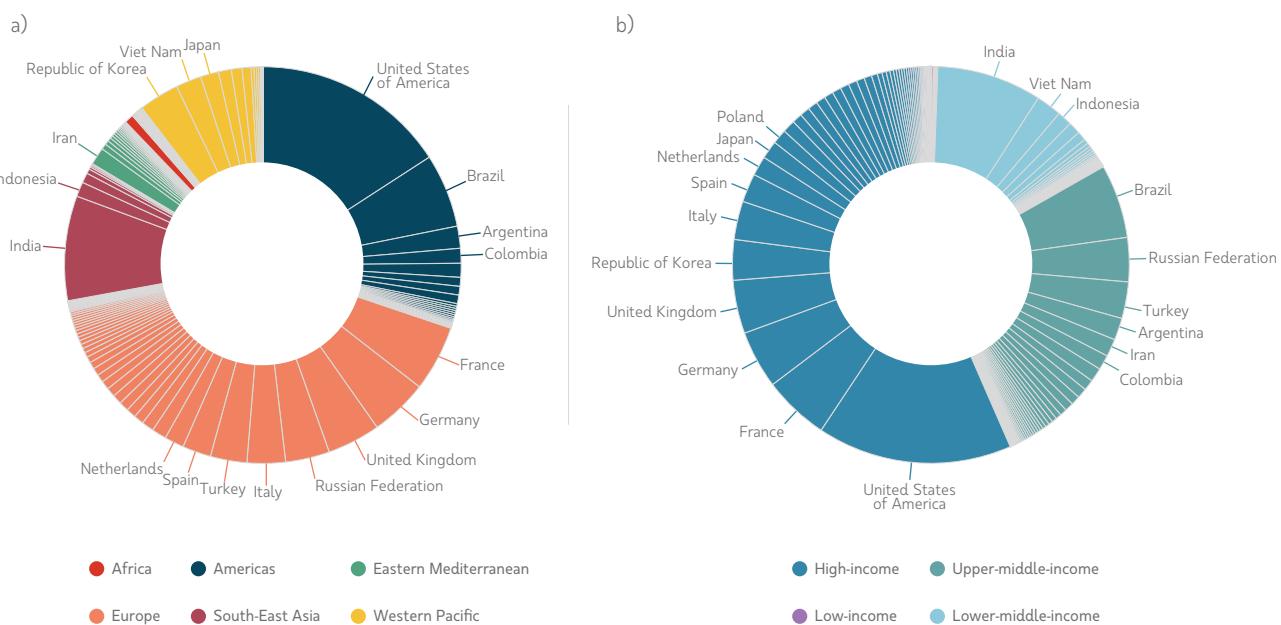
As of 20 April 2022, more than 504.4 million confirmed COVID-19 cases and over 6.2 million related deaths had been reported to WHO. Approximately 1.2 million new cases were being reported every 24 hours in early 2022, but this has now decreased to about 400 000 during April 2022 (8).

A systematic review and meta-analysis of more than 800 standardized studies aligned with the WHO UNITY protocol showed steep increases in seroprevalence of SARS-CoV-2 across all regions. These increases were attributable mainly to SARS-CoV-2 infections in some regions (low-income countries [LICs] in the WHO African and European regions and the Region of the Americas) and to vaccination in others (high-income countries [HICs] in the European Region and Region of the Americas). By July 2021, the estimated global seroprevalence

from infection or vaccination was 45.2% (95% confidence interval, 40.7–49.8) (9, 10).

Although the virus is prevalent across the entire planet, the vast majority of confirmed cases (504.4 million by April 20, 2022) have been reported from the WHO Region of the Americas and the European Region (Fig. 1.1). Taken together, they comprise almost three quarters (72%) of cases reported globally, with respective case rates per 100 000 population of 14 862 and 22 589 as of 20 April 2022. As a comparison, reported case rates were under 3000 per 100 000 population in the other WHO regions. The highest numbers of confirmed cases have been reported in HICs and some upper-middle-income countries (UMICs) (8).

Fig. 1.1. Cumulative confirmed COVID-19 cases, (a) by WHO region and (b) by World Bank income groups, as of 20 April 2022



Source: 194 Member States reports <https://covid19.who.int/>

By contrast, seroprevalence data show that the highest proportion of infection-induced seropositivity is in the WHO African and South-East Asia regions (11). A meta-regression analysis has indicated that infection-induced seroprevalence

estimates are higher in low- and middle-income countries than in HICs. This ostensible distribution of cases largely reflects incomplete case data due to varying testing strategies and capacities and reporting requirements in different countries.

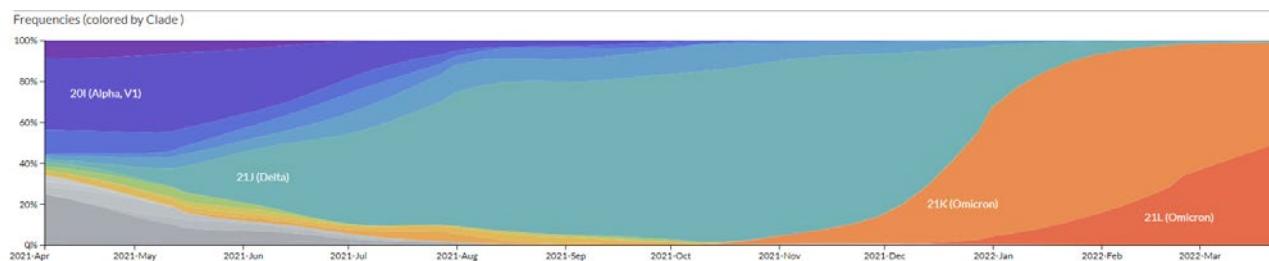
Serological analysis has shown that even in places with limited numbers of reported cases, widespread transmission has occurred. In some settings, the estimated true number of cases was hundreds of times larger than the reported number of cases (9,10).

The wide availability of genomics has facilitated an unprecedented capacity to identify and characterize virus variants, especially in countries with strong sequencing facilities and surveillance. Virus variant dynamics were characterized by the replacement of circulating viruses by more transmissible virus variants, which likely reflected adaptation of the virus to the human host. This pattern has led to a succession of SARS-CoV-2 Variants of Concern (Fig. 1.2). The Alpha and Beta variants emerged in December 2020 and were followed by

the Gamma variant in January 2021 and the Delta variant in April 2021. In November 2021, a more transmissible variant (Omicron) capable of partially escaping immunity at virus ports of entry (that is, the upper respiratory tract) was identified and rapidly became the dominant variant worldwide (12, 13).

As vaccination programmes rolled out in higher-resource settings, a decoupling between infection and severity began to occur. However, countries with lower vaccination coverage, particularly among vulnerable groups, have continued to experience considerable morbidity. Omicron was characterized as being less severe than its predecessors, but it has continued to cause substantial morbidity and mortality in vulnerable populations, such as the unvaccinated elderly in Hong Kong SAR (China) (14).

Fig. 1.2. Proportion of SARS-CoV-2 variants globally, April 2021 to April 2022



Source: Proportion of variants submitted to the GISAID sequence database over time, Nextstrain.org

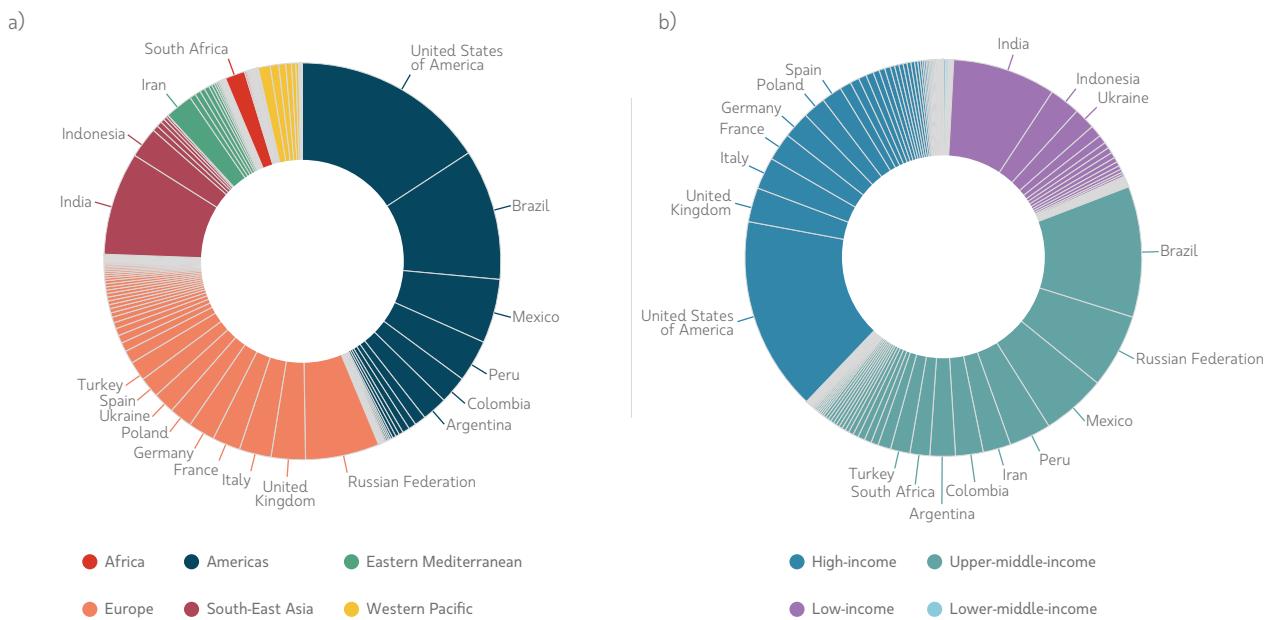


Deaths due to COVID-19

As of 20 April 2022, over 6.2 million reported deaths had been attributed to COVID-19 since the start of the pandemic (Fig. 1.3). The vast majority of those reported deaths—over 4.7 million—were in the WHO Americas and European regions.

However, due to incomplete mortality data for many countries, the actual number of COVID-19-related deaths in other regions may be higher than currently reported (see below) (8).

Fig. 1.3. Cumulative reported COVID-19 deaths, (a) by WHO region and (b) by World Bank income groups, as of 20 April 2022



Source: 194 Member States reports <https://covid19.who.int/>

During the course of the pandemic, COVID-19 has become a significant cause of death in many countries. Relative to causes described in the WHO Global Health Estimates 2020, the absolute number of reported deaths due to COVID-19 in 2020 would place the disease among the top 10 causes of death globally (15). Analyses from the United States of America indicates that COVID-19 was the top cause of death

for people aged 45–84 years in January 2022 and among the top four leading causes of death for other age groups (16). The pandemic may also be shortening life expectancy in some countries. For example, South Africa's national statistical agency has estimated that life expectancy at birth declined from 62.4 years in 2020 to 59.3 years in 2021 for males and from 68.4 years to 64.6 years for females (17).

Excess mortality

Excess mortality associated with COVID-19 pandemic allows for a more comprehensive picture of the pandemic's impact on mortality as it accounts for COVID-19 deaths that are directly attributable to the disease, as well as deaths due to the indirect effects of the pandemic and responses to it.¹ However, calculating excess mortality is challenging.

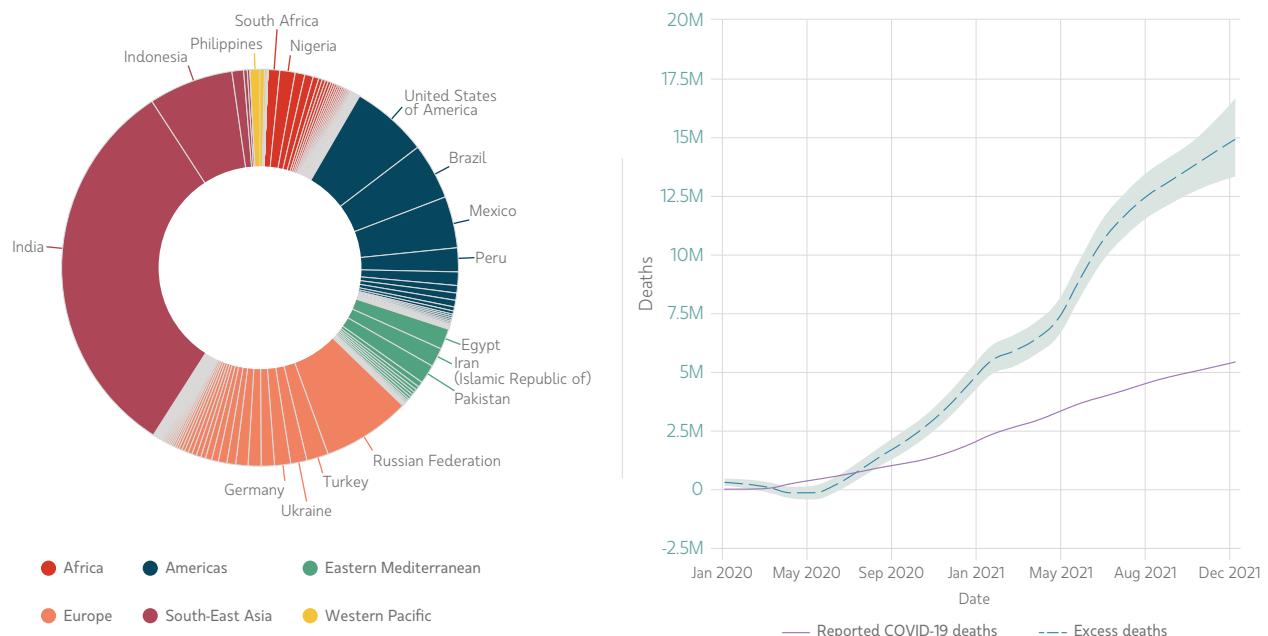
Many countries lack functioning civil registration and vital statistics systems with the capacity to provide accurate, complete and timely data on deaths and causes of death. As a result, mortality data for calculating the actual number of deaths in real-time are only available in a subset of countries where reporting systems are functioning effectively. Historical datasets for calculating expected deaths are also often incomplete.

A recent assessment of health information systems capacity in 133 countries found that the percentage of registered deaths ranged from 98% in the WHO European Region to only 10% in the African Region (18). Significant data gaps exist especially in the WHO African, Eastern Mediterranean, South-East Asia and Western Pacific regions. Due to these data gaps, excess mortality cannot be derived for all countries by using

empirical calculations. Countries also use different processes for diagnosing SARS-CoV-2 infection and reporting COVID-19 deaths, making comparisons difficult.

In February 2021, WHO and the United Nations Department of Economic and Social Affairs (UN DESA) convened a Technical Advisory Group on COVID-19 Mortality Assessment (TAG) to assist WHO and Member States to obtain comprehensive estimates of the number of deaths attributable to the pandemic. The resultant estimates of excess mortality associated with the COVID-19 pandemic for a 24-month period (January 2020 to December 2021) were released in May 2022. They show that the full death toll associated directly and indirectly with the COVID-19 pandemic between 1 January 2020 and 31 December 2021 was approximately 14.9 million (UI 13.3 to 16.6 million), representing 9.5 million more deaths than the reported 5.4 million COVID-19 deaths during that period (Fig. 1.4). There were 4.5 million excess deaths globally in 2020, the first year of the pandemic, while the remaining 10.4 million excess deaths occurred in 2021 (19, 20).

Fig. 1.4. (a) Cumulative estimated excess deaths, and (b) cumulative estimated excess deaths and confirmed COVID-19 deaths, January 2020 to December 2021



Source: 194 Member States reports <https://covid19.who.int/>

¹ Excess mortality is defined as the difference in the total number of deaths in a crisis compared to those expected under normal conditions. COVID-19 excess mortality accounts for both the total number of deaths directly attributed to the virus, as well as the indirect impact, such as disruption to essential health services or travel disruptions.

Most excess deaths (84%) in 2020-2021 were concentrated in the WHO South-East Asia and European regions and the Region of the Americas. Ten countries, representing approximately 35% of the global population, accounted for almost 70% of excess deaths worldwide. Lower-middle-income countries (LMICs) and UMICs accounted for 53% and 28%, respectively,

of the 14.9 million excess deaths over the 24-month period, while HICs and LICs accounted for 15% and 4%, respectively. The global death toll was especially high among older adults, with 82% of the total excess deaths occurring among those aged 60 and older (19, 20).

COVID-19 patterns and inequalities

COVID-19 cases and deaths vary across populations by age, sex and income status. Country-level data and analysis have revealed significant inequalities in the distribution of COVID-19 cases and deaths within countries and across different sociodemographic profiles. COVID-19 is disproportionately affecting vulnerable populations, including those who are economically disadvantaged, the elderly and people with existing underlying health conditions.

There was very little sex-related differences in the number of COVID-19 cases globally until Omicron became the dominant variant in late 2021 and cases among females began to outnumber those among males. Patterns of deaths due to COVID-19 are more distinct. Except for people older than 80 years, males in every age group are more likely than females to die of COVID-19. This pattern has held consistently across

most of the pandemic. For both sexes, people aged 65 years and older have consistently accounted for the largest proportion of COVID-19 deaths. The number of COVID-19 deaths tends to increase with age and is highest for people aged 80 years and older (representing about one third of all deaths among both males and females) (21, 22).

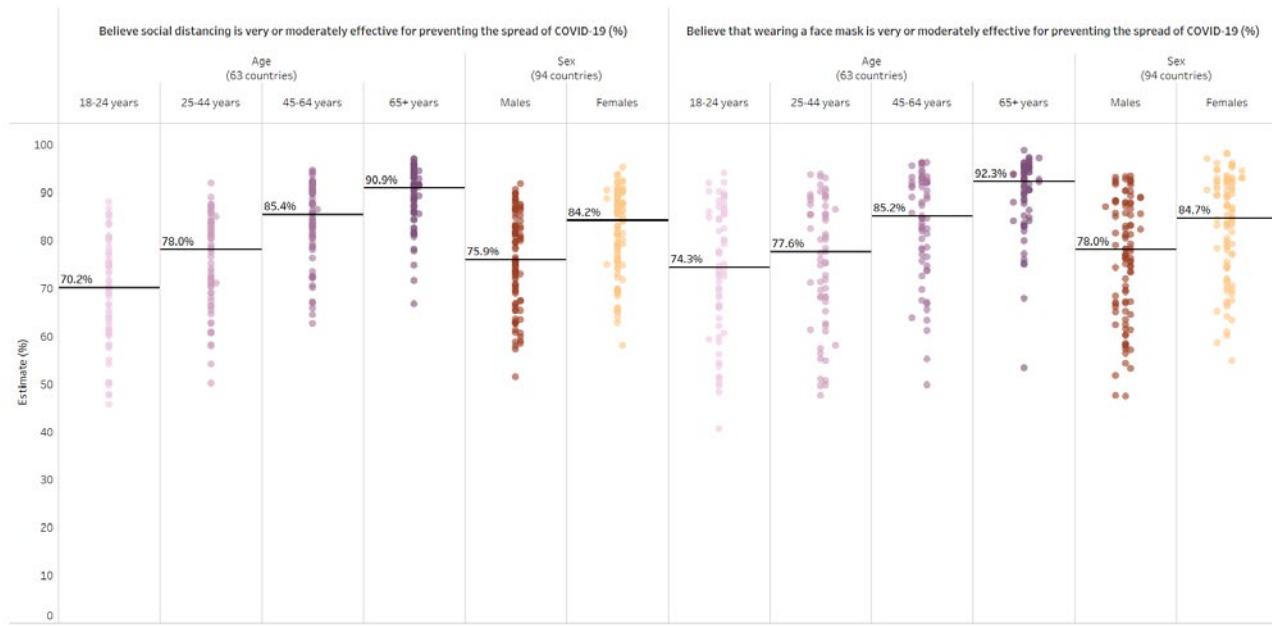
Older people and those with certain underlying medical conditions (including hypertension, cardiovascular disease, chronic respiratory disease, diabetes, human immunodeficiency virus [HIV] infection or cancer) are more likely to develop serious illness after acquiring SARS-CoV-2 infection than those without those conditions (23). Similarly, unvaccinated persons are at much higher risk of being hospitalized or dying due to their SARS-CoV-2 infection compared with fully vaccinated persons (24).

Age and sex differences in beliefs about the effectiveness of measures to prevent COVID-19

Age and sex differences related to how people perceive preventive measures to be effective can shed some light on different preventive behaviours observed during the COVID-19 pandemic. Data collected by the University of Maryland Social Data Science Center Global COVID-19 Trends and Impact Survey, in partnership with Facebook, indicate that younger people and men were less likely to believe that measures like social distancing and wearing a face mask are very (or moderately) effective for preventing the spread of COVID-19. The level of trust in these measures increased steadily with age (unpublished data: <https://jpsm.umd.edu/research/global-covid-19-trends-and-impact-survey%2C-partnership-facebook>,

covid-19-trends-and-impact-survey%2C-partnership-facebook, accessed 17 May 2022)

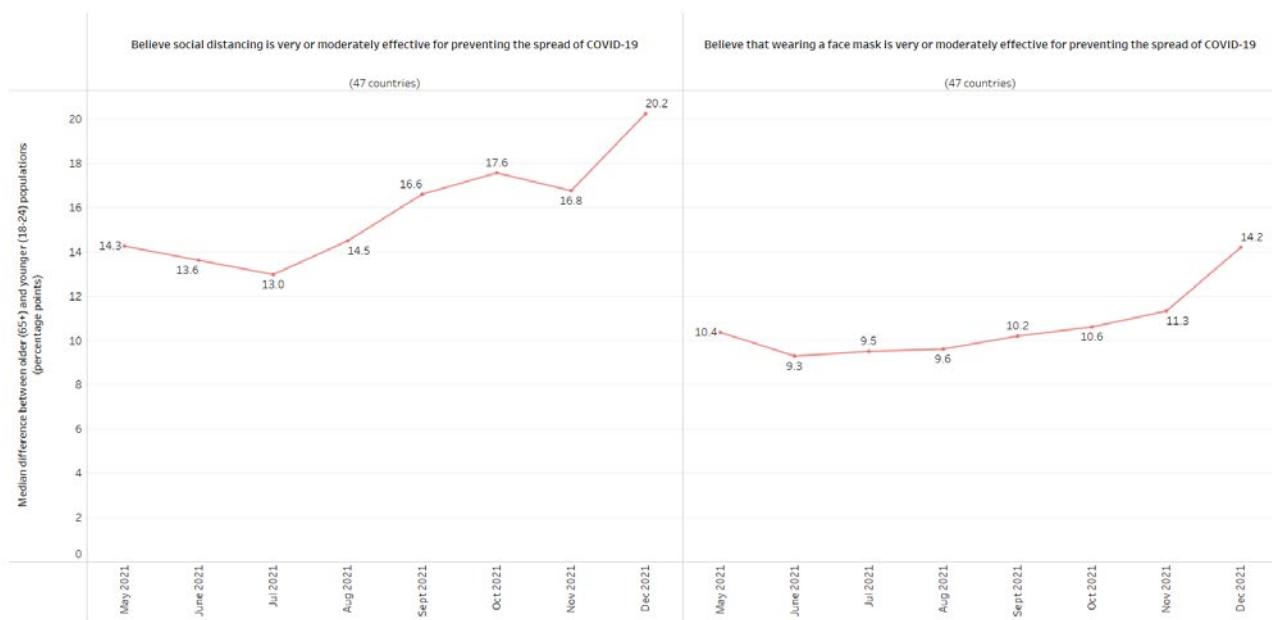
A median 70% of people aged 18–24 years across 63 countries reported that they believed social distancing was an effective preventive measure, compared to 91% among people aged 65 years or older. Belief in the effectiveness of mask wearing showed similar age-related inequalities (74% versus 92%) and also varied by sex. Across 94 countries, the median percentage of people who believed in the effectiveness of social distancing was 8.3% higher for women than for men, and the percentage of people who trusted mask wearing was 6.7% higher for women (Fig. 1.5).

Fig. 1.5. Beliefs regarding preventive measures against COVID-19, disaggregated by age and sex, December 2021

Note: Circles indicate countries. Solid horizontal lines indicate the median value across all countries with data for all subgroups.
Source: WHO calculations using The Global COVID-19 Trends and Impact Survey

An analysis of data from 47 countries for May to December 2021 indicates that age-related differences in knowledge about COVID-19 preventive measures did not decrease as the pandemic continued. By December 2021, the age-related gap around people's trust in the effectiveness of social distancing

had widened (Fig. 1.6) (25). These findings underline the importance of effective, targeted communication to improve the understanding of measures and achieve a wider adoption of preventive behaviour, especially among younger populations.

Fig. 1.6. Age-related differences in belief in the effectiveness of preventive measures against COVID-19, May to December 2021

Source: WHO calculations based on data from the Global COVID-19 Trends and Impact Survey

Note: Data points indicate the median value of the difference between the oldest and youngest age groups across all countries with available data for all subgroups, May to December 2021.

Progress on COVID-19 vaccine coverage

Equitable access to vaccines—focusing at first on protecting priority populations such as health care workers and those at highest risk of serious illness and death, including older populations—is one of the most powerful countermeasures available to countries to protect against severe disease, hospitalization and death due to COVID-19, and to protect health systems and restore the social and economic well-being of communities and countries.

An intensive global research and development effort led to safe and highly efficacious vaccines becoming available and authorized for use within less than a year after the SARS-CoV-2

virus had been identified in early January 2020. The first mass vaccination campaigns were underway before the end of 2020, only 38 weeks from the declaration of the pandemic by WHO on 11 March 2020. Never have vaccines been designed, developed, evaluated, authorized, manufactured and deployed so soon after the identification of a new pathogen. As of 6 May 2022, a total of 10 vaccine products had been approved by WHO for emergency use listing and the WHO Strategic Advisory Group of Experts on Immunization (SAGE) provided product-specific recommendations for use (Table 1.1) (26).

Table 1.1. Coronavirus vaccines approved by WHO for emergency use, by type, April 2022

Platform/Vaccine/Manufacturer	WHO emergency use listing date ¹	Latest WHO SAGE recommendations ²
Messenger Ribonucleic Acid (mRNA)		
COMIRNATY • (Pfizer BioNTech)	31 Dec 2020	21 Jan 2022
SPIKEVAX • (Moderna)	30 Apr 2021	23 Feb 2022
Recombinant viral vector		
COVISHIELD • (Serum Institute of India) 3	15 Feb 2021	15 Mar 2022
VAXZEVRIA • (AstraZeneca) 3	16 Apr 2021	
Ad26.COV 2-S • (Janssen)	12 Mar 2021	9 Dec 2021
Inactivated virus		
Inactivated SARS-CoV-2 vaccine • (BIBP/Sinopharm)	7 May 2021	15 Mar 2022
CORONAVAC • (Sinovac Life Sciences)	1 Jun 2021	15 Mar 2022
COVAXIN • (Bharat Biotech)	3 Nov 2021	15 Mar 2022
Recombinant spike protein nanoparticle		
COVOVAX • (Serum Institute of India) 3	17 Dec 2021	20 Dec 2021
NUVAXOID • (Novavax, Inc.) 3	20 Dec 2021	

Source: WHO (<https://www.who.int/teams/regulation-prequalification/eul/covid-19>, accessed 17 May 2022).

1 <https://www.who.int/teams/regulation-prequalification/eul/covid-19>, accessed 12 May 2022.

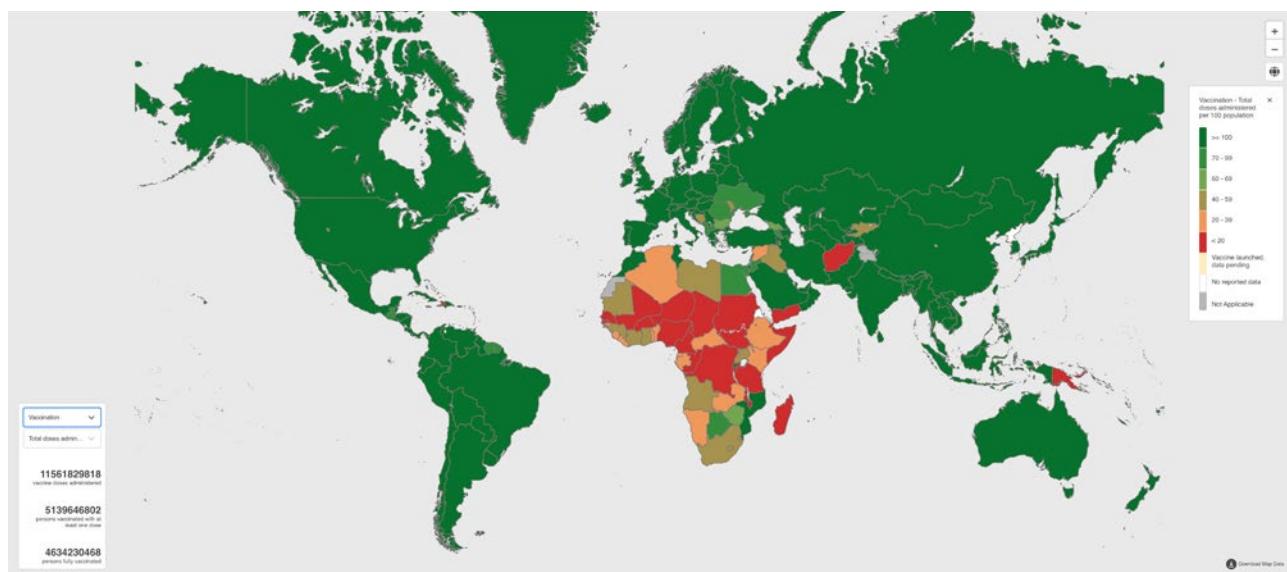
2 <https://www.who.int/groups/strategic-advisory-group-of-experts-on-immunization>, accessed 12 May 2022.

3 Same vaccine products produced in different manufacturing sites or having different registered names can be used interchangeably.

COVID-19 vaccines have been introduced into virtually every country worldwide, with only two countries yet to decide on their introduction (as of 2 May 2022). Thirty-nine days separated the first use of a COVID-19 vaccine in a HIC and first vaccine use in a lower-income country. The pace and extent of global vaccination coverage, including the use of booster doses, increased rapidly over the last months of 2021 and continued to increase during the first months of 2022. By early May 2022, 11.7 billion vaccine doses had been administered worldwide, triple the 4–5 million annual doses of all other vaccines combined (8).

WHO's Strategy to achieve global COVID-19 vaccination by mid-2022 called for vaccinating 40% of the world's adolescent and adult population by end-2021 and 70% by mid-2022 (27). Although the distribution of COVID-19 vaccines increased markedly during 2021, achieving vaccine coverage equity remains a significant challenge. In 2021, inequity resulted from inequitable access to a constrained vaccine supply. It was only in the last quarter of 2021 that supply constraints eased and lower-income countries achieved greater access to doses. Since late 2021 and in 2022 there has been a sufficient supply to meet the demands of all countries, including through COVAX and non-COVAX sources, enabling immunization programmes to accelerate toward the coverage targets.

Fig. 1.7. Persons fully vaccinated with the last dose of the primary series per 100 population, as of 25 April 2022



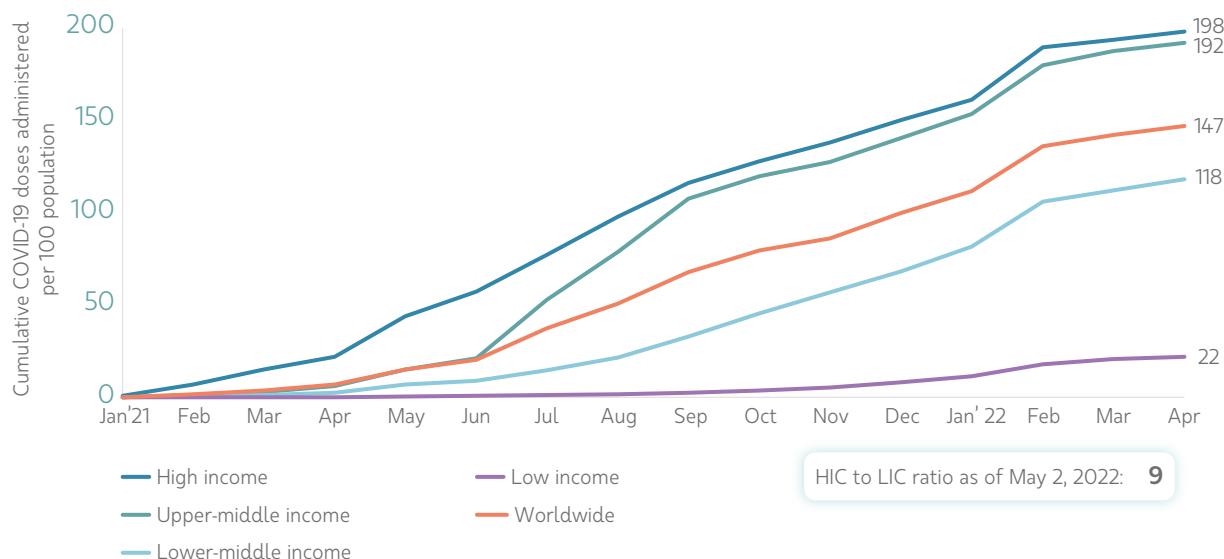
Source: WHO Coronavirus (COVID-19) dashboard, 25 April 2022 (8).

The WHO region with the highest proportions of persons who have completed their primary series of vaccinations as of 2 May 2022 was the Western Pacific Region (82%), followed by the Region of the Americas (67%), the European Region (63%), the South-East Asia Region (62%), the Eastern Mediterranean Region (43%), and the African Region (14%)

(Fig. 1.7) (8). When coverage is considered by country income group, the inequality remains stark (Fig. 1.8).² As of 2 May 2022, 74% of persons in HICs, 74% in UMICs, and 52% in LMICs had completed their primary series compared with only 13% of those in LICs (8).

² Using World Bank income group categories.

Fig. 1.8. Cumulative COVID-19 vaccine doses administered per 100 population, by World Bank income groups and globally, as of 25 April 2022



Source: Our World in Data; WHO COVID-19 Dashboard, World Bank (Income groups)

Source: Our World in Data (<https://ourworldindata.org/covid-vaccinations>, accessed 12 May 2022); WHO COVID-19 dashboard (8).

In the context of the Omicron variant, COVID-19 vaccines that have been granted emergency use listing by WHO continue to provide significant protection against severe disease. However, based on over 50 vaccine effectiveness studies that considered five approved vaccines (Pfizer, Moderna, AstraZeneca, Janssen and Sinovac), vaccine effectiveness against the Omicron variant showed a decline over time for all products, especially against symptomatic disease and infection. Booster doses increase vaccine effectiveness and provide approximately 80–90% protection against severe disease and substantial protection against symptomatic disease or infection (28).

Of the 151 WHO Member States providing a COVID-19 vaccine booster or additional doses as of 2 May 2022, 103 were HICs or UMICs. Only 36 of 54 LMICs and 12 of 27 LICs had started to administer booster or additional doses. By early May 2022, the number of booster or additional doses administered

globally each day was equivalent to the number needed for LICs to reach 70% vaccination coverage by mid-2022 (28, 29).

With the global supply of vaccines no longer a binding constraint, the overarching challenge is now vaccine delivery—"getting shots into arms". High vaccination coverage, with a priority for higher-risk populations, is needed to protect against severe illness and death due to COVID-19 and to contribute to reducing the risk of new variants that are more transmissible or capable of evading vaccine protection. By 2 May 2022, three in four health care workers in reporting countries overall had completed the primary series of vaccine doses. However, in LICs, only four in 10 workers had been fully vaccinated with the primary series. In 29 countries from the WHO African region reporting data on vaccination of older people, only 26% of adults over 60 years were fully vaccinated, while in 21 countries reporting these data, only 11% of people with comorbidities had completed the primary series (31).

Overcoming supply side constraints

COVAX, the vaccine pillar of the ACT-A, established the COVAX Facility as the global vaccine procurement entity with an aim to assure equitable access to vaccines. WHO, Gavi (the Vaccine Alliance) and the Coalition for Epidemic Preparedness Innovations, co-lead COVAX in partnership with the United Nations Children's Fund (UNICEF). They work across the full vaccine value chain from vaccine research and development to vaccine delivery in communities. The COVAX Facility was designed to be the world's primary distributor of COVID-19 vaccines, with the Independent Allocation of Vaccines

Group serving as an independent "referee" for equitable allocations (32).

However, HICs largely sidestepped procurement through the Facility, obtaining vaccine doses for their domestic use through bilateral contracts and then providing some vaccine donations to low- and middle-income countries through COVAX and bilateral arrangements (32). Due to the increase in global vaccine supply since the latter part of 2021, it is estimated that there were more than enough vaccine doses in early 2022 to

protect every adult and adolescent (12 years and older) in the world with a three-dose regimen.

As of the last week of April 2022, COVAX had shipped approximately 1.45 billion doses to 145 participating countries. COVAX deliveries accounted for more than 80% of the more than 300 million doses shipped to LICs since 24 February 2021 when it dispatched its first vaccine shipments. Over 473 million doses had been delivered to 51 African countries, 33% of all doses delivered to that region. The African Union's Africa Vaccines Acquisition Trust shipped another 6% of the doses and bilateral deals accounted for the rest during that period.

Ninety percent of COVAX deliveries to the region occurred after mid-2021, and almost 60% of the COVAX vaccine deliveries were completed since early December 2021 (31, 32).

Given the sufficient vaccine supplies, COVAX allocation is now demand-driven, guided by country choices of coverage targets, priority populations and the preferred COVID-19 vaccine products to meet those targets. Achieving 70% coverage globally will require initiatives that build awareness in countries that there are ample doses and that the coverage target remains highly relevant in view of the uncertain evolution of the pandemic, especially for higher-risk groups.

Increased focus on delivering vaccines into arms in countries

In a context of sufficient supplies, low vaccination rates tend to be due to political, financial and operational bottlenecks (such as misalignment between in-country funding needs and actual disbursement, inadequate cold chain/logistics, and health workforce shortages), as well as the complexity of administering different vaccine products, challenges related to collecting and managing data, and demand side-constraints that affect uptake.

It is also important to work with countries to strengthen demand and build the absorptive capacity to administer vaccines. Such a collaboration is also vital to ensure that initial vaccine supplies are offered first to provide primary vaccination series and boosters to higher-risk priority groups, in accordance with the updated WHO SAGE roadmap published in January 2022 (34). Achieving higher levels of community demand for COVID-19 vaccines is crucial and will require a holistic approach tailored to country settings. Numerous studies have been carried out to understand the motivations for vaccine uptake and dashboards have been established to track trends (35–38). These data sources show that the reasons for low uptake are complex and context specific. For example, a survey of approximately 23 000 people in 19 African Union Member States in September 2021 found that vaccine hesitancy was not the main challenge, with at least three in four respondents indicating that they were vaccinated or intended to get vaccinated (39). Research also indicated that people in lower-income countries were more willing to take COVID-19 vaccines than their counterparts in

HICs. An average 80% of people surveyed in low- and middle-income countries said they would accept the opportunity to be vaccinated (38).³ Vaccination strategies and campaigns must diminish barriers to access, especially where COVID-19 risk perception and institutional trust are low.

In 2022, WHO, UNICEF, and Gavi (the Vaccine Alliance) launched the COVID-19 Vaccine Delivery Partnership. This represents an intensified operational phase of the inter-agency country readiness and delivery-coordination work that supported the introduction and rollout of COVID-19 vaccines in almost every country worldwide in 2021. The Partnership is focusing on accelerating vaccination coverage in countries that face the biggest challenges to reaching their vaccination targets—primarily the 34 countries that were at or below 10% coverage in January 2022. It is providing urgent support to a rotating list of 10 countries (31).

The Partnership is also building on the momentum seen in many countries in Africa in the latter months of 2021 as vaccine supplies increased. Many countries reported significantly higher vaccination rates in the first months of 2022 as they launched concerted large-scale campaigns to accelerate coverage. For example, during a two-week campaign in early February 2022, Kenya tripled the number of vaccines it administered compared with the previous two weeks. In Guinea Bissau, approximately 125 000 doses were administered in a fortnight in February 2022 compared with 11 000 in the entire month of January (31).

Expanding and decentralizing vaccine manufacturing capacity

WHO and its partners are seeking to increase the capacity of low- and middle-income countries to produce COVID-19 vaccines and mRNA technology is thought to also constitute a potential technological solution to COVID-19 and future disease outbreaks, thereby bolstering national and regional health security. Efforts have been made to provide a facility where manufacturers from low- and middle-income countries

can receive training in producing designated vaccines and obtain the licenses for doing so.

Drawing on initial support from France, WHO worked alongside partners to establish the mRNA technology transfer hub in South Africa. This landmark hub has produced the first batches of mRNA vaccine and commenced provision of technology transfers to 15 recipient countries that will manufacture mRNA

³ Data were gathered from 15 vaccine acceptance surveys carried out in Burkina Faso, Colombia, India, Mozambique, Nepal, Nigeria, Pakistan, Rwanda, Sierra Leone, Uganda, the Russian Federation and the United States of America.

vaccines for themselves or their regions (Argentina, Bangladesh, Brazil, Egypt, India, Indonesia, Kenya, Nigeria, Pakistan, Senegal, Serbia, South Africa, Tunisia, Ukraine and Viet Nam).

WHO and key partners consider the mRNA Technology Transfer Hub to be highly promising, not only for increasing access to vaccines against COVID-19, but also for other diseases, potentially including malaria, tuberculosis (TB) and cancer. However, there are a number of constraints to building sustainable vaccine manufacturing capacity in countries. WHO and partners are working to address the following four key barriers to local production in low- and middle-income countries.

- **Access to know-how.** This is being addressed through technology transfers such as the mRNA training hub and by providing necessary know-how to enable countries to rapidly produce vaccines and biological products.
- **Workforce capacity.** Dedicated training is needed where capacity is limited, especially for biological products. WHO is addressing this through a biomanufacturing training hub in the Republic of Korea, and there are plans to establish regional training centres.

- **Regulatory capacity.** WHO is working to strengthen regulatory agencies across Africa, in particular in countries receiving mRNA technology transfers, to foster increased confidence, quality and trust in vaccine products.
- **Commercial sustainability.** WHO is working closely with countries to achieve a balance between constructing large facilities (which demands significant capital outlays, entails high maintenance costs and requires access to reliable markets) and smaller facilities (which, although cheaper to maintain, may have less impact in the event of another pandemic).

While vaccines alone may not bring about an end to the pandemic, they will go a long way toward decoupling COVID-19 cases from serious disease and deaths. An enhanced performance of second-generation products against infection is needed to have a greater impact on mild disease and infection. A combination of preventive steps and public health and social measures, underpinned by national immunization programmes is needed, including mask wearing indoors, social distancing and frequent hand cleansing. However, vaccination, if achieved on an equitable and large enough scale, will bring the world much closer to containing and ending the COVID-19 pandemic.

Health service disruptions

Findings from the third round of the WHO Global pulse survey on continuity of essential health services during the COVID-19 pandemic indicate that health systems in all regions and in countries of all income levels continue to be affected, in some cases severely. The third pulse survey, conducted during the final quarter of 2021, gathered responses from 129 countries. The latest survey found little or no improvement since early 2021 when the previous survey was conducted (6). Countries in the WHO Region of the Americas reported the highest percentage of services disrupted (55% across 27 countries). HICs generally reported fewer services disrupted than LICs.

Disruptions occurred in all health care settings. In more than one half of countries surveyed, day-to-day primary and community care for preventing and managing some of the most common health conditions were badly affected. Elective, critical and operative care was disrupted in 38% of reporting countries. Almost one half of countries reported that routine immunization services had been disrupted in the final quarter of 2021. There was a 14% increase in countries reporting disruptions to facility-based immunization and a 7% increase in those reporting disruptions to outreach immunization when compared to Q1-2021.

Plans for recovery are underway

Countries have adopted short-term strategies and adaptations to reduce disruptions and recuperate health care services

In addition, about one half of countries reported disruptions to TB diagnosis and treatment, HIV testing and prevention services, and hepatitis B and C diagnosis and treatment, while about one third reported disruptions to one or more malaria services. At least 50% of countries reported some level of disruption to noncommunicable disease (NCD) services and more than one third reported disruptions across mental, neurological, and substance use disorder services (6).

The main reasons for disruptions were intentional service delivery modifications (40% of countries), such as temporary closures or postponement of services, and shortages of staff, essential medicines and diagnostics, and health facility infrastructure and space. Also affecting health care services was the inability or reluctance of patients to seek care due to financial constraints, transport difficulties and fear of being exposed to infection. As a result, many millions of people have missed out on vital health care. If these disruptions are allowed to persist, they will have potentially major implications for morbidity and mortality and for the evolution of other communicable disease epidemics (6).

overall and to ensure the smooth provision of essential COVID-19 services. The changes include service delivery

modifications (such as shifting to community-based care or telehealth consultations), health worker capacity strengthening and training, improving access to essential medicines and health products, increased community engagement, and health financing strategies. About two thirds of countries have developed policies and plans for safeguarding essential health services during the pandemic. Countries are also acting to shore up longer-term health service resilience (6).

WHO is leading modelling efforts to estimate the immediate and lasting consequences of these essential health service disruptions on health outcomes. It is also working with Member States to strengthen health information systems, particularly civil registration and vital statistics, and improve the availability and quality of pertinent data. This includes disaggregated data that can be used to address inequalities highlighted during the COVID-19 the pandemic (20).

• Box 1.1. Progress in the Health Emergencies Protection billion target of the GPW 13

Initial projections had anticipated that the Health Emergencies Protection Billion target could be met by 2023. However, COVID-19 has shown that no country is fully prepared for a pandemic of such scale, even though the “Prepare” indicator indicates that country-level preparedness capacities increased since the 2018 baseline. The pandemic has disrupted activities that are central to protecting against health emergencies.

With new data added from 2021, the “Prevent” indicator shows that more countries are experiencing a decrease in vaccine coverage for priority pathogens than in the previous year. Equitable access, prevention strategies and catch-up vaccination efforts must be prioritized, scaled-up and accelerated so that coverage does not decline

further. Meanwhile, the “Detect, Notify and Respond” indicator reveals a different trend: countries improved the timeliness with which they detect International Health Regulations (2005) notifiable events and strengthened critical public health functions, such as surveillance. These improvements need to be sustained and expanded to cover an increasing number of emergencies.

Protecting people in fragile, conflict-affected settings that are disproportionately affected by health emergencies is a priority. WHO is working with Member States and partners to act on recent reviews, recommendations and resolutions so that preparations and responses will ensure that COVID-19 is the last pandemic of its kind.

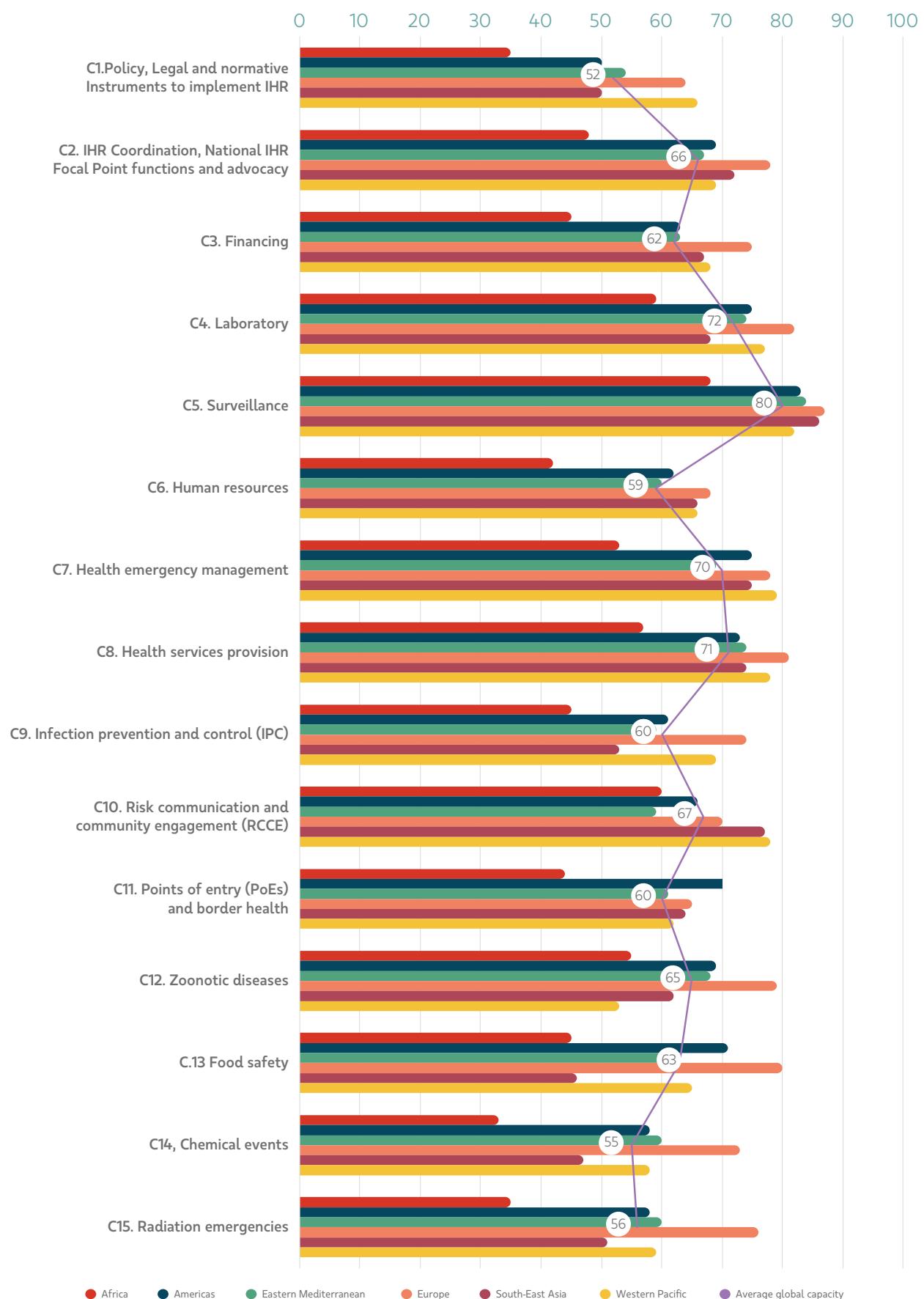
International Health Regulations

The International Health Regulations (IHR) (2005) have been vital in the COVID-19 pandemic response, underscoring the importance of strengthening and continuously monitoring core capacities for health emergency preparedness and response. The IHR 2005 requires that all 196 IHR signatory countries and territories (States Parties) work together for global health security to build and strengthen their capacities to detect, assess, report and respond to public health emergencies and to report annually to the World Health Assembly on the status of implementation. As part of its support to IHR States Parties, WHO has developed a monitoring and evaluation framework, which facilitates this compulsory annual reporting.

In the last few years, countries were able to develop national action plans for strengthening their health security-related capacities, using the IHR State Party self-assessment annual reporting tool (SPAR) (40) and complementary, voluntary instruments (such as the Joint External Evaluation, Simulation Exercises and After-Action Reviews).

A review of the SPAR tool in 2021 contributed to an improved understanding of preparedness strengths and gaps, based on the global experience of the COVID-19 pandemic. The second edition of the SPAR (2021) was expanded to include 15 capacities and 35 indicators. As of 11 May 2022, a total of 175 of the 196 States Parties had submitted their SPAR 2021 annual reports (the same number as in 2021). The global average for the 15 IHR capacities was 64% (Fig. 1.9), compared with the 2020 global IHR average of 65% (when 13 capacities were assessed). The European Region reported the highest average scores across all capacities (75%) followed by the Western Pacific Region (69%), the Region of the Americas (67%), the Eastern Mediterranean (65%) and South-East Asia (64%) regions while the African Region reported the lowest average score (48%).

The SPAR 2021 reports highlight the continued need for national legislation to ensure and support implementation of the IHR, and to safeguard surge capacity and infection prevention and control to respond to public health risks and acute events.

Fig. 1.9. Average 15 IHR capacity scores by WHO Region, SPAR report 2021

References

1. Nalbandian A, Sehgal K, Gupta A. Post-acute COVID-19 syndrome. *Nat. Med.* 2021;27:601–615.
2. Bell ML, Catalfamo CJ, Farland LV. Post-acute sequelae of COVID-19 in a non-hospitalized cohort: results from the Arizona CoVHORT. *PLoS One.* 2021;16
3. Comelli A, Viero G, Bettini G, Nobili A, Tettamanti M, Galbussera AA, et al. Patient-reported symptoms and sequelae 12 months after COVID-19 in hospitalized adults: a multicenter long-term follow-up study. *Front Med (Lausanne).* 2022;9:834354.
4. Van Kessel SAM, Olde Hartman TC, Lucassen PLBJ, van Jaarsveld CHM. Post-acute and long-COVID-19 symptoms in patients with mild diseases: a systematic review. *Fam Pract.* 2022;39(1):159-167.
5. Lechner-Scott J, Levy M, Hawkes C, Yeh A, Giovannoni G. Long COVID or post COVID-19 syndrome. *Mult Scler Relat Disord.* 2021;55:103268.
6. Third round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic: November – December 2021. Interim report. Geneva: World Health Organization; 2022 (https://www.who.int/publications/item/WHO-2019-nCoV-EHS_continuity-survey-2022_1, accessed 12 May 2022).
7. Shet A, Carr K, Danovaro-Holliday MC, Sodha SV, Prosperi C, Wunderlich J, et al. Impact of the SARS-CoV-2 pandemic on routine immunisation services: evidence of disruption and recovery from 170 countries and territories. *Lancet Glob Health.* 2022;10(2):e186-e194
8. WHO Coronavirus (COVID-19) dashboard, 20 April 2022 [online database] (<https://covid19.who.int>, accessed 12 May 2022).
9. Bergeri I, Whelan M, Ware H, Subissi L, Nardone A, Lewis HC et al. Global epidemiology of SARS-CoV-2: a systematic review and meta-analysis of standardized population-based seroprevalence studies, Jan 2020 – Dec 2021. *MedRxiv* 2021;12:14.21267791 (doi:<https://doi.org/10.1101/2021.12.14.21267791> [pre-print], accessed 12 May 2022).
10. SeroTracker. Seroprevalence estimates by country. 2022 (<https://serotracker.com/en/Analyze>, accessed 12 May 2022).
11. Strategic Advisory Group of Experts on Immunization (SAGE) - April 2022 (https://www.who.int/news-room/events/detail/2022/04/04/default-calendar/sage_meeting_april_2022)
12. Tracking SARS-CoV-2 variants. Geneva: World Health Organization; 2022 (<https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/>, accessed 12 May 2022).
13. Proportion of variants submitted to the GISAID sequence database over time, Nextstrain.org (<https://nextstrain.org/ncov/gisaid/global/>, accessed 12 May 2022)
14. Enhanced response to Omicron SARS-CoV-2 variant: Technical brief and priority actions for Member States. Update # 7: January 2022 (https://www.who.int/docs/default-source/coronavirus/2022-01-07-global-technical-brief-and-priority-action-on-omicron--corr2.pdf?sfvrsn=918b09d_20, accessed 17 May 2022).
15. The top 10 causes of death. Fact sheet. Geneva: World Health Organization; December 2020 (<https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>, accessed 12 May 2022)
16. COVID-19 Leading cause of death ranking. Peterson-KFF Health System Tracker, 24 March 2022 (<https://www.healthsystemtracker.org/brief/covid-19-leading-cause-of-death-ranking/>, accessed 12 May 2022).
17. Mid-year population estimates 2021 – P0302. Pretoria: Statistics South Africa; 2021 (<http://www.statssa.gov.za/publications/P0302/P03022021.pdf>).
18. The SCORE for health data technical package. Geneva: World Health Organization; 2022 (<https://www.who.int/data/data-collection-tools/score/dashboard#/>, accessed 12 May 2022)
19. Global excess death associated with COVID-19, January 2020 – December 2021. Geneva: World Health Organization (<https://www.who.int/stories/global-excess-deaths-associated-with-covid-19-january-2020-december-2021>, accessed 17 May 2022).
20. Estimates of excess mortality associated with COVID-19 pandemic (as of 25 March 2022). Geneva, World Health Organization, 2022 (<https://www.who.int/news-item/05-05-2022-14.9-million-excess-deaths-were-associated-with-the-covid-19-pandemic-in-2020-and-2021>, accessed 12 May 2022).

21. Confirmed and probable COVID-19 cases and deaths by age. Geneva: World Health Organization; April 2022 (<https://www.who.int/docs/default-source/coronavirus/situation-reports/20200418-sitrep-89-covid-19.pdf>, accessed 12 May 2022).
22. Sex ratio for COVID-19 cases and deaths. World Health Organization; April 2022 (<https://app.powerbi.com/view?r=eyJrljoiYWRiZWVkJNWUtNmMONi0OMDAwLTljYWMTN2EwNTM3YjQzYmRmlwidCI6ImY2MTBjMGIBLWJkMjQtNGIzOS04MT-BiLTNkYzl4MGFmYjU5MCIsImMiOjh9>, accessed 12 May 2022).
23. Kompaniyets L, Pennington AF, Goodman AB, Rosenblum HG, Belay B, Ko JY, et al. Underlying Medical Conditions and Severe Illness Among 540,667 Adults Hospitalized With COVID-19, March 2020–March 2021. *Prev Chronic Dis* 2021;18:210123 (https://www.cdc.gov/pcd/issues/2021/21_0123.htm, accessed 17 May 2022).
24. Meslé MM, Brown J, Mook P, Hagan J, Pastore R, Bundle N, et al. Estimated number of deaths directly averted in people 60 years and older as a result of COVID-19 vaccination in the WHO European Region, December 2020 to November 2021. *Euro Surveill.* 2021;26(47):2101021.
25. WHO calculations using The Global COVID-19 Trends and Impact Survey
26. 10 vaccines granted emergency use listing (EUL) by WHO, as of 6 May 2022. Geneva: World Health Organization (<https://covid19.trackvaccines.org/agency/who/>, accessed 12 May 2022).
27. Strategy to achieve global COVID-19 vaccination by mid-2022. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/m/item/strategy-to-achieve-global-covid-19-vaccination-by-mid-2022>, accessed 12 May 2022).
28. International Vaccine Access Center (IVAC), Johns Hopkins Bloomberg School of Public Health. VIEW-hub. www.view-hub.org (<https://view-hub.org/covid-19/effectiveness-studies>).
29. COVID-19 Vaccine Delivery Partnership Information Hub (<https://infohub.crd.co/eJRF>, accessed 17 May 2022), based on eJRF data and other monthly regional data reporting systems, as per May 9 2022
30. COVID-19 vaccine boosters administered, May 8, 2022. Our World in Data (<https://ourworldindata.org/grapher/cumulative-covid-vaccine-booster-doses?time=latest&country=BGD~BRA~DEU~IND~PAK~RUS~USA>, accessed 12 May 2022).
31. New push to drive up Africa's COVID-19 vaccination. Brazzaville: WHO Regional Office for Africa; 24 February 2022 (<https://www.afro.who.int/news/new-push-drive-africas-covid-19-vaccination>, accessed 12 May 2022).
32. UNICEF's COVID-19 Procurement portal (<https://cpp.unicef.org/dashboard/1>, accessed 18 May 2022).
33. UNICEF COVID-19 Vaccine Market Dashboard, as of 25 April 2022 (<https://www.unicef.org/supply/covid-19-vaccine-market-dashboard>, accessed 12 May 2022).
34. Updated WHO SAGE Roadmap for prioritizing uses of COVID-19 vaccines. Geneva: World Health Organization; 2022 (<https://www.who.int/news/item/21-01-2022-updated-who-sage-roadmap-for-prioritizing-uses-of-covid-19-vaccines>, accessed 12 May 2022).
35. COVID behaviors dashboard. Baltimore, MD: Johns Hopkins Center for Communication Programs; 2022 (<https://covidbehaviors.org/>, accessed 12 May 2022).
36. YouGov Covid 19 Behaviour Tracker Data Hub. London, United Kingdom: Imperial College; 9 March 2022 (<https://github.com/YouGov-Data/covid-19-tracker>, accessed 12 May 2022).
37. COVID-19 behavioral dashboard. The Collective Service for Risk Communication and Community Engagement; 2022 (<https://www.rcce-collective.net/data/behavioural-indicators/>, accessed 12 May 2022).
38. Responding to COVID-1 in Africa: finding the balance. Part IV. Calls to action. Partnership for evidence-based COVID-19 response; 2021 (<https://preventepidemics.org/wp-content/uploads/2021/12/PERC-Finding-the-Balance-Part-IV.pdf>, accessed 12 May 2022).
39. Solís Arce JS, Warren SS, Meriggi NF et al. COVID-19 vaccine acceptance and hesitancy in low- and middle-income countries. *Nat Med* 27. 2021;1385–1394.
40. International health regulations (2005): State party self-assessment annual reporting tool, 2nd ed. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/9789240040120>, accessed 12 May 2022).

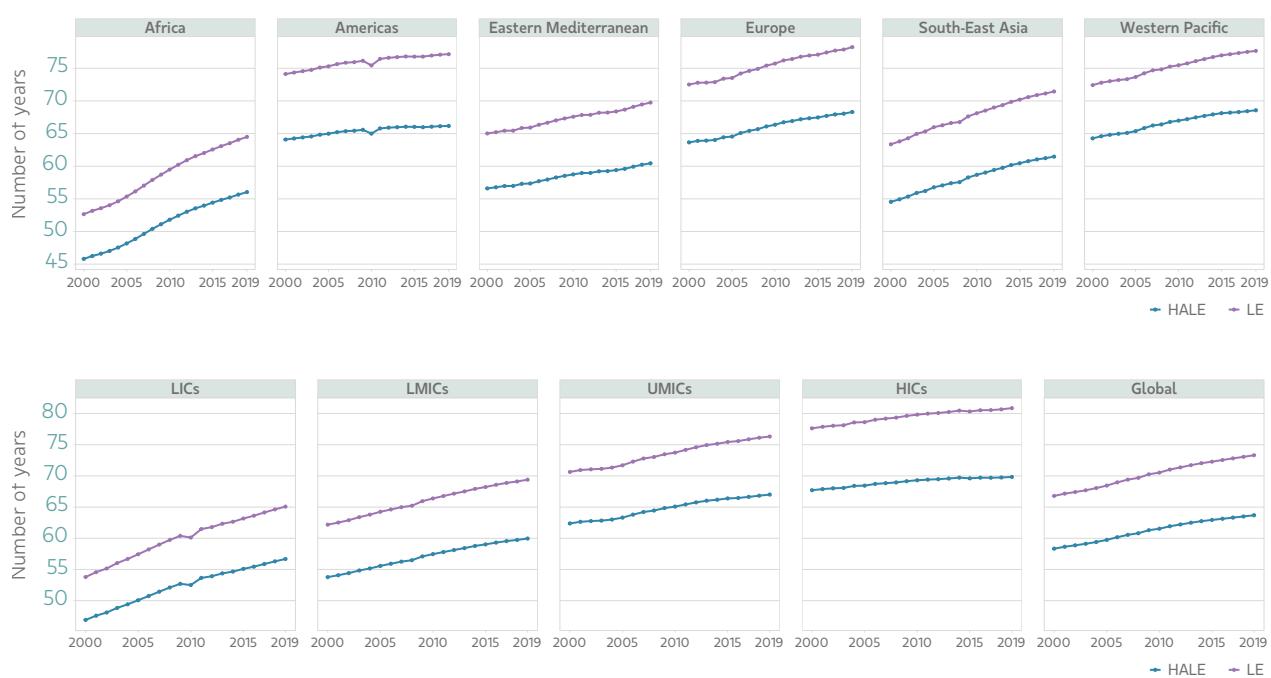
02



Healthy life expectancy and burden of disease

The COVID-19 pandemic continues to have a detrimental impact on global population health, life expectancy and healthy life expectancy (HALE) (1,2). Prior to the pandemic, there had been progress in all these respects, with average life expectancy at birth and HALE increasing markedly from 2000 to 2019.¹ These trends were driven by the progress made against many diseases and injuries, including those occurring among disadvantaged populations and specific groups. This chapter describes the latest trends in life expectancy, HALE and the burden of disease for a range of key communicable and NCDs, as well as for injuries.

Fig. 2.1. Life expectancy and HALE, by WHO region, World Bank income group and global, 2000–2019



Source: WHO Global health estimates, 2019 (3).

¹ Life expectancy at birth is the average duration of life for a specified population. HALE at birth is the average number of years a person can expect to live in full health, that is, not hampered by disabling illnesses or injuries. WHO uses this measurement to assess changes in health and well-being. It is the overarching indicator for the WHO Triple Billion targets and it is also used to evaluate the progress towards SDG 3.

Trends and disparities in life expectancy and healthy life expectancy

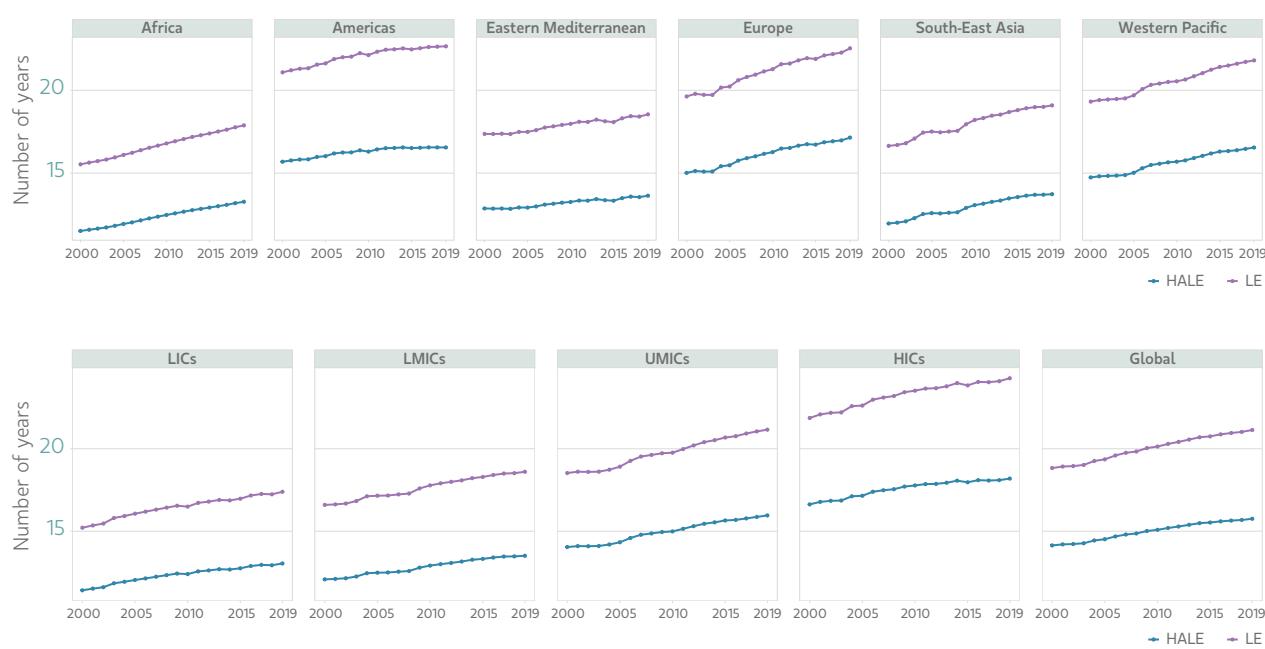
Global life expectancy at birth increased from 66.8 years in 2000 to 73.3 years in 2019, and HALE at birth increased from 58.3 years to 63.7 years. Life expectancy has increased moderately faster than HALE, leading to a slightly larger proportion of years lived with disability (3).

Life expectancy and HALE have risen across all country income groups, but they continue to be higher in HICs and UMICs than in LICs and LMICs (Fig. 2.1). LICs have experienced the biggest gains and life expectancy has increased by more than 11 years and HALE by almost 10 years since 2000, though the pace of those improvements has slowed after 2015. Despite the gains, LICs have still lagged well behind global averages in 2019 and far behind the averages for HICs. For example, life expectancy

was 65.1 years and HALE was 56.7 years in LICs compared with 80.9 years and 69.8 years, respectively, in HICs.

Gains in life expectancy and HALE at birth in LICs and LMICs predominantly reflect successes in improving the survival of children under the age of 5 years (4). Child mortality decreased by 55% in LICs between 2000 and 2020, from 145.2 deaths per 1000 live births in 2000 to 66.0 in 2020. In HICs and UMICs, gains in life expectancy and HALE were larger in older age groups (Fig. 2.2). The greater mortality reduction at older ages in higher-income settings over the past two decades has been driven mainly by a decline in NCD mortality, partly due to the success in curbing and managing cardiovascular diseases (3).

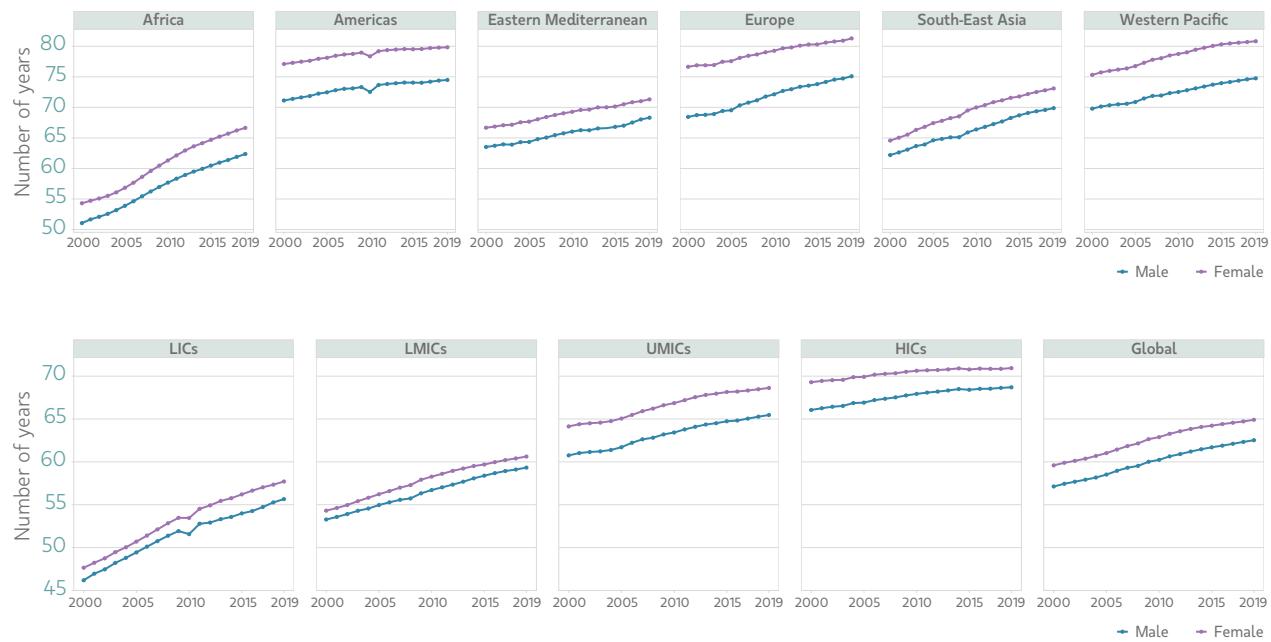
Fig. 2.2. Life expectancy and healthy life expectancy at 60 years, by WHO region, World Bank income group and global, 2000–2019



Source: WHO Global health estimates, 2019 (3).

Globally, life expectancy and HALE, respectively, have been 5.1 years and 2.4 years higher for females than for males in 2019, which has remained fairly constant since 2000 (Fig. 2.3). Male/female gaps in life expectancy and HALE in 2019 were largest

in the WHO European and Western Pacific regions. Assessed by country income groups, the gap in HALE for males and females has widened slightly in LICs, but has narrowed in HICs.

Fig. 2.3. Life expectancy at birth, men and women, by WHO region, World Bank income groups and global, 2000–2019

Source: WHO Global health estimates, 2019 (3).

Improvements in healthy longevity and the changing burden of disease

In an ideal world, an increase in life expectancy would be driven primarily by increases in years lived in good health, with a shrinking proportion of years lived in disability. This would mean that people are both living longer and remaining in good health for longer periods and for greater proportions of their lives.

At the global level, HALE as a proportion of life expectancy at birth has remained largely constant since 2000 at around 88–89% for men and 84–87% for women. HALE as a proportion of life expectancy at age 60 years follows a similar trend, but is lower, at approximately 73–78% for men and 70–75% for women. In HICs and UMICs, the latter proportion has decreased slightly since 2000. On average, people are living longer, but their extended longevity is accompanied by rising levels of ill health and disability.

Globally, the average number of years an infant is expected to live in less than full health has risen by about one year since 2000, to 8.3 years in 2019 for a male infant and to 11.0 years for a female infant. The average number of years a person aged 60 years is likely to live with compromised health has also risen slightly over that period to 4.7 and 6.0 years for males and females, respectively (3). Irrespective of age, females on average live more years in disability than males, partly due to their longer life expectancy and their higher risk of experiencing

function loss, especially at older ages. This sex gap is widening as life expectancy increases (5).

The overall gains in life expectancy and HALE reflect profound changes in mortality and morbidity during the past two decades. Globally, across all WHO regions, age-standardized rates of death and disability-adjusted life years (DALYs) fell between 2000 and 2019 across all three broad categories of causes of death: communicable, maternal, perinatal and nutritional; NCDs; and injuries. This trend was driven mainly by a steep decline in morbidity and mortality caused by communicable diseases, particularly in LICs and LMICs. In the latter settings, age-standardized rates of death due to communicable diseases declined by more than 50% since 2000, about double the decline seen for NCDs and injuries.

As more individuals avoid or survive communicable diseases, they are surviving to older ages where NCDs become the principal health risks. Globally, NCDs accounted for 60.8% of all deaths in 2000, rising to 73.6% in 2019, while the share of communicable diseases decreased from 30.7% in 2000 to 18.4% in 2019 (Fig. 2.4). Seven of the 10 leading causes of deaths in 2019 were NCDs, accounting for over 85% of mortality in HICs. The picture is markedly different in LICs where communicable diseases were still responsible for almost one half (46.8%) of deaths in 2019, despite the gains made against

those diseases. The proportion of deaths due to injuries has also risen in LICs and LMICs.

In 2019, communicable diseases accounted for over one half (52.9%) of all deaths in the WHO African Region and almost

one quarter of deaths in the Eastern Mediterranean and South-East Asia regions. In the European Region, the Western Pacific Region and the Region of the Americas, NCDs were the cause of 80–90% of deaths between 2000 and 2019.

Fig. 2.4. Composition of causes of death, by WHO region, World Bank income group and global, 2000 and 2019



Source: WHO Global health estimates, 2019 (3).

At the global level, declining mortality is not being matched by improvements in morbidity, although trends vary by region and country income group. The age-standardized rate for years lived with disability increased slightly in HICs between 2000 and 2019, partly due to extended longevity and the increasing prevalence of NCDs, as noted above. However, in LICs and LMICs and in the African Region overall, the rate declined during the same period due to gains made against communicable diseases.

Although the largest communicable disease epidemics had ceased to grow prior to COVID-19, they continue to be major threats to public health, especially in low-resourced emergence settings. Globally, these epidemics were still responsible for more than 10.2 million (uncertainty interval [UI] 6.2 to 16.7 million) deaths in 2019, representing 18% of all deaths. The COVID-19 pandemic and the recent resurgence in TB

deaths are powerful reminders of the perennial threat of new or resurgent communicable disease epidemics.

Major investments and improvements in AIDS, TB and malaria programmes have led to declines in incidence and mortality for these diseases at the global level. Wide availability of highly effective antiretroviral therapy has reduced the number of AIDS-related deaths by 55% globally and by 63% in the heavily affected eastern and southern African subregions between 2000 and 2020 (6, 7). Similarly, the effectiveness of early TB diagnosis and treatment has reduced the number of deaths due to this preventable disease by 38% between 2000 and 2020, while vector control, chemoprevention, diagnosis and treatment averted an estimated 1.5 billion malaria cases and 7.6 million deaths over the same period (8, 9). Nonetheless, these diseases continue to rank among the top 10 causes of death in LICs.

Global burden of disease

The burden of disease continued to show a distinct distribution across country income groups. The vast majority 87.8% of deaths in HICs in 2019 were due to NCDs, with heart disease, dementia and stroke the leading causes. In LICs, communicable diseases, together with maternal, perinatal and nutritional conditions, were still responsible for nearly one half of all deaths, while lower respiratory infections, diarrhoeal diseases, malaria, TB and HIV remained among the top 10 causes of

death. LICs and LMICs continued to bear the greater part of the burden of communicable diseases, including TB, HIV, malaria, neglected tropical diseases and hepatitis B.

Current improvements are not strong enough to allow to reach several of the health-related SDG targets by 2030, including premature mortality from NCDs, the incidence of TB and malaria, and new HIV infections.

Impact of the COVID-19 pandemic

Current estimates indicate that the COVID-19 pandemic is either slowing or reversing the rising trend for life expectancy and HALE. It is estimated that life expectancy and HALE has fallen by up to one to two years in some countries and by smaller margins in several others. When compared with 2019, recent studies found that COVID-19 had reduced life expectancy in 2020 by more than 6 months in some countries in the Americas and Europe. One study showed that the decline in

life expectancy was greater for men than women in most of the countries included due to a higher excess mortality attributed to COVID-19 in men (10). Similarly, another report found that life expectancy in 2020 had fallen in all but three of 37 HICs and UMICs compared with 2019, with men experiencing a greater decline in life expectancy. The study estimated that more than 28 million excess years of life were lost in 2020 in those 37 countries (1).

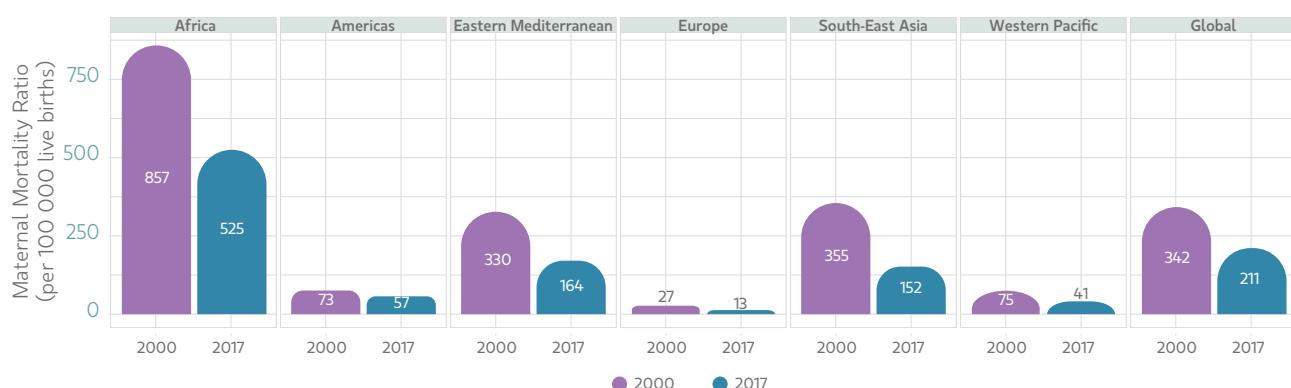
Maternal and child mortality

Maternal mortality

A sharp reduction in maternal mortality has been observed since 2000. Thirty-five percent fewer women died globally from causes related to or aggravated by pregnancy and childbirth in 2017 compared with 2000 (Fig. 2.5). Nevertheless, the estimated toll of 295 000 (279 000 to 340 000) deaths in 2017 was unacceptably high. The vast majority of those women—an estimated 94%—died in LICs and LMICs.

The Sustainable Development agenda requires reducing the global maternal mortality ratio to fewer than 70 per 100 000 live births by 2030 (SDG Target 3.1). The steepest reductions between 2000 and 2017 were observed in the South-East Asia Region (57%; from 355 to 152 maternal deaths per 100 000 live births) and the African Region (39%; from 827 to 525 maternal deaths per 100 000 live births) (11).

Fig. 2.5. Maternal mortality ratios (probability of dying by age five per 100 000 live births), by WHO region and global, 2000 and 2017



Source: Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division (11).

Several factors are contributing to the progress in reducing maternal mortality. They include advances towards UHC and improvements in addressing inequities in access to and the quality of sexual, reproductive, maternal and newborn health care. Many health systems have adapted to respond better to the needs and priorities of women and girls and interventions aimed at reducing social and structural inequities have increased.

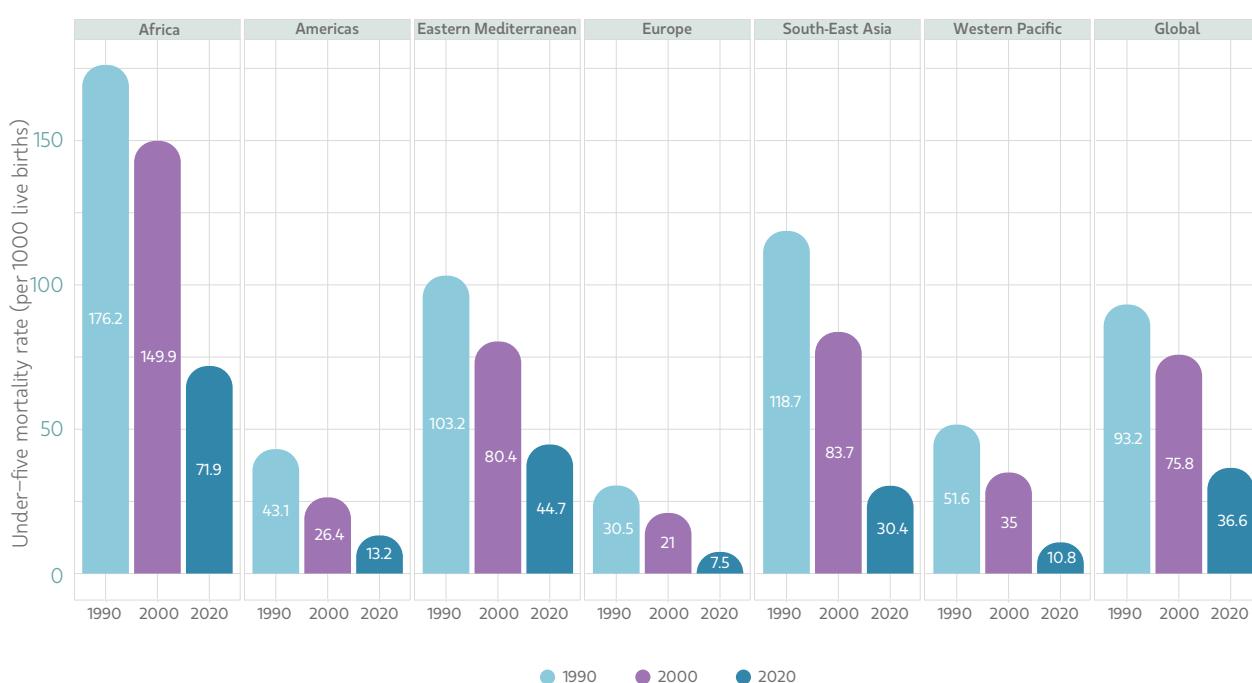
The global lifetime risk of maternal death was nearly halved between 2000 and 2017, from one in 100, to one in 190.

Under-five mortality

Substantial global progress has been made since 1990 in reducing childhood mortality (Fig. 2.6). The total number of deaths in children under 5 years of age declined from an estimated 12.6 million in 1990 to 5.0 million in 2020, and the global under-five mortality rate has dropped by 61%, from 93 deaths per 1000 live births in 1990 to 37 in 2020 (4). This was equivalent to 1 in 11 children dying before reaching age 5 in 1990, compared to one in 27 in 2020.

However, large differences remained in 2017 between the lifetime risk of maternal death in HICs (one in 5400) and LICs (one in 45) continue to exist. Partly due to those disparities, global reductions in maternal mortality are not sufficient to reach the SDG target. From 2000 to 2017, the global maternal mortality ratio declined by an estimated 38%—from 342 deaths to 211 deaths per 100 000 live births. Only 16 countries have achieved an annualized rate of reduction of at least 6.1% per year, the rate needed to reach the SDG target by 2030.

Fig. 2.6. Under-five mortality rate (per 1000 live births), by WHO region and global, 1990, 2000 and 2020



Source: United Nations Inter-agency Group for Child Mortality Estimation. Levels and trends in child mortality: report 2021 (4).

COVID-19 disease and children's health

Deaths directly attributable to COVID-19 infection are strongly age-dependent, with children and adolescents least affected. Current estimates indicate that children under 5 years of age

represent approximately 2.5% of the global COVID-19 cases and 0.1% of deaths due to the disease (12).

Despite early evidence indicating that COVID-19 disease would have a modest direct impact on child mortality, concerns have remained about its *indirect* impact on child mortality. Increases in under-five deaths were anticipated due to the additional strain on under-resourced health systems, reduced care-seeking visits to health facilities, and disrupted preventive measures such as access to immunization and nutritional supplements. COVID-19-related socioeconomic harm experienced by households, including loss of income, was also expected to compromise the health of children under five years and affect child mortality.

The contribution of such indirect deaths to overall mortality can be assessed by examining excess mortality over a given period. Data from civil registration and vital statistic systems and from health management information systems from 80 countries, as well as specific country-wide monitoring systems (for example, in Mozambique and South Africa), indicate no significant deviation from expected under-five mortality for 2020. In some cases, there may have been fewer deaths than would have been expected, based on historical data (4). As more data arrive from countries and further analyses are performed, these preliminary findings may change for 2021.

Newborn deaths

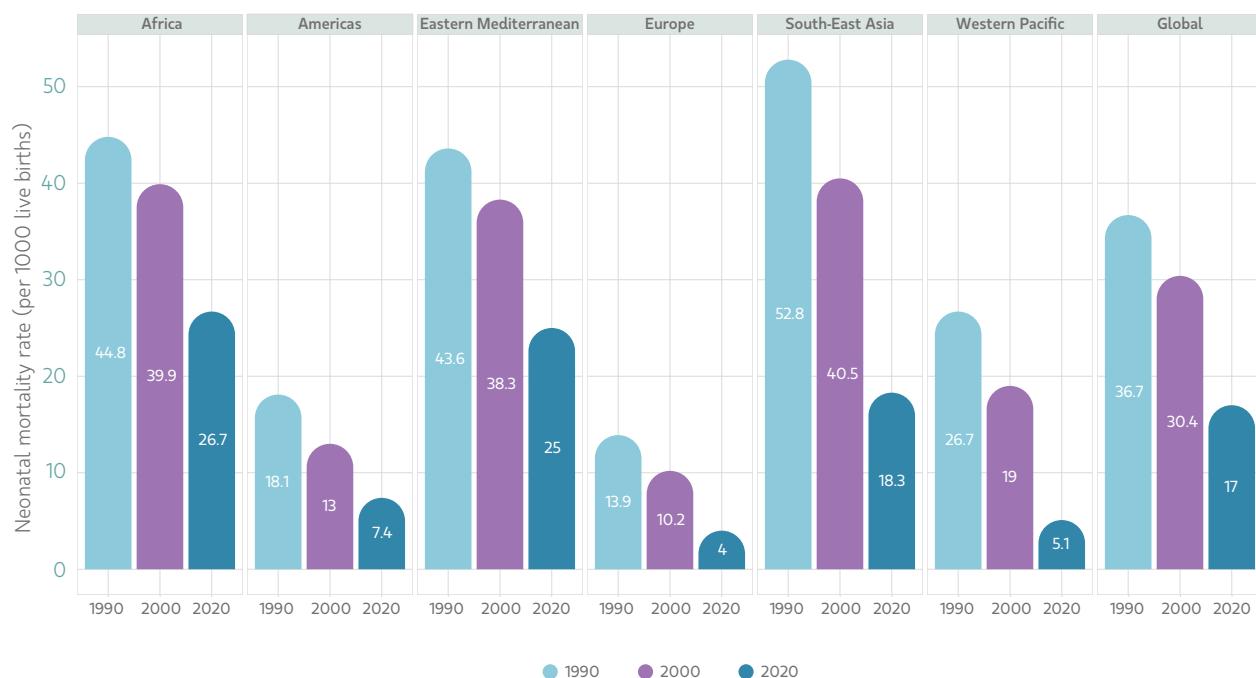
Globally 2.4 million children died in their first month of life in 2020, a steep drop compared with the estimated 5 million children who had died at that age in 1990. However, this still amounted to approximately 6500 newborn deaths every day in 2020. The decline in neonatal mortality from 1990 to 2020 has been slower than that in post-neonatal under-five mortality. Neonatal mortality accounted for about 47% of all deaths among children under five years of age in 2020, up from 40% in 1990.

The chances of survival from birth vary widely depending on where a child is born. The African Region had the highest neonatal mortality rate in 2020, with 27 (UI 24 to 31) deaths per 1000 live

births, followed by the Eastern Mediterranean Region, with 25 (UI 22 to 29) deaths per 1000 live births (Fig. 2.7). A child born in the African Region was 10 times more likely to die during its first month of life compared with a child born in a HIC.

On average, boys are expected to have a higher under-five mortality rate than girls. However, in some countries, the under-five mortality rate for girls is significantly higher than would be expected based on global sex ratio patterns. The number of countries with higher-than-expected under-five mortality for girls has decreased over time, from 22 countries in 1990 to 5 in 2020 (4).

Fig. 2.7. Neonatal mortality rate (0 to 27 days, per 1000 live births), by WHO region and global, 1990, 2000 and 2020



Source: United Nations Inter-agency Group for Child Mortality Estimation. Levels and trends in child mortality: report 2021 (4).

Fifty-four countries, three quarters of them in the WHO African Region, need to urgently reduce their under-five mortality rates if they are to meet the SDG target (SDG 3.2.1) for under-five mortality² by 2030. The stakes are high: achieving the SDG target in all countries would avert at least 10 million under-five deaths between 2021 and 2030. Similarly, 61 countries will also not meet the SDG target (3.2.2) for neonatal mortality

rates³ by 2030 without rapid, urgent action. In brief, 53 of these countries need to more than double the current rate at which neonatal mortality is decreasing if they are to achieve the SDG target. Children living in countries considered as fragile or conflict-affected are particularly vulnerable and almost 43% of global under-five deaths in 2020 occurred in such settings.

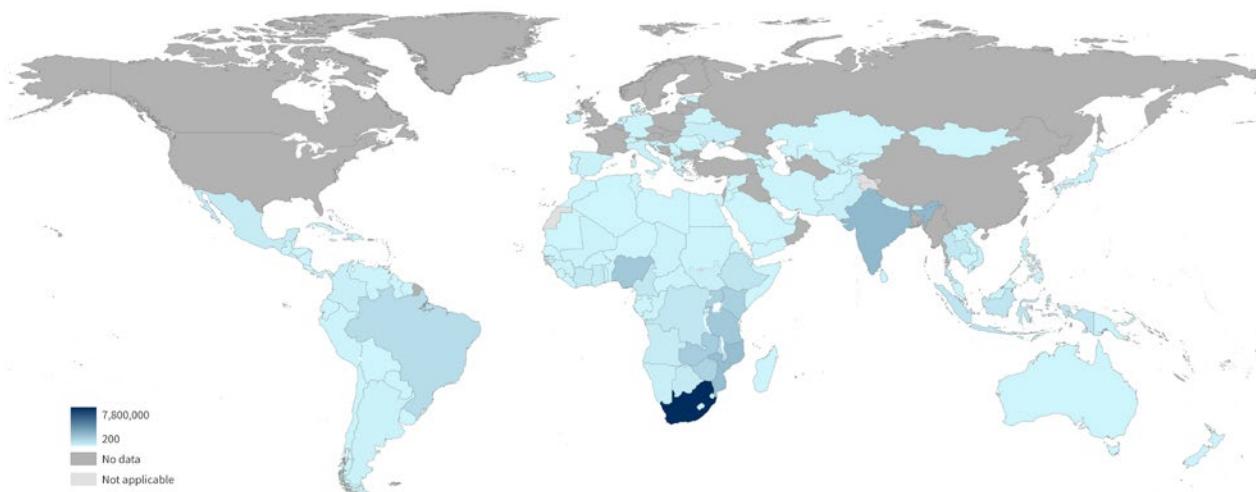
Communicable diseases

HIV incidence and mortality

Worldwide, an estimated 1.5 million (UI 1.0 to 2.0 million) people acquired HIV for the first time in 2020. This brought the number of people living with HIV globally to 37.7 million (UI 30.2 to 45.1 million), with over two thirds in the WHO African Region (Fig. 2.8). Globally, new HIV infections in 2020 were 48.3% lower than in 2000, a testament to countries' efforts to prevent new infections. Progress has been strongest in

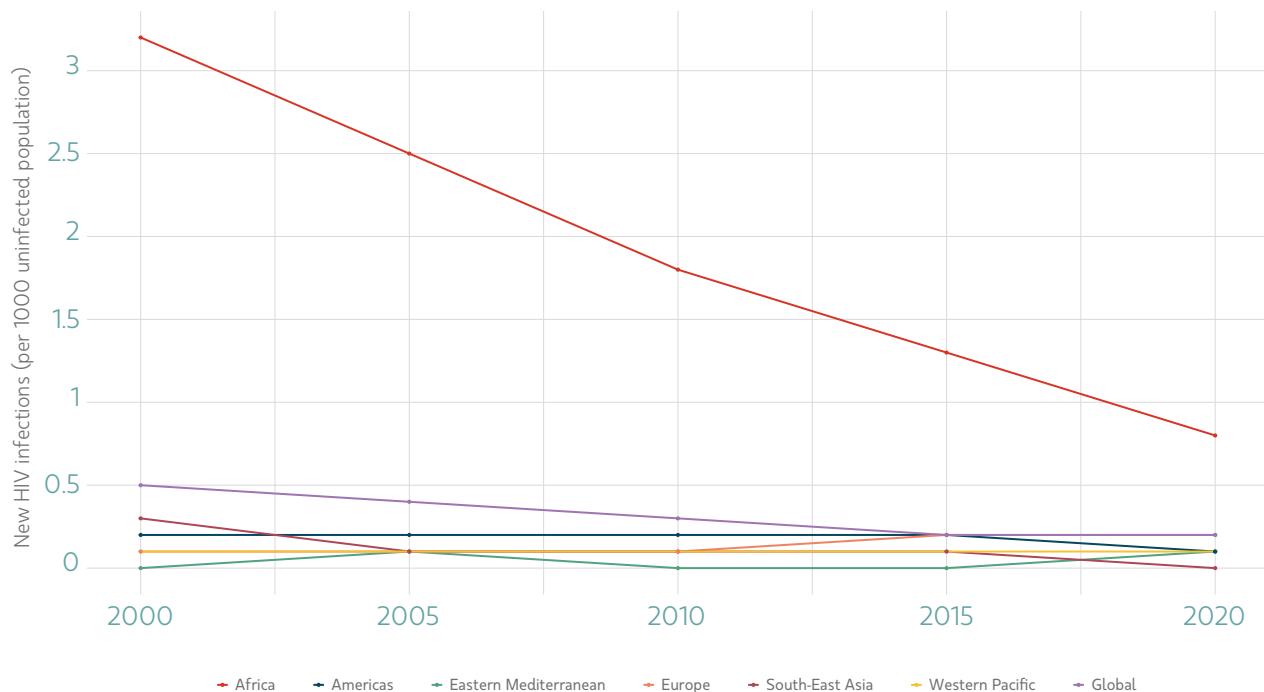
the African Region (Fig. 2.9). However, no region has achieved the target of a 75% reduction in new infections by 2020,⁴ as agreed to by the United Nations General Assembly in 2016 (13). New infections have also increased since 2000 in some countries in the WHO European Region and Eastern Mediterranean Region.

Fig. 2.8. Estimated numbers of people (all ages) living with HIV, 2020



Source: AIDSinfo. Joint United Nations Programme on HIV/AIDS (UNAIDS); Global Health Observatory indicators (6,7).

² The target for SDG 3.2.1 is under-five mortality rates for all countries of at least as low as 25 per 1000 live births by 2030.
³ The target for SDG 3.2.2 is neonatal mortality rates for all countries of at least as low as 12 deaths per 1000 live births by 2030.
⁴ Measured against a 2010 baseline.

Fig. 2.9. New HIV infections (per 1000 uninfected population), by WHO region and global, 2000–2020

Source: AIDSinfo. Joint United Nations Programme on HIV/AIDS (UNAIDS); Global Health Observatory indicators (6,7).

Certain subpopulations continued to be at heightened risk of HIV infection. In the WHO African Region, adolescent girls and young women (aged 15–24 years) accounted for approximately 25% of all HIV infections in 2020, although they represented only 10% of the total population (14). In all regions, people belonging to key populations⁵ are considerably more likely to acquire HIV compared with the overall adult population. According to the Joint United Nations Programme on HIV/AIDS, almost two thirds of new HIV infections in 2020 were among persons belonging to key populations and their sex partners (14).

In addition to protecting people living with HIV against severe illness and death due to acquired immunodeficiency syndrome (AIDS), HIV treatment also contributes to preventing new infections. Studies have established that persons with undetectable HIV viral loads are unable to transmit the virus to others (15–17). The availability and use of antiretroviral therapy has increased dramatically since 2000 when HIV treatment was

available primarily in HICs. In 2020, an estimated 27.5 million (UI 26.5 to 27.7 million) people living with HIV globally were receiving antiretroviral therapy, representing approximately 73% (56% to 88%) of people living with HIV. Widening access to effective treatment has led to a steep drop in AIDS-related deaths, now estimated at 680 000 (UI 480 000 to 1.0 million) in 2020—55% lower than in 2000 (6, 7).

COVID-19 pandemic-related demands on health services have disrupted some HIV prevention programmes. Testing and treatment services were worst affected, particularly during 2020, while voluntary medical male circumcision programmes (an important intervention for protecting males against acquiring HIV infection during heterosexual intercourse) were also suspended in several African countries. Globally, about one in six (17%) countries reported that at least 25% of their HIV prevention services were still disrupted in the final quarter of 2021 (19).

Tuberculosis incidence and mortality

Although TB is both preventable and curable, it is the world's leading cause of death from a single infectious agent, the leading killer of people with HIV, and a major cause of deaths related to antimicrobial resistance. Stepped-up national responses have led to important gains against TB in the past two decades, with the annual number of TB deaths globally declining by 45% between 2000 and 2019. But the COVID-19 pandemic

is threatening the progress made in providing essential TB services and reducing the TB disease burden.

The impact of the COVID-19 pandemic was most visible in the large global reduction in the number of newly diagnosed and reported cases of TB: from 71 million in 2019 to 5.8 million in 2020, far fewer than the approximately 10 million people who developed TB in 2020. Overall, 16 countries worldwide

⁵ Primarily sex workers, gay men and other men who have sex with men, people who inject drugs, transgender persons, and prisoners and other incarcerated persons.

accounted for 93% of those reductions, with the worst affected being India, Indonesia and the Philippines (8).

Reductions in TB case notification were evident in five of the six WHO regions (with large absolute and relative reductions in the South-East Asia (24.0%) and Western Pacific regions (19.5%). Taken together, these two regions accounted for most (84%) of the global reduction in notifications of people newly diagnosed with TB between 2019 and 2020. The decline in the WHO African Region was more modest (2.5%). Provisional data up to June 2021 show ongoing shortfalls in diagnoses and reporting. Fewer people received TB preventive treatment in 2020 than in 2019 (3.6 million compared with 2.8 million, a 21% decrease) and fewer people were treated for drug-resistant TB in 2020 than in 2019 (150 000 compared with 170 000, a 15% decrease) (8).

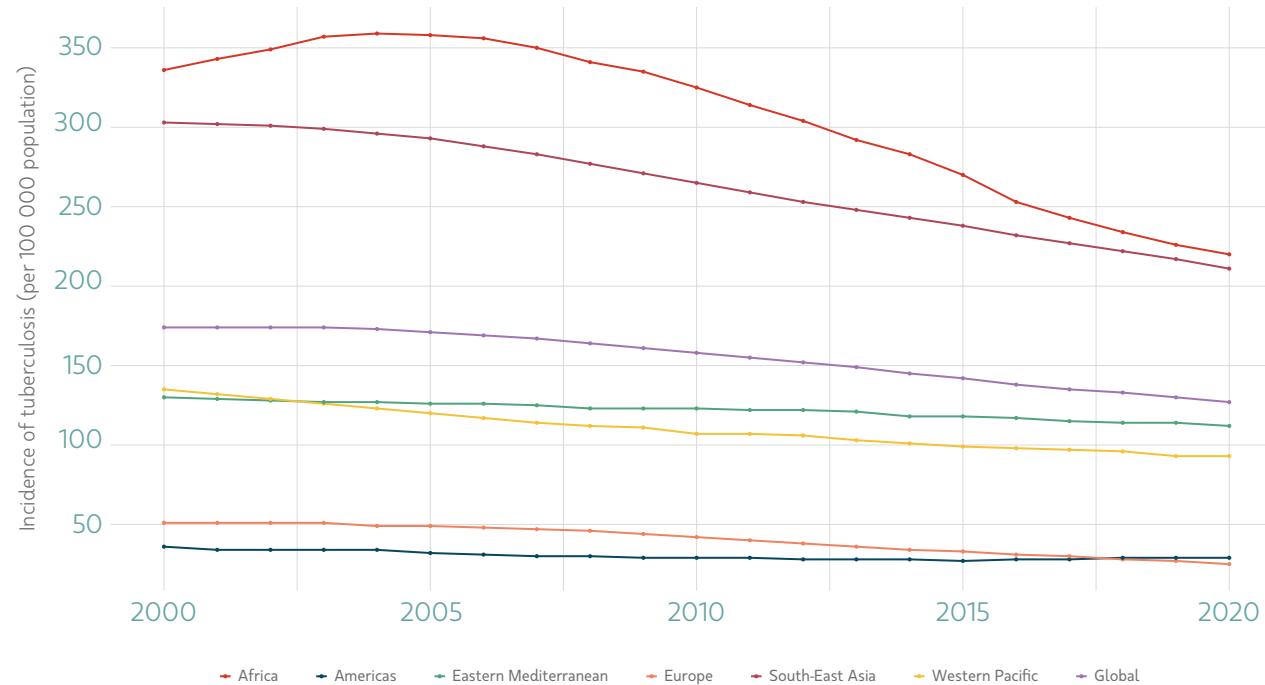
Reduced TB diagnosis and access to treatment has resulted in an increase in TB deaths. Globally in 2020, there were an estimated 1.3 million (UI 1.2 to 1.4 million) deaths among HIV-negative people, up from 1.2 million (UI 1.1 to 1.3 million) in 2019, and an additional 214 000 (UI 187 000 to 242 000) deaths among HIV-positive people compared with 209 000 (UI 178 000 to 243 000) in 2019. The highest reported TB

mortality was in the WHO African and South-East Asian regions. Despite some country and regional success stories, the world is not currently on track to reach the global TB targets, including the 2030 SDG target of a 90% reduction of the 2015 mortality baseline. These effects of COVID-19-related disruptions are expected to worsen in 2021 and 2022 (8).

In addition, the decline in TB incidence (the number of people developing TB each year) achieved prior to the COVID-19 pandemic has slowed considerably (Fig. 2.10). Worldwide, in 2020, an estimated 9.9 million (UI 8.9 to 11 million) people were infected with TB, representing a small decline from 2019. The slowing decline in TB incidence was most evident in the WHO Eastern Mediterranean, South-East Asia and Western Pacific regions, while more rapid declines were observed in the African and European regions. Incidence has increased in the WHO Region of the Americas due to an upward trend in Brazil since 2016 (8).

Actions to counteract these trends are urgently required. The immediate priority is to restore access to and provision of essential TB services so that levels of TB case detection and treatment can recover to at least their 2019 status, especially in the most badly-affected countries.

Fig. 2.10. Incidence of TB (per 100 000 population), by WHO region and global, 2000–2020



Source: Global tuberculosis report 2021 (8).

Malaria incidence and mortality

Strong gains were made between 2000 and 2020 in preventing and controlling malaria, including a 27% reduction in global malaria case incidence (from 81 to 59 cases per 1000 population at risk) and an almost 50% reduction in the global malaria mortality rate (from 30 to 15 deaths per 100 000 population at risk) (Fig. 2.11). An estimated 10.6 million malaria deaths were averted globally in 2000–2020, mostly (95%) in the WHO African Region. However, progress began to stall in 2017 and subsequent disruptions associated with the COVID-19 pandemic have reversed some of the earlier improvements, reverting the global incidence and mortality rates back to their 2015 levels (9).

Globally, the total number of malaria cases increased to an estimated 241 million (UI 218–269 million) in 2020, up from 227 million (UI 208 to 248 million) in 2019. The WHO African Region accounted for most of the 14 million increase. An estimated additional 69 000 more people died from malaria globally in 2020 than in 2019 (627 000 [UI 583 000 to 765 000] compared with 558 000 [UI 521 000 to 642 000], respectively). About two thirds (47 000) of the additional

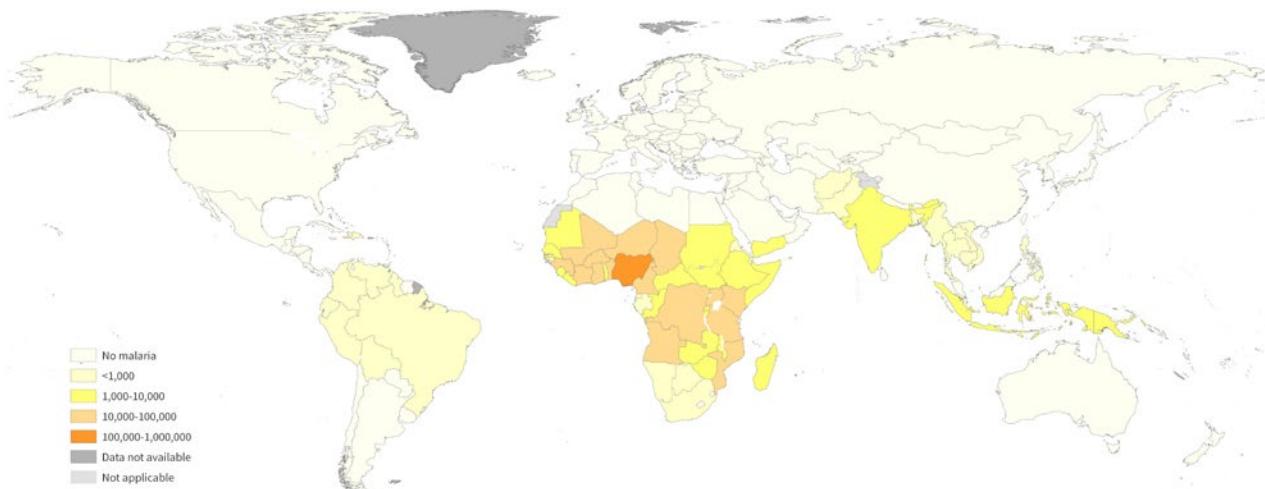
malaria deaths were linked to disruptions in the provision of malaria prevention, diagnosis and treatment services and products during the COVID-19 pandemic (9).

Among the 11 countries with the highest burden worldwide, only India registered progress against malaria in 2020 compared with the previous year. The 10 other highest-burden countries, all in the WHO African Region, reported increases in cases and deaths (8). The African Region, which continues to carry the heaviest burden, accounted for about 95% of all malaria cases and 96% of all deaths in 2020. Total malaria cases in that region increased to an estimated 228 million (UI 205 to 256 million) in 2020, up from 213 million (UI 194 to 233 million) in 2019. The region experienced a 13% increase in malaria deaths in 2020 compared with 2019, with deaths rising to 602 000 (UI 560 000 to 738 000) in 2020, up from 534 000 (UI 498 000 to 616 000) in 2019 (Fig. 2.12) (9). That shift highlights the consequences of even moderate service disruptions in populations at risk of malaria. About 80% of deaths in the region are among children under five years of age.

Fig. 2.11. Incidence of malaria (per 1000 population), by WHO region and global, 2000–2020



Source: World malaria report 2021 (9).

Fig. 2.12. Estimated number of malaria deaths, 2020

Source: World malaria report 2021 (9).

Progress towards the 2020 milestones of the WHO global malaria strategy are now substantially off-track. In 2020, the global malaria case incidence rate was 59 cases per 1000 people at risk—40% higher than the target of 35 cases. The global mortality rate of 15.3 deaths per 100 000 people at risk exceeded the target of 8.9 cases by 42%. Reaching the 2030 goals of the WHO malaria strategy, including a 90% reduction in global malaria incidence and mortality rates by 2030, will require new approaches, new tools and a more effective implementation and use of existing ones. Improved and more equitable access is needed for all health services, including for the prevention, diagnosis and treatment of malaria (9).

Some encouraging achievements occurred together with the setbacks of 2020 as some countries made or sustained gains against malaria, particularly those with a low burden of malaria and relatively strong health systems. China and El Salvador were certified by WHO as malaria-free in 2021, while the Islamic Republic of Iran attained three consecutive years of zero indigenous cases in 2020. The six countries of the Greater Mekong subregion continued to record impressive declines in their malaria caseloads. There were approximately 82 000 cases of malaria in the subregion at the end of 2020, down from a peak of 650 000 cases in 2012 and about 100 000 cases in 2019 (9).

Inequalities are persisting

Although most indicators for HIV, TB and malaria have improved over the past 10 years, inequalities have persisted. In many countries, testing for HIV is much lower among populations who are impoverished, poorly educated or rural. Sex-related disparities vary. While UNAIDS and other analysis have shown that young women (15–24 years) in the WHO African Region are at greater risk of HIV infection than their male peers. Males globally are less likely to have taken an HIV test or to be receiving antiretroviral therapy (6). According to data analysed for WHO's 2021 State of inequality: HIV, tuberculosis and malaria report, 56% of countries (27 of 48) reported large

disparities in HIV testing levels for men. However, nearly all countries reported no or low sex-related differences in TB case detection rates, and there were low overall sex-related differences in TB knowledge and attitudes. A few gaps are narrowing. For example, household ownership of at least one insecticide-treated net increased faster among the poorest than the richest households between 2001–2010 and 2011–2020 (19).

Hepatitis B incidence and mortality

WHO estimated that, in 2019, 296 million people were living with chronic hepatitis B infection (defined as hepatitis B surface antigen positive), including about 1.5 million people newly infected with the virus during that year. Hepatitis B prevalence is highest in the WHO African and Western Pacific regions where an estimated 7.5% and 5.9%, respectively, of the adult population have acquired the virus. Prevalence is lower in the South-East Asia (3.0%), Eastern Mediterranean (2.5%) and European regions (1.5%), and in the Region of the Americas (0.5%).

Only 30.4 million people with chronic hepatitis B infection knew their hepatitis B status and 6.6 million were receiving treatment. The infection caused an estimated 820 000 deaths in 2019, mostly from cirrhosis and hepatocellular carcinoma. Globally in 2019, 36 000 people died from acute hepatitis B,

with the South-East Asia Region accounting about one third of those deaths (12 600).

Safe and effective vaccines exist for preventing hepatitis B infection. Their widening use has reduced the global proportion of children under five years of age who are chronically infected with hepatitis B virus to just under 1% in 2019, down from around 5% from the 1980s to the early 2000s before vaccines were available.

Chronic hepatitis B infection can be treated with medicines, including oral antiviral agents that can slow the progression of cirrhosis, reduce the incidence of liver cancer and improve long-term survival. In 2021, WHO estimated that 12–25% of people with chronic hepatitis B infection will require treatment, depending on the setting and eligibility criteria (20).

Number of people requiring interventions against neglected tropical diseases

The 20 WHO-defined diseases and disease groups mostly affect impoverished populations in tropical areas. In 2020, approximately 1.73 billion people worldwide required treatment and care for NTDs. This was considerably fewer than the 2.19 billion people in 2010 and a slight decline (9.5 million) compared with 2019, despite the COVID-19 pandemic, which caused significant disruptions to NTD services (21). In the least-developed countries, 502 million people required treatment and care for NTDs in 2020 (representing 48% of those countries' populations, down from 79% in 2010). However, more than 1.2 billion people still required treatment and care for NTDs outside these countries.

Progress has been due largely to the elimination of at least one NTD by the end of 2020 in 42 countries. Lymphatic filariasis and trachoma are no longer public health problems in 17 and 10 countries, respectively, while onchocerciasis has been eliminated in four countries in the Region of the Americas. Three countries no longer require preventive treatment for soil-transmitted helminthiases (after multiple treatment rounds with high coverage). The annual number of cases of human African trypanosomiasis has decreased over 90% since 2012

to just 663, and the global number of new leprosy cases has continued to decline at an average annual rate of 1% since 2010. Most endemic countries had eliminated leprosy as a public health problem by 2000. In addition, dracunculiasis is on the verge of eradication; only five countries reported a total of 27 human cases in 2020.

In 2020, NTD services were among the health services most severely affected by the COVID-19 pandemic. Leprosy programmes were severely disrupted and new case detection in 2020 was 37% lower compared with 2019 (22). Data reported to WHO show that 761 million individuals received treatment for at least one of the five main NTDs in 2020, considerably fewer than the one billion people treated annually in large-scale campaigns since 2015 (23).

In addition to setting disease-specific targets and intermediate milestones for 2030, the new WHO global road map for NTDs (2021–2030) (23) emphasizes four overarching and 10 cross-cutting targets aligned with SDGs and the WHO Thirteenth General Programme of Work 2019–2023 (24). It also outlines the actions required to reach those targets.

Number of cases of poliomyelitis caused by wild polio virus

There are three strains of wild poliovirus (that is, type 1, type 2 and type 3). Wild poliovirus type 2 was eradicated in 1999 and no case of wild poliovirus type 3 has been detected since the last reported case in Nigeria in November 2012. Both strains are officially certified as globally eradicated, with wild poliovirus type 3 having attained that status in

October 2019. Wild poliovirus type 1 continues to affect three countries globally: Afghanistan, Malawi and Pakistan (with 4, 1 and 1 reported cases, respectively). No cases of wild poliovirus type 1 have been reported in Nigeria since August 2016 and the eradication of wild poliovirus in the WHO African Region was certified in August 2019 (25).

Antimicrobial resistance

WHO has declared antimicrobial resistance to be one of the top 10 global public health threats. Antimicrobial resistance occurs when bacteria, viruses, fungi and parasites evolve in ways that render antibiotics and other antimicrobial medicines ineffective, making infections increasingly difficult or impossible to treat. Misuse and overuse of antimicrobials are the main factors permitting the emergence of drug-resistant pathogens (26). For common bacterial infections (including urinary tract infections, sepsis, sexually-transmitted infections, and some forms of diarrhoea), high rates of resistance have been observed, indicating that the world is running out of effective antibiotics (26).

The rate of resistance to ciprofloxacin, an antibiotic commonly used to treat urinary tract infections, varied from 8.4% to 92.9% for *Escherichia coli* and from 4.1% to 79.4% for *Klebsiella pneumoniae* in countries reporting to the Global Antimicrobial Resistance and Use Surveillance System (26). Resistance in *K. pneumoniae*, a common form of intestinal bacteria, to last-resort

treatment (carbapenem antibiotics) has spread to all regions of the world. *K. pneumoniae* is a major cause of hospital-acquired infections, such as pneumonia, bloodstream infections, and infections in newborns and intensive care unit patients.

In 2020 in 83 reporting countries, a global median 47% of bloodstream infections due to *E. coli* were resistant to third-generation cephalosporins. The global median of methicillin-resistant *Staphylococcus aureus* reported by 81 countries was 30%. The lowest values were observed in HICs. Both pathogens were added to SDG indicators in 2020.

The clinical development of new antimicrobials is almost at a standstill. In 2019, WHO identified 32 antibiotics under clinical development that address the WHO list of priority pathogens; of these, only six were classified as innovative. A lack of access to quality antimicrobials also remains a major issue. Antibiotic shortages are affecting countries in all regions (26).



Injuries

Road injury

Crude death rates for road injuries have decreased by nearly 13% globally since 2000, from 19.1 per 100 000 population to 16.7 per 100 000 population in 2019. However, due to population increases, the total number of deaths caused by injuries rose slightly during that period, from 1.2 million to 1.3 million in 2019. The European Region has seen the greatest decline—a 51% reduction since 2000, down to 7.4 (UI 5.9 to 9.2) deaths per 100 000 population in 2019, which was the lowest rate among all WHO regions. The decline has been slower in other regions.

Homicide

Worldwide, nearly 475 000 people were killed by others in 2019; 80% of victims were men. The global crude death rate for homicides declined by 22%, from 7.9 (UI 6.5 to 9.7) per 100 000 population in 2000 to 6.2 (UI 4.4 to 8.7) per 100 000 population in 2019. The WHO Region of the Americas had the highest male homicide mortality in 2019 at 34.0 (UI 28.0 to 41.5) per 100 000 population, which was almost 3.5 times higher than the global male homicide mortality rate. A strong age pattern was also observed, with young adults aged 20–29 years having the highest age-specific mortality rate at over 10 deaths per 100 000 population globally. Older adults are also a population at high risk of suicide.

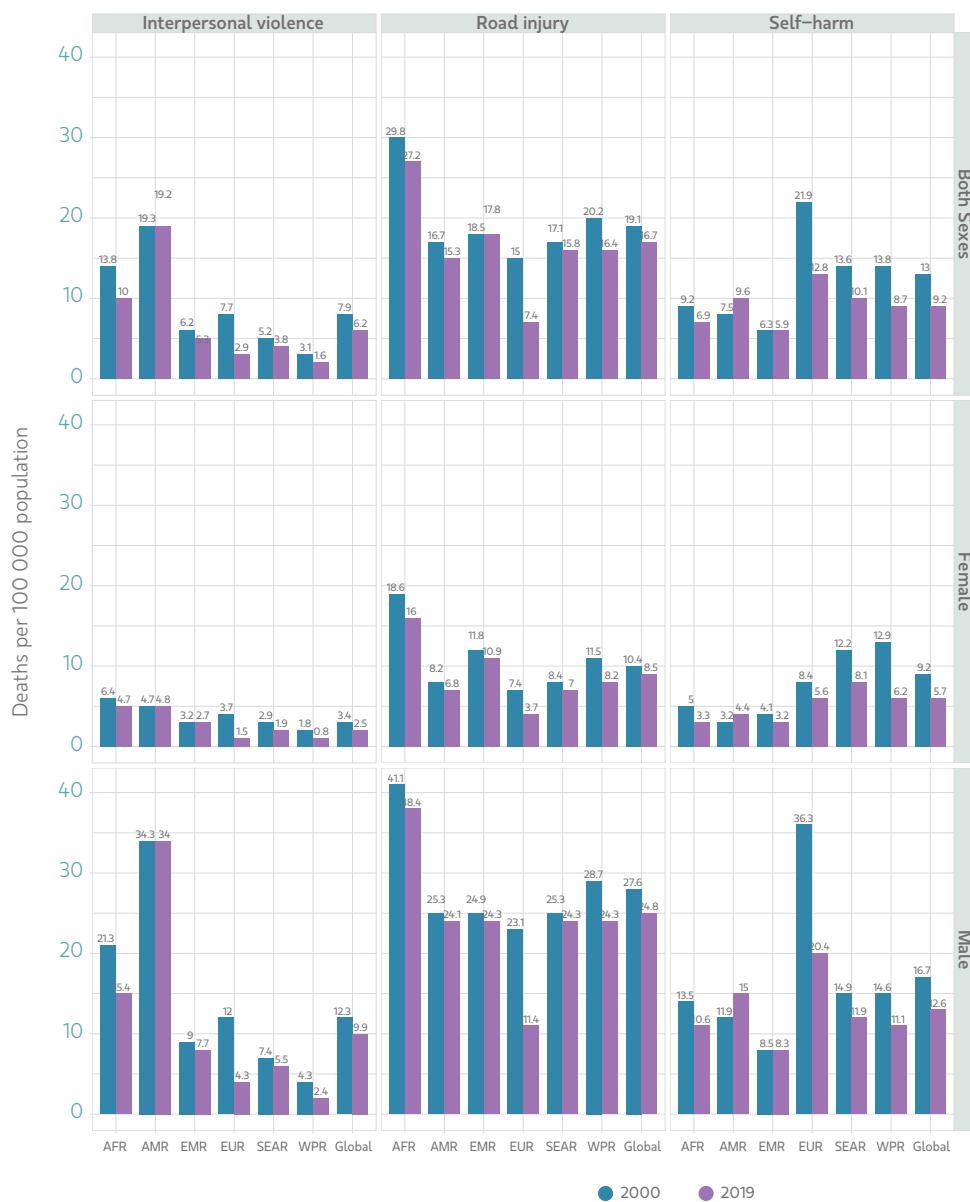
Suicide

The global total of suicide deaths has decreased since 2000, from almost 800 000 to a little over 700 000 in 2019. Crude death rate for suicides declined by 29% during that period, from 13.0 deaths per 100 000 population to 9.2 deaths per 100 000 population.

Whereas suicide rates fell by up to 37% in the Western Pacific Region and 42% in the European Region between 2000 and 2019, the Region of Americas experienced a 28% increase, with rates rising by 26% in men and 38% in women respectively. Despite a dramatic decline in suicide rates over the past two decades, the European Region still has the highest suicide mortality rate at 12.8 per 100 000 population in 2019.

The lowest suicide rate was in the Eastern Mediterranean Region (5.9 per 100 000) (27).

The suicide rate among men was more than twice that among women in 2019 (12.6 per 100 000 compared with 5.7 per 100 000, respectively). Suicide rates among men are generally higher in HICs (16.5 per 100 000), while for women the highest suicide rates are found in LMICs (7.1 per 100 000). Older male adults are particularly at risk – 1 in 4 deaths by suicide among males occur in the age group 60 years and over. Although some countries have placed suicide prevention high on their agendas, too many countries remain insufficiently committed to take action. Currently, only 38 countries are known to have a national suicide prevention strategy.

Fig. 2.13. Crude death rates for injuries, by type, by WHO region and global, 2000 and 2019

Source: WHO Global health estimates, 2019 (3).

Environment

Mortality rate attributed to household and ambient air pollution

Ambient (outdoor) and household (indoor) air pollution are environmental risk factors that have been linked to several health conditions (see chapter 3). These forms of air pollution were responsible for approximately 7 million deaths globally in 2016. The highest attributable mortality rates were concentrated in LMICs that accounted for almost nine of 10 (88%) deaths (28).

In 2016, ambient air pollution accounted for an estimated 4.2 million deaths due to stroke, heart disease, lung cancer, lower respiratory infections and chronic obstructive pulmonary disease. In addition, exposure to indoor air pollution due to smoke from cooking fires caused approximately 3.8 million premature deaths, mostly in LMICs.

Mortality rate attributed to unsafe water, sanitation or lack of hygiene

Unsafe drinking water, sanitation and lack of hygiene caused an estimated 870 000 associated deaths globally in 2016. The African Region suffered a disproportionate burden from such deaths, with a mortality rate at 45.9 per 100 000

population, four times higher than the global average (11.7 per 100 000) and over 150 times higher than the least affected region, the European Region (0.3 per 100 000).

Mortality rate attributed to unintentional poisoning

Globally, more than 84 000 people died from unintentional poisoning in 2019, approximately 9000 fewer than in 2000. The 2019 toll translated to 1.1 (UI 0.6 to 1.8) deaths per 100 000 population, with men dying at a 67% higher rate than women. The youngest and oldest populations were at highest risk of

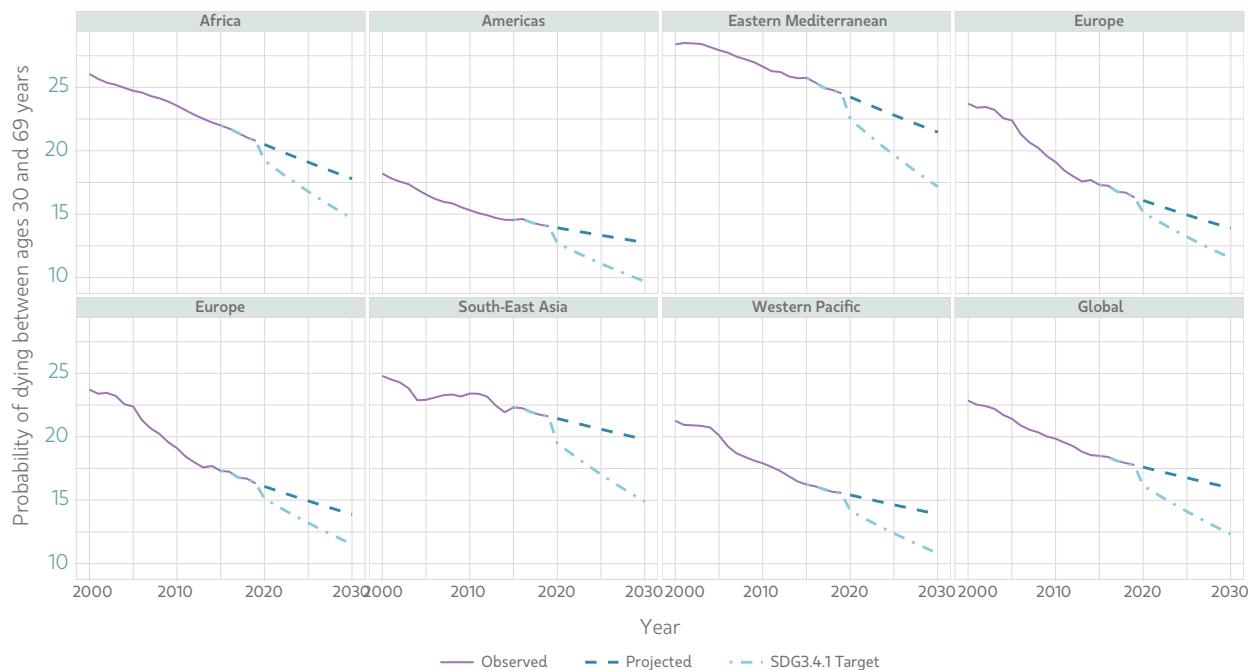
dying from unintentional poisoning. The WHO African Region still had the highest crude death rates at 2.5 (UI 1.2 to 5.0) per 100 000 population in 2019, despite a 25% decline since 2000. The steepest declines were achieved in the South-East Asia and European regions (more than 50%).

Noncommunicable diseases

Improved prevention, diagnosis and treatment have contributed to a significant decrease in global premature NCD mortality, (6) from 22.9% in 2000 to 17.8% in 2019 (Figs. 2.14 and 2.15). The greatest decline occurred in HICs and UMICs (around 30%) and in the European and Western Pacific regions (31% and 27%, respectively) between 2000 and 2019. Despite some progress,

the pace of change in most countries is too slow to achieve SDG target 3.4, which calls for reducing premature mortality from NCDs by one third against a 2015 baseline. With the global annualized rate of reduction slowing significantly since 2015 to a little under 1%, the world is not on track to reach the 2030 SDG target.

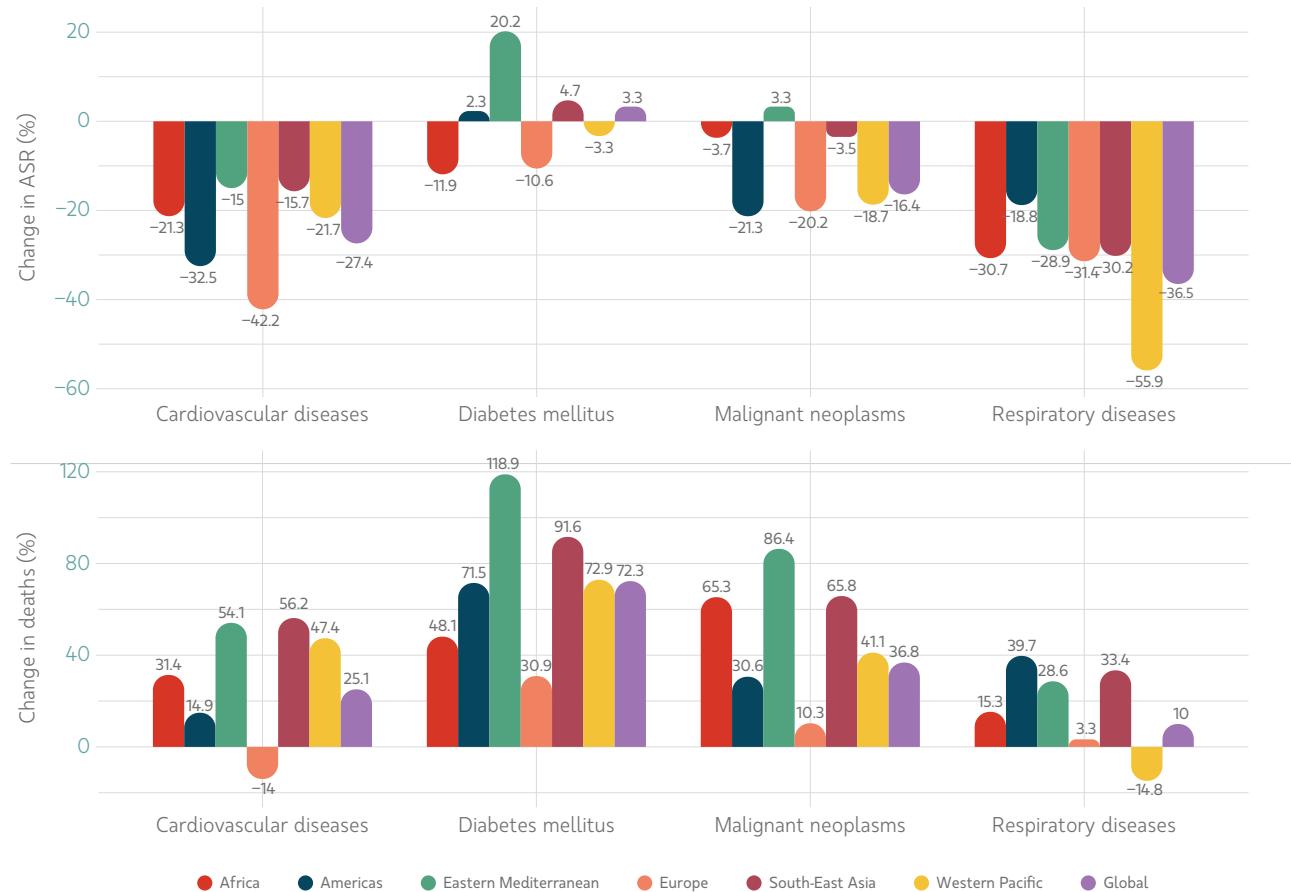
Fig. 2.14. Probability of dying between ages 30 and 70 years from the four major NCDs: observed and projected versus SDG target, by WHO region and global, 2000–2030⁷



Source: WHO Global health estimates, 2019 (3).

⁶ As measured by the probability of dying from one of the four major NCDs (cancer, cardiovascular diseases, diabetes and chronic respiratory diseases) between 30 and 70 years.

⁷ The projection is based on trends prior to COVID-19 and does not account for the impact of the pandemic.

Fig. 2.15. Changes in age-standardized mortality rates for major noncommunicable diseases, by type and WHO region, 2019

Source: WHO Global health estimates, 2019 (3).

Ischaemic heart disease carries the highest risk of premature death for women in more than one half of all countries and in more than three quarters of countries for men. Strokes, other cardiovascular diseases, and some cancers are associated with a similar and even higher risk of premature death in certain countries (29).

Both the absolute numbers and trends for premature mortality due to NCDs continued to vary strikingly between regions and country income groups. Regions with already low premature NCD mortality (such as the Region of the Americas, and the Western Pacific and European regions) experienced the strongest acceleration in annualized rates of reduction since 2015, while the African, Eastern Mediterranean and South-East Asia regions also had accelerated rates of reduction after 2015. Changes in annualized rates of reduction differed less between the various country income groups: across HICs, UMICs and LICs, they slowed by 24% to 30% during 2015 and 2019.

Globally, the biggest declines in deaths between 2000 and 2019 were for chronic respiratory diseases (a 37% drop in age-standardized rates for all ages combined), followed by cardiovascular disease (27%) and cancer (16%). However, deaths due to diabetes increased slightly (by 3%) in the same period.

The Western Pacific Region made the biggest gains against chronic respiratory diseases (a 55% decrease in mortality), while the Region of the Americas and the European Region achieved declines of up to 43% in mortality due to cardiovascular disease. In contrast, mortality caused by diabetes increased slightly in the Region of the Americas and the South-East Asia Region (a 5% rise in the age-standardized rate) and by over 20% in the Eastern Mediterranean Region. The age-standardized rate of mortality due to diabetes increased by 5% in UMICs and by 13% in LMICs.

However, due to population growth and increased longevity, the total number of deaths attributable to NCDs has risen. Cancer, cardiovascular disease, diabetes and chronic respiratory diseases killed approximately 33.2 million people worldwide in 2019, a 28% increase compared to 2000. More than 20 million of these deaths were in middle-income countries, with the Western Pacific Region most heavily affected. NCDs continued to be leading causes of ill health worldwide and were responsible for seven of 10 premature deaths in 2019. The COVID-19 pandemic threatens to aggravate that trend. Persons with existing NCDs are at increased risk of severe illness and death due to COVID-19 (30-34), and the pandemic has disrupted many NCD services (18, 35,36), which is expected to lead to increases in NCD deaths.

References

1. Islam N, Jdanov DA, Shkolnikov VM, Khunti K, Kawachi I, White M, et al Effects of COVID-19 pandemic on life expectancy and premature mortality in 2020: time series analysis in 37 countries. *BMJ*, 2021;375:e
2. Pifarré i Arolas H, Acosta E, López-Casasnovas G, Lo A, Nicodemo C, Riffe T, et al. Years of life lost to COVID-19 in 81 countries *Sci Rep* 2021;11:3504.
3. Global health estimates 2019: Life expectancy and leading causes of death and disability, 2000–Geneva: World Health Organization; 2020 (<https://www.who.int/data/gho/data/themes/theme-details/GHO/mortality-and-global-health-estimates>, accessed 3 May 2022).
4. Levels and trends in child mortality: United Nations Inter-Agency Group for Child Mortality Estimation (UN IGME), Report New York: United Nations Children's Fund (UNICEF); 2021 (<https://data.unicef.org/wp-content/uploads/2022/01/UNICEF-IGME-2021-Child-Mortality-Report.pdf>, accessed 3 May 2022)
5. Hosseinpoor AR, Williams JS, Jann B, Kowal P, Officer A, Posarac A, Chatterji S. Social determinants of sex differences in disability among older adults: a multi-country decomposition analysis using the World Health Survey *Int J Equity Health* 2012;11:52.
6. AIDSinfo [online database] Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS) (<https://aidsinfo.unaids.org/>, accessed 3 May 2022).
7. HIV/AIDS (Global Health Observatory) [online database] Geneva: World Health Organization; 2022 (<https://www.who.int/data/gho/data/themes/hiv-aids>, accessed 16 May 2022).
8. Global tuberculosis report Geneva: World Health Organization; (<https://apps.who.int/iris/rest/bitstreams/1379788/retrieve>, accessed 3 May 2022)
9. World malaria report Geneva: World Health Organization; Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/rest/bitstreams/1398397/retrieve>, accessed 3 May 2022)
10. Aburto JM, Schöley J, Kashnitsky I, Zhang L, Rahal C, Missov TI, et al. Quantifying impacts of the COVID-19 pandemic through life-expectancy losses: a population-level study of 29 countries *Int J Epidemiol* 2022;51(1):63–
11. Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division Geneva: World Health Organization; 2019 (<https://apps.who.int/iris/handle/10665/327595>, accessed 11 May 2022).
12. WHO Coronavirus (COVID-19) dashboard with vaccination data (online database) Geneva: World Health Organization; 2022 (<https://covid19.who.int/measures>, accessed 3 May 2022).
13. Political declaration on HIV and AIDS: On the fast-track to accelerating the fight against HIV and to ending the AIDS epidemic by A/RES/70/ New York: United Nations General Assembly; 2016.
14. Confronting inequalities: Lessons for pandemic responses from 40 years of AIDS Global AIDS Update Geneva: UNAIDS; 2021 (https://www.unaids.org/sites/default/files/media_asset/2021-global-aids-update_en.pdf, accessed 3 May 2022).
15. Rodger AJ, Cambiano V, Bruun T, Vernazza P, Collins S, van Lunzen J, et al. Sexual activity without condoms and risk of HIV transmission in serodifferent couples when the HIV-positive partner is using suppressive antiretroviral therapy *JAMA* 2016;316(2):171.
16. Rodger AJ, Cambiano V, Bruun T, Vernazza P, Collins S, Degen O, et al. Risk of HIV transmission through condomless sex in serodifferent gay couples with the HIV-positive partner taking suppressive antiretroviral therapy (PARTNER): final results of a multicentre, prospective, observational study. *Lancet*. 2019.
17. Bavinton BR, Pinto AN, Phanuphak N, Grinsztejn B, Prestage GP, Zablotska-Manos IB, et al. Viral suppression and HIV transmission in serodiscordant male couples: an international, prospective, observational, cohort study *Lancet HIV* 2018;5(8):e438–e447.
18. Third round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic: November – December Interim report Geneva: World Health Organization; 2022 (https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2022.1, accessed 3 May 2022).
19. State of inequality: HIV, tuberculosis and malaria Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/rest/bitstreams/1398650/retrieve>, accessed 3 May 2022).

20. Hepatitis B: key facts Geneva: World Health Organization; July 2021 (<https://www.who.int/news-room/fact-sheets/detail/hepatitis-b>, accessed 3 May 2022).
21. Neglected tropical diseases: 2020 preventive chemotherapy treatment coverage declines due to COVID-19 disruptions Geneva: World Health Organization; September 2021 (<https://www.who.int/news-room/item/24-09-2021-neglected-tropical-diseases-2020-preventive-chemotherapy-treatment-coverage-declines-due-to-covid-19-disruptions>, accessed 3 May 2022).
22. Leprosy: key facts Geneva: World Health Organization; January 2022 (<https://www.who.int/news-room/fact-sheets/detail/leprosy>, accessed 3 May 2022).
23. Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021–Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/handle/10665/338565>, accessed 3 May 2022).
24. Thirteenth General Programme of Work, 2019–2023: Promote health, keep the world safe, serve the vulnerable Geneva: World Health Organization; 2019 (<https://apps.who.int/iris/handle/10665/324775>, accessed 3 May 2022).
25. Africa eradicates wild poliovirus. Media release. Brazzaville: WHO Regional Office for Africa 25 August 2020 (<https://www.afro.who.int/news/africa-eradicates-wild-poliovirus>, accessed 3 May 2022)
26. Antimicrobial resistance fact sheet. Geneva: World Health Organization; November 2021 (<https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance>, accessed 3 May 2022).
27. Suicide worldwide in Geneva: World Health Organization; June 2021 (<https://apps.who.int/iris/rest/bitstreams/1350975/retrieve>, accessed 3 May 2022).
28. WHO Global Health Observatory. Air pollution data portal. Geneva: World Health Organization, 2022 (<https://www.who.int/data/gho/data/themes/air-pollution>, accessed 3 May 2022).
29. NCD Countdown 2030 collaborators. NCD Countdown 2030: pathways to achieving Sustainable Development Goal target 3. Lancet 2020;396(10255):918–
30. Cheng S, Zhao Y, Wang F, Chen Y, Kaminga AC, Xu H. Comorbidities' potential impacts on severe and non-severe patients with COVID-19: A systematic review and meta-analysis. Medicine (Baltimore) 2021;100(12)e2971.
31. Pagdanganan CDP, Juangco J. Hypertension as a prognostic factor in the prediction of mortality in patients with COVID-19: a systematic review and meta-analysis. Euro Heart J. 2021;42(s1):hab724.2393.
32. Du Y, Zhou N, Zha W, Lv Y. Hypertension is a clinically important risk factor for critical illness and mortality in COVID-19: A meta-analysis. Nutr Metab Cardiovasc Dis. 2021;31(3):745–
33. Mahamat-Saleh Y, Fiolet T, Rebeaud ME, Mulot M, Guihur A, El Fatouhi D, et al. Diabetes, hypertension, body mass index, smoking and COVID-19-related mortality: a systematic review and meta-analysis of observational studies. BMJ Open 2021;11(10):e052777.
34. Pranata R, Lim MA, Huang I, Raharjo SB, Lukito AA. Hypertension is associated with increased mortality and severity of disease in COVID-19 pneumonia: A systematic review, meta-analysis and meta-regression. J Renin Angiotensin Aldosterone Syst. 2020;21(2):
35. Pulse survey on continuity of essential health services during the COVID-19 pandemic. Interim report, Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/rest/bitstreams/1297631/retrieve>, accessed 3 May 2022).
36. Second round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic. Interim report, Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/rest/bitstreams/1343409/retrieve>, accessed 3 May 2022).



03

Risk factors for health

Included in the health-related targets of the SDGs are risk factors that shape health and developmental outcomes for individuals and societies. This chapter provides an overview of progress towards achieving the health risk-related SDG and WHO General Programme of Work targets, including the impact of the COVID-19 pandemic.

Before the pandemic struck, global trends had been favourable in several respects. There had been reductions in child stunting, alcohol consumption and tobacco use, as well as increased access to safely managed drinking water and sanitation, basic hygiene, and clean fuels and technologies for cooking. By contrast, obesity among people of all ages, anaemia among women, hypertension among adults, violence against women, and outdoor air pollution had been either increasing or remaining at high levels.

The full impact of the pandemic on these risk factors is not yet known at the global level. However, the available evidence suggests that many of the relevant services have been disrupted, with potentially dramatic, negative consequences (see chapter 4) (1). In addition, some NCD risk factors have been found to increase individuals' risk of severe outcomes due to COVID-19.

Box 3.1 Progress in the Healthier Populations billion target of the GPW 13

WHO is monitoring overall progress on risk factors using the healthier populations billion target. This target is projected to be almost reached by 2023, however, this is only a quarter of that required to reach the Sustainable Development Goals by 2030. Prior to the COVID-19 pandemic, estimates suggested 900 million more people would be enjoying better health and wellbeing in 2023 compared with the 2018 baseline. Current progress reflects improvements made in access to clean household fuels, safe water, sanitation and hygiene (WASH), and tobacco control. However, in other areas such as obesity and malnutrition the situation is stagnant or even worsening. Looking ahead, it has been

estimated that to achieve the health-related Sustainable Development Goals, the target needs to be almost 4 billion people reached for every five-year period. To achieve this, a focus will be required on leading risk factors for premature mortality and morbidity, such as tobacco use, air pollution, road traffic injuries, mental health, obesity and climate change, that will be key levers for increasing healthier lives. Attention to inequalities between and within countries is critical. To achieve global targets, sustained evidence-based policy solutions must be produced and implemented to drive rapid progress in countries (2).

Malnutrition

Malnutrition refers to deficiencies, excess or imbalance in a person's intake of energy and/or nutrients. It manifests in undernutrition (for example, wasting, stunting and underweight);

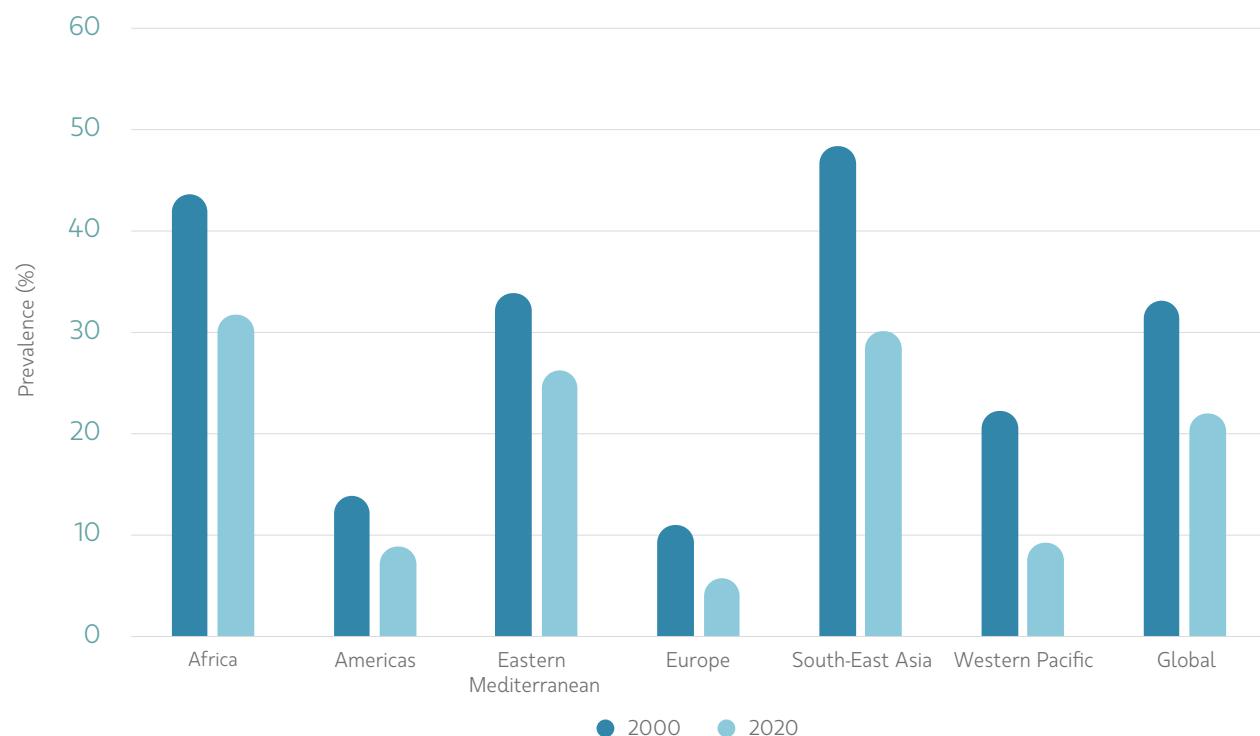
Child malnutrition

Stunting is the result of chronic and recurrent malnutrition in mothers and children. Globally in 2020, 149.2 million (UI 144.4 to 154.2 million) children under 5 years of age, or 22.0% (UI 21.3 to 22.7) of all children under five, were estimated to be stunted (that is, too short for their age). This represented a 27% reduction in the total number of children affected by

deficiencies or excess of micronutrients (vitamins or minerals); and overweight, obesity and associated diet-related NCDs.

stunting compared with 2000, and a 34% reduction in the prevalence rate of stunting. The prevalence of child stunting in 2020 was particularly high in the WHO African (31.7% [UI 30.9 to 32.6]), South-East Asia (30.1% [UI 27.7 to 32.7]) and Eastern Mediterranean regions (26.2% [UI 24.5 to 27.9]) (Fig. 3.1) (3).

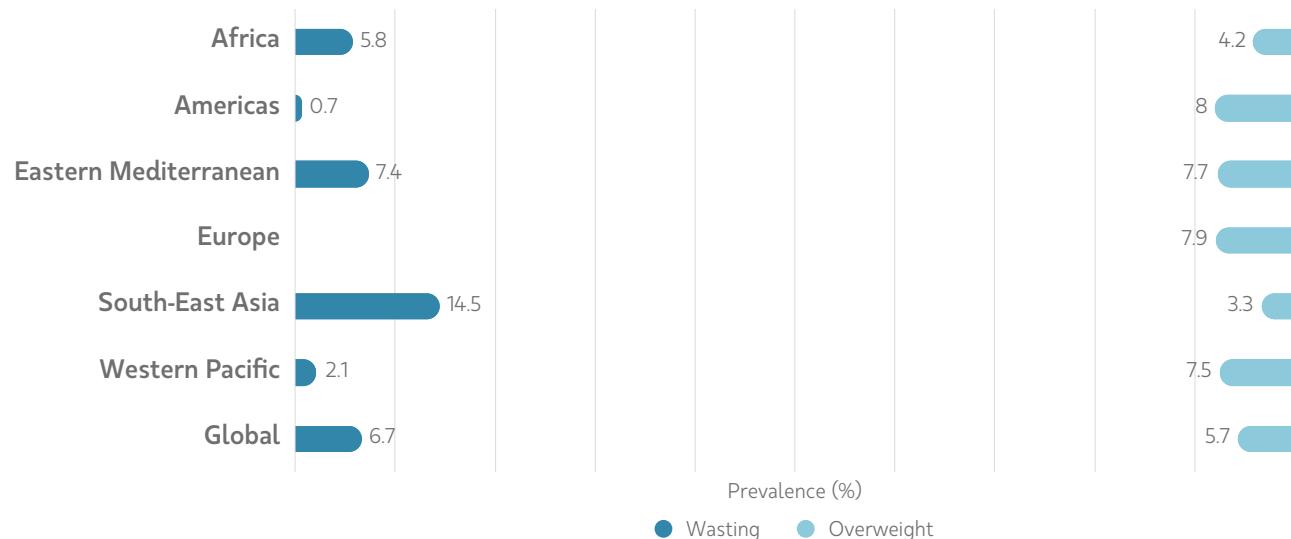
Fig. 3.1. Stunting prevalence among children under five years of age (%), globally and by WHO region, 2000 and 2020



Source: WHO, UNICEF, World Bank. Levels and trends in child malnutrition: key findings of the 2021 edition (3).

As many as 45.4 million (UI 37.0 to 53.7 million) children under 5 years of age were estimated to be too thin for their height ("wasted") in 2020, of whom 13.6 million (UI 10.6 to 16.7 million) were severely wasted. Over one half (56.2%) of children who suffered from wasting lived in the South-East Asia Region (3). Children suffering from wasting have weakened immunity, are susceptible to long-term developmental delays, and face an increased risk of death, particularly when wasting is severe.

By contrast, an estimated 38.9 million (UI 35.6 to 42.4 million) of children under 5 years were overweight (too heavy for their height) in 2020, up from 33.3 million (UI 31.5 to 35.1 million). The regional prevalence was especially high in four of the WHO regions, namely the WHO Eastern Mediterranean, European and Western Pacific regions and the Region of the Americas (Fig. 3.2) (3).

Fig. 3.2. Wasting and overweight prevalence among children under five years of age (%), globally and by WHO region, 2020

Source: WHO, UNICEF, World Bank. Levels and trends in child malnutrition: key findings of the 2021 edition (3).

Estimates that reflect the impact of the COVID-19 pandemic on child malnutrition are not yet available. A study conducted in 2021 presented three modelled scenarios reflecting different trajectories of economic recovery and food system and health service disruptions due to the pandemic in 2021–2022, including their potential impact on child undernutrition, in 118 low- and middle-income countries and compared them with a no-COVID-19 scenario. The pandemic scenarios were: a rapid recovery in 2021 ("optimistic"); a scenario with a second wave of infections in 2021 ("moderate"); and a scenario of

persistent disruptions and protracted recovery ("pessimistic") (4). Extrapolating the results of this modelling exercise to 135 low- and middle-income countries,¹ the "moderate" scenario predicted that an additional 11.2 million children under 5 years of age would be affected by wasting from 2020 to 2022. In the "pessimistic" scenario, the estimate of additional cases increased to 16.3 million. For child stunting, the model predicted an additional 3.4 million children affected in 2022 in the "moderate" scenario, and 4.5 million affected in the "pessimistic" scenario (5).

Obesity in older children, adolescents and adults

Overweight and obesity are major risk factors for NCDs such as cardiovascular disease, diabetes, musculoskeletal disorders (especially osteoarthritis, a highly disabling degenerative disease of the joints), and some cancers (including endometrial, breast, ovarian, prostate, liver, gallbladder, kidney and colon cancer).

According to the latest estimates, 6.8% (UI 6.1 to 7.6) of children and adolescents aged 5–19 years worldwide were obese in 2016, up from 2.9% (UI 2.6 to 3.2) in 2000 and 4.9% (UI 4.6 to 5.3) in 2010. The prevalence of obesity in that age group has increased in all WHO regions since 2000, but has remained the highest in the Region of the Americas where it reached 14.4% (UI 12.4 to 16.6) in 2016 (6).² Among adults aged 18 years and older, the age-standardized prevalence of obesity also increased between 2000 and 2016 across all WHO regions. Prevalence was estimated at 13.1% (UI 12.4 to 13.9) globally in 2016 and ranged from 4.7% (UI 3.9 to 5.6) in

the South-East Asia Region to 28.6% (UI 26.6 to 30.5) in the Region of the Americas (6).³

Estimates that reflect the impact of the COVID-19 pandemic on global obesity levels and trends are not yet available. Several systematic reviews and meta-analyses have found that individuals with obesity face a greater risk of severe outcomes due to SARS-CoV-2 infection, including hospitalization, intensive clinical care needs and death (7–9).

Analysis of data from Demographic and Health Surveys in low- and middle-income countries during 2010–2019 shows that obesity is associated with socioeconomic characteristics such as economic status and education level. Data from 16 low- and middle-income countries show that among men aged 15–49 years, the prevalence of obesity was overall much higher in the richest 20% of men (median 5.9%) than in the

¹ The income grouping refers to the World Bank analytical income of economies as of 1 July 2020, based on the 2019 gross national income per capita estimates calculated using the World Bank Atlas method.

² For children/adolescents aged 5–19 years, obesity is defined as BMI-for-age greater than two standard deviations above the WHO growth reference for school-aged children and adolescents median.

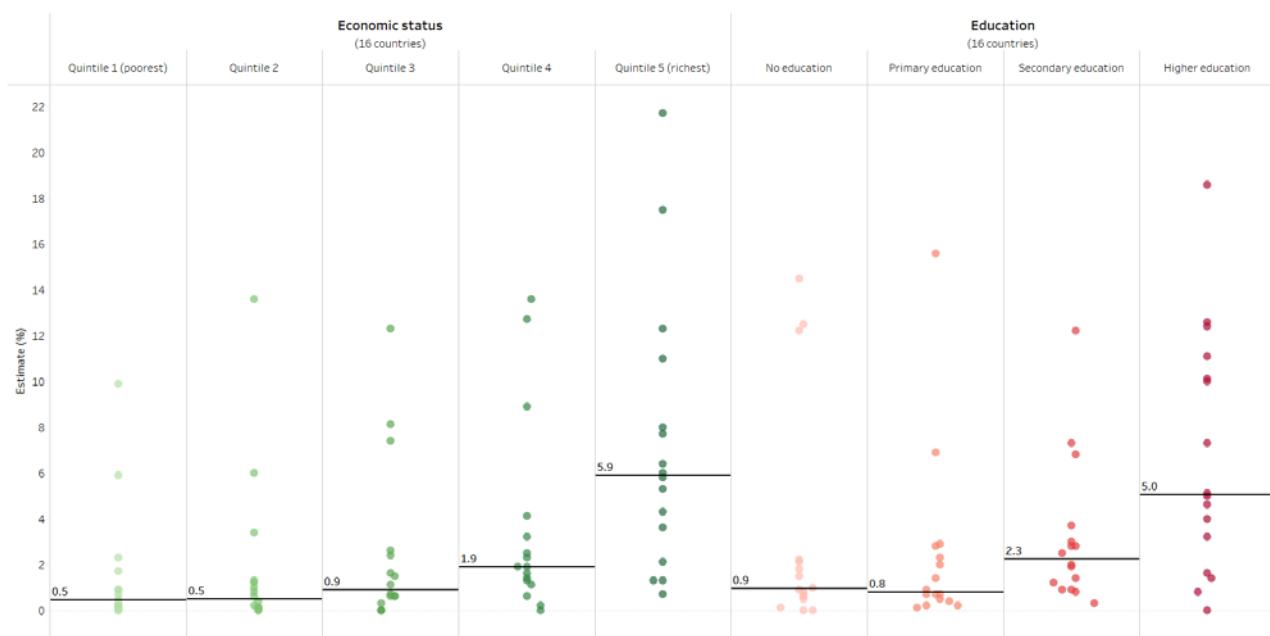
³ For adults, obesity is defined as a BMI greater than or equal to 30.

poorest 40% (median 0.5%). The pattern was very similar when obesity prevalence in men was assessed against levels of education (Fig. 3.3).

Among women aged 15–49 years, the prevalence of obesity across 54 low- and middle-income countries was also lowest among those in the poorest quintile (median 2.5%) and increased

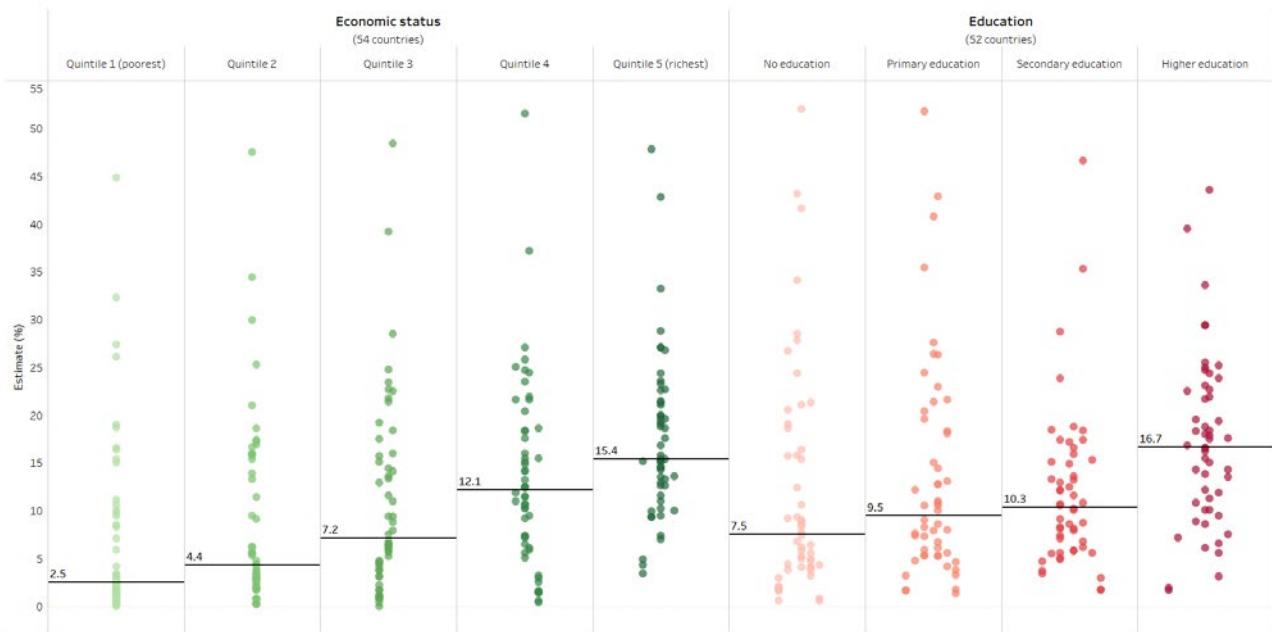
stepwise by income quintile to a median 15.4% in the richest quintile. Prevalence was roughly similar across women with no, primary and secondary education (medians of 7.5% to 10.3%), but was markedly higher among women with higher education (Fig. 3.4).

Fig. 3.3. Proportions of men aged 15 to 49 years who are obese as defined by a body mass index ≥ 30 , disaggregated by economic status and education, 2010–2019



Notes: Circles indicate countries – each country is represented by multiple circles (one for each subgroup). Horizontal black lines indicate the median value (middle point of estimates). The definition used in the analysis is the "percentage of men aged 15–49 years with a body mass index (BMI) of 30 kg/m² or higher". This differs from the standard WHO definition of obesity: for children/adolescents aged 5–19 years, obesity is defined as BMI-for-age greater than two standard deviations of the WHO growth reference for school-aged children and adolescents median. For people aged 20 years and older, obesity is defined as a BMI of 30 kg/m² or higher.
Source: Demographic and Health Surveys, 2010–2019 (<https://dhsprogram.com/>, accessed 16 May 2022).

Fig. 3.4. Proportions of women aged 15 to 49 years who are obese as defined by body mass index ≥ 30 , disaggregated by economic status and education, 2010–2019



Notes: Circles indicate countries – each country is represented by multiple circles (one for each subgroup). Horizontal black lines indicate the median value (middle point of estimates). The definition used in the analysis is “percentage of women aged 15–49 years with a body mass index (BMI) of 30 kg/m² or higher”. This differs from the standard WHO definition of obesity: for children/adolescents aged 5–19 years, obesity is defined as BMI-for-age above two standard deviations of the WHO growth reference for school-aged children and adolescents median. For people aged 20 years and older, obesity is defined as a BMI of 30 kg/m² or higher.

Source: Demographic and Health Surveys, 2010–2019 (<https://dhsprogram.com/>), accessed 13 May 2022).

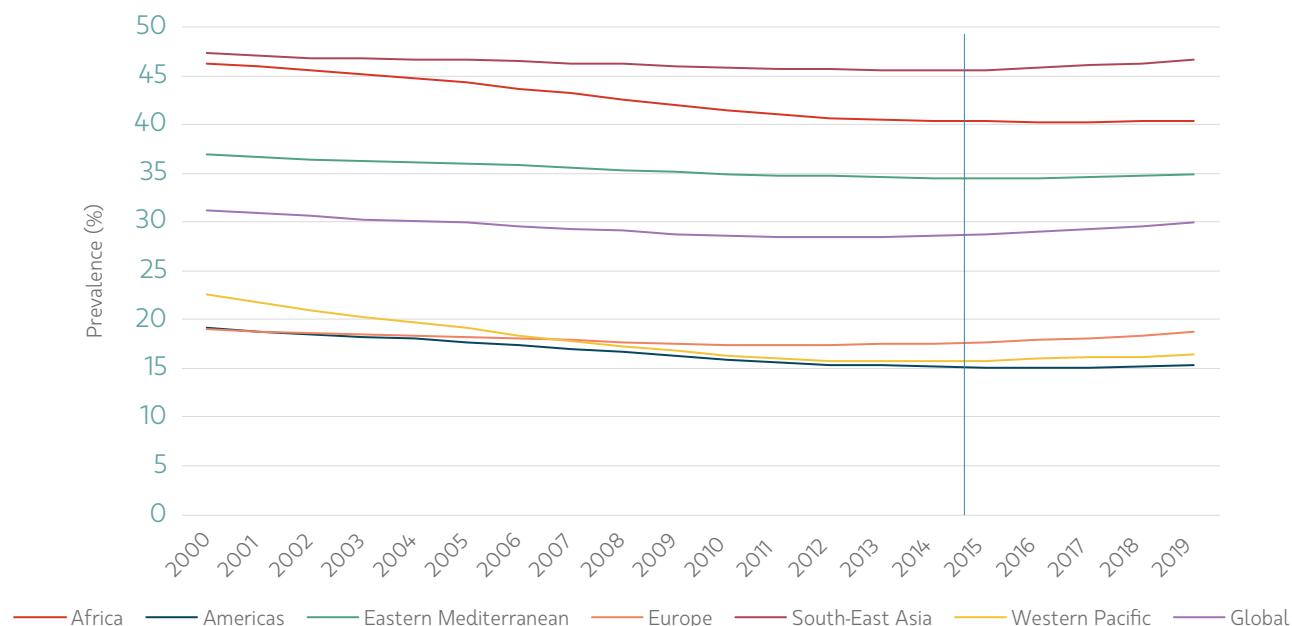
Anaemia among women

Anaemia leads to reduced physical and mental capacity, yet it often goes undetected. Severe anaemia is associated with more noticeable negative effects on health, as well as on longer term social and economic development. During pregnancy, anaemia is associated with adverse maternal and birth outcomes such as preterm delivery, low-birth-weight infants, maternal mortality and decreased iron stores for the baby, which may lead to impaired growth and development.

In 2019, the global prevalence of anaemia in women aged 15–49 years was 29.9% (UI 27.0 to 32.8). Prevalence was higher among pregnant women (36.5% [UI 34.0 to 39.1]) than non-pregnant women (29.6% [UI 26.6 to 32.5]). While anaemia prevalence among women aged 15–49 years in 2019 was

similar to the rate in 2000, the total number of women affected increased considerably due to population growth, from 492.9 million (UI 452.8 to 538.1 million) in 2000 to 570.8 million (UI 515.4 to 625.5 million) in 2019 (10).

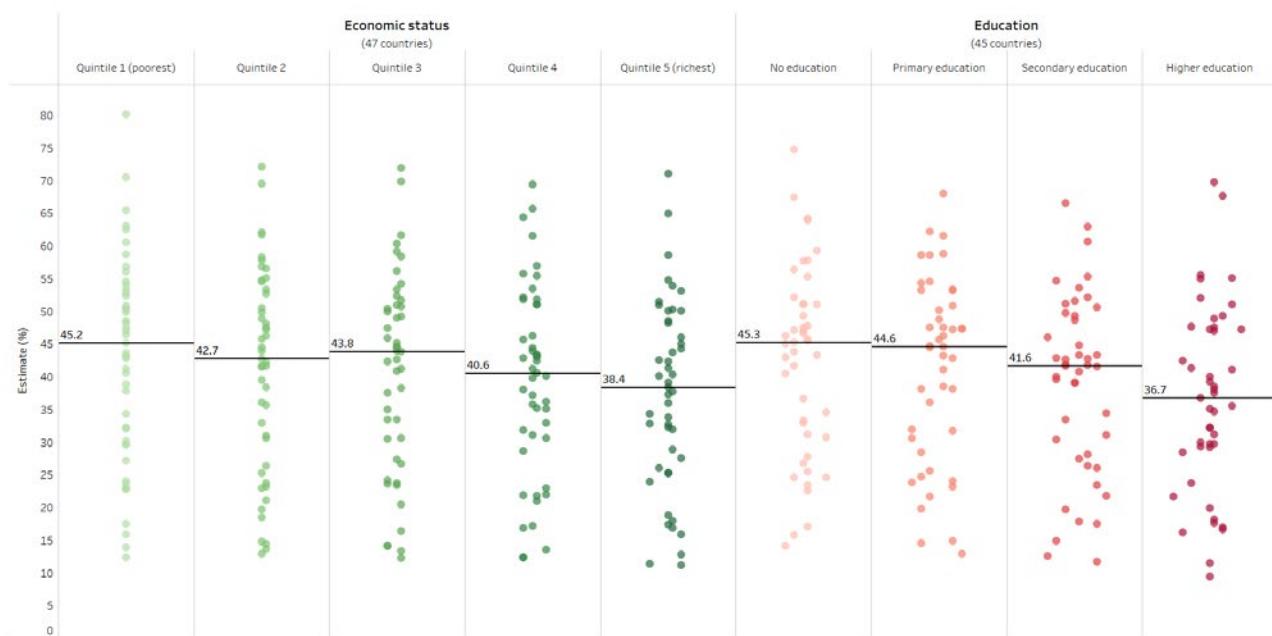
Across regions, there had been declines in the prevalence of anaemia after 2000, but they either slowed or halted after 2015. A decline was observed in the WHO Western Pacific Region from 22.6% (UI 16.3 to 30.4) in 2000 to 16.4% (UI 11.4 to 23.5) in 2019, with improvements also observed in the African Region and the Region of the Americas. The prevalence of anaemia continued to be highest in the South-East Asia Region (Fig. 3.5) (10).

Fig. 3.5. Trends in anaemia prevalence (%) among women of aged 15 to 49 years, globally and by WHO region, 2000–2019

Source: WHO global anaemia estimates, 2021 (10).

Analysis of data from Demographic and Health Surveys conducted during 2010–2019 in 45–47 low- and middle-income countries showed that the median prevalence of anaemia in women aged 15–49 years was high (over 35%) across all income

quintiles and education levels (Fig. 3.6). However, the prevalence of anaemia tended to be lowest overall among women with the highest economic status and educational attainment.

Fig. 3.6. Anaemia prevalence among women aged 15 to 49 years, disaggregated by economic status and education, 2010–2019

Notes: Circles indicate countries – each country is represented by multiple circles (one for each subgroup). Horizontal black lines indicate the median value (middle point of estimates). The definition used in the analysis is “prevalence of haemoglobin concentrations below 110 g/L for pregnant women and 120 g/L for non-pregnant women”. Source: Demographic and Health Surveys, 2010–2019 (<https://dhsprogram.com/>, accessed 13 May 2022).

Other risk factors for noncommunicable diseases

Risk factors for NCDs are generally classified into two broad groups: modifiable behavioural risk factors and metabolic risk factors. The first group includes harmful use of alcohol, tobacco use, physical inactivity and an unhealthy diet. Metabolic risk factors include raised blood pressure, overweight and obesity,

hyperglycemia (high blood glucose levels), and hyperlipidemia (high levels of fat in the blood). The latest available data for SDG and WHO General Programme of Work indicators concerning some of these risk factors are presented below.⁴

Harmful use of alcohol

Drinking alcohol is associated with a risk of developing health problems such as mental and behavioural disorders, major NCDs such as liver cirrhosis, some cancers and cardiovascular disease, as well as injuries resulting from violence and road collisions. Alcohol consumption by an expectant mother may cause fetal alcohol spectrum disorders and pre-term birth complications.

The average level of alcohol consumption worldwide in 2019 was 5.8 litres (UI 5.5 to 6.2) of pure alcohol per capita (person aged 15 years or older), a slight decline from 6.1 litres (UI 5.8 to 6.5) per capita in 2010. On average, men consumed over three times more alcohol than women, a pattern that has not changed since 2000. Men in the WHO European Region had the highest consumption in 2019 at 15.2 litres (UI 14.8 to 16.1) per capita, despite a declining trend since 2000. In the South-East Asia and Western Pacific regions, consumption increased between 2000 and 2015, most notably among men, and then plateaued or subsequently

slightly declined. Alcohol consumption has remained very low in the Eastern Mediterranean Region (Fig. 3.7) (11).

Studies have reported diverse findings in trends of alcohol consumption during the COVID-19 pandemic, with an increased use in some settings and decreased use in others (12-14). While more national and regional data have started to become available, careful analysis needs to be done to understand the overall impact of the pandemic on the harmful use of alcohol at the global level.

Emerging evidence indicates that individuals with alcohol or drug use disorders are at increased risk of contracting COVID-19 and more likely to experience negative outcomes. This vulnerability reflects both the adverse effects of the non-medical use of psychoactive substances on health, compounded by high rates of non-attended medical comorbidities, as well as associated psychosocial and structural factors, including poverty and stigma (15-17).

Fig. 3.7. Trends in per capita alcohol consumption, by sex and by WHO region, 2000–2019



Source: WHO Global Information System on Alcohol and Health [online database] (11).

⁴ Overweight and obesity are discussed in the malnutrition section of this chapter.

Tobacco use

Tobacco use is a major risk factor for cardiovascular and respiratory diseases, over 20 different types or subtypes of cancer, and many other debilitating health conditions. In 2020, an estimated 22.3% of the global population aged 15 years and older were current users of some form of tobacco, down from approximately one third (32.7%) in 2000. About one half of men (49.3%) and one in six women (16.2%) aged 15 years and older in 2000 were current users of some form of tobacco. By 2020, the proportion of men using tobacco had declined to slightly over one in three (36.7%), while that of women had declined to one in thirteen (7.8%) (18).

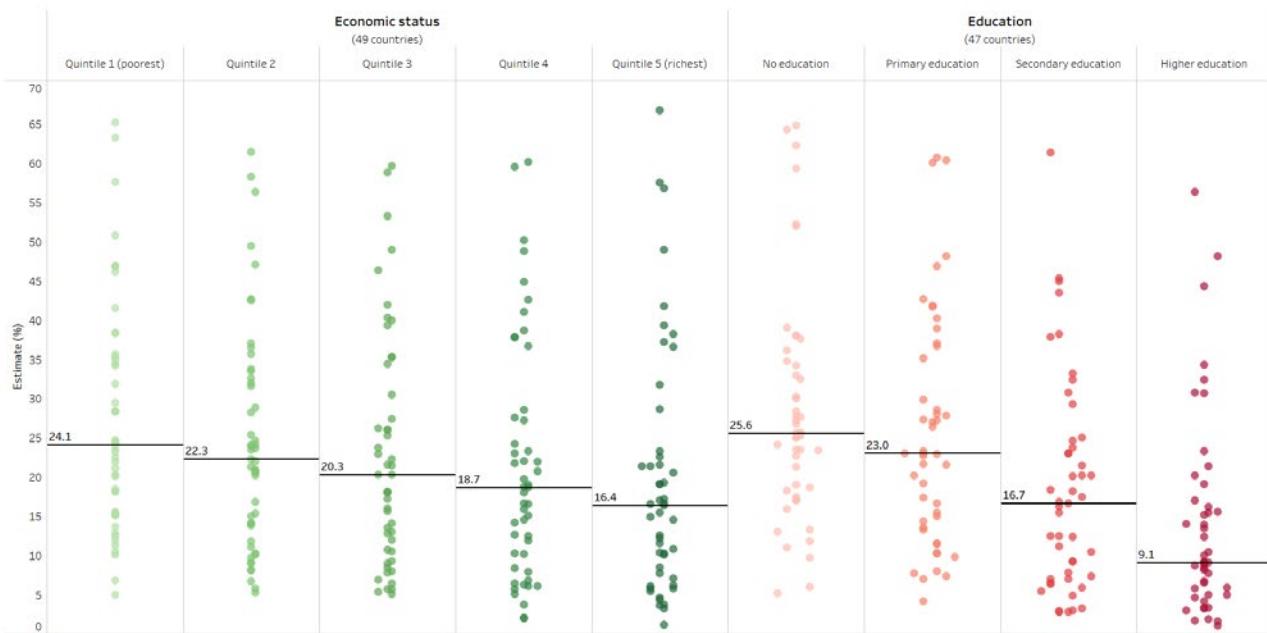
Since very limited prevalence data are available from surveys done in 2020 and 2021, the impact of the COVID-19 pandemic on national and global prevalence rates of tobacco use is not yet known. Small-scale studies undertaken during the COVID-19 era have found that levels of tobacco use increased in some instances (19-22) and decreased in others (23,24). There is evidence that tobacco smoking increases the risk of

more severe disease progression among those infected with SARS-CoV-2 compared to non-smokers (25-26).

Analysis of data from Demographic and Health Surveys conducted in 2010–2019 in 49 low- and middle-income countries showed that tobacco smoking among men aged 15–49 years tended to be higher among the poorest and least educated subgroups. Across these 49 countries, a median of 25.6% of men with no education smoked any type of tobacco product compared to 9.1% of those with higher education levels. Similarly, smoking prevalence was highest among men in the poorest quintile, decreasing step-wise across the wealth quintiles.

Countries continued to adopt tobacco control measures during 2019 and 2020, with approximately 5.3 billion people in 146 countries protected by at least one demand-reduction measure at best practice level. This is an improvement from 2018, when 5.1 billion people in 139 countries were protected in that manner (27).

Fig. 3.8. Percentage of men aged 15 to 49 years who smoke any type of tobacco, disaggregated by economic status and education, 2010–2019



Notes: Circles indicate countries – each country is represented by multiple circles (one for each subgroup). Horizontal black lines indicate the median value (middle point of estimates). The definition used in the analysis is “the percentage of men aged 15–49 years who smoke any type of tobacco product (cigarettes, pipe, kreteks, cigars, water pipe) at the time of survey”.

Source: Demographic and Health Surveys, 2010–2019 (<https://dhsprogram.com/>, accessed 13 May 2022).

Trans-fatty acids

Trans-fatty acids are a compound that can be found in cakes, cookies, biscuits, packaged foods, cooking oils and spreads. An increased intake of trans-fatty acids (>1% of total energy intake) is associated with an increased risk of heart attacks and death from cardiovascular disease. The elimination of industrially-produced trans-fatty acids by 2023 is a WHO priority and the number of countries passing and implementing best-practice policies is growing. In 2021, best-practice trans-

fatty acid policies came into effect in 40 countries covering 1.4 billion people. Six additional countries have also passed a best-practice, trans-fatty acid policy that will come into effect in the next two years, potentially covering 1.7 billion additional people. However, most policy actions have been taken in higher-income countries, mostly in the Region of the Americas and the European Region. No LICs have adopted best-practice, trans-fatty acid policies to date (28, 29).⁵

Raised blood pressure

Hypertension, or elevated blood pressure, is a medical condition that significantly increases the risks of heart, brain, kidney and other diseases. The number of adults aged 30–79 years with hypertension is estimated to have doubled from approximately 650 million to 1.28 billion between 1990 and 2019, according to a pooled analysis of 1201 population-representative studies. Population growth and ageing were the main drivers of that trend. While there was little change in the overall rate of hypertension in this age group globally, the burden had shifted from HICs to low-

and middle-income countries. The rate of hypertension decreased in HICs, but increased in many low- or middle-income countries. Over one billion adults aged 30–79 years with hypertension lived in low- and middle-income countries in 2019 (30).⁶

More recent estimates reflecting the impact of the COVID-19 pandemic on the prevalence of hypertension globally are not yet available. However, many studies have indicated an increased risk of severe or fatal COVID-19 outcomes among patients with hypertension (31–34).

Environmental risk factors

Water, sanitation and hygiene

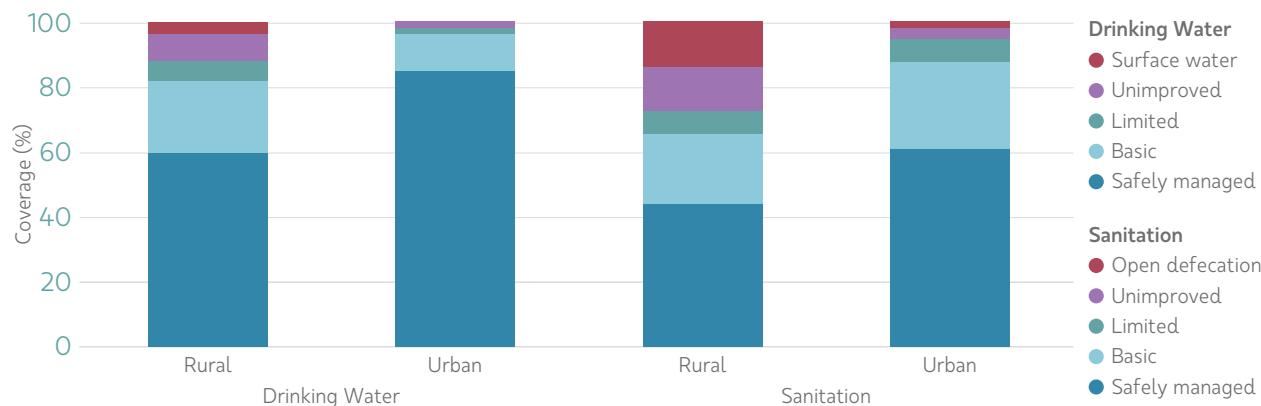
Access to safe WASH is vital for health, child development, and social and economic progress. The COVID-19 pandemic has underscored the importance of ensuring the provision of safe water, sanitation and waste management, and hygienic conditions for preventing and protecting human health during infectious disease outbreaks.

Available data from 138 countries show that safely managed drinking water services (that is, located on premises, available when needed and free from contamination) was accessible by 74% of the global population in 2020. This translated into 2 billion people still lacking safely managed water services—including 1.2 billion

people with only basic services, 282 million with limited services, 367 million using unimproved sources, and 122 million drinking surface water. In the same year, safely managed sanitation services (with excreta safely disposed on-site or treated off-site) were available to only 54% of the global population, leaving 3.6 billion people with insufficient sanitation services. While hand hygiene is one of the first lines of defence against the spread of infectious diseases, 2.3 billion people, or 29% of the global population, lacked a basic handwashing facility with water and soap at home in 2020 (35). For both water and sanitation, safely managed services are enjoyed by a higher proportion of populations in urban areas compared to rural areas (Fig. 3.9).

⁵ The income grouping refers to the World Bank analytical income of economies as of 1 July 2020, based on the 2019 gross national income per capita estimates calculated using the World Bank Atlas method.

⁶ The income grouping refers to the World Bank analytical income of economies as of 1 July 2020, based on the 2019 gross national income per capita estimates calculated using the World Bank Atlas method.

Fig. 3.9. Coverage of rural and urban service levels of water and sanitation services, global, 2020

Source: Progress on household drinking water, sanitation and hygiene, 2000–2020 (34).

Achieving universal access to safely managed water, sanitation and basic hygiene services by 2030 will require a quadruple increase in current rates of progress. The situation is more challenging in the least-developed countries and in fragile settings where current rates of progress need to increase up to 10- and 23-fold, respectively (35).

While the available data do not yet allow a global baseline estimate for industrial wastewater generation or treatment, estimates for the generation and treatment of domestic wastewater were available for 128 countries and territories in 2020 (covering 80% of the global population). They show that 44% of household wastewater was discharged without safe treatment (36).

The COVID-19 pandemic has led to large increases in health care-related waste, exacerbating the environmental impact of solid waste. Extra medical waste generated by the response to the COVID-19 pandemic has put a tremendous strain on health care waste management systems around the world. Even before the pandemic, many health care facilities were not equipped to

safely segregate, treat and dispose of health care waste. In the least-developed countries, it was estimated that only 30% of health care facilities had basic health care waste management services) (37)⁷

While overall Official Development Assistance (ODA) increased from US\$ 202 billion to US\$ 246 billion from 2019 to 2020 in response to the COVID-19 pandemic, ODA for the water sector decreased over the same period, with commitments falling by 11% to US\$ 10.5 billion and disbursements declining by 5% to US\$ 8.7 billion. For water supply and sanitation, the decrease in disbursements was 12%, from US\$ 7.6 billion to US\$ 6.7 billion. The decrease in disbursements in 2020 was likely due to the COVID-19 pandemic disrupting the execution of large drinking water and sanitation infrastructure projects. The decline in commitments may reflect a gradual deprioritization of water and sanitation aid compared to other sectors among donors, a trend accelerated by the pandemic (38).

Clean air

Access to clean air both indoors and outdoors is essential to the health of children and adults alike. Whether smoke inside the home or smog over cities, air pollution poses a major threat

to people's health. The combined effects of ambient (outdoor) and household air pollution cause millions of premature deaths every year (see chapter 2).

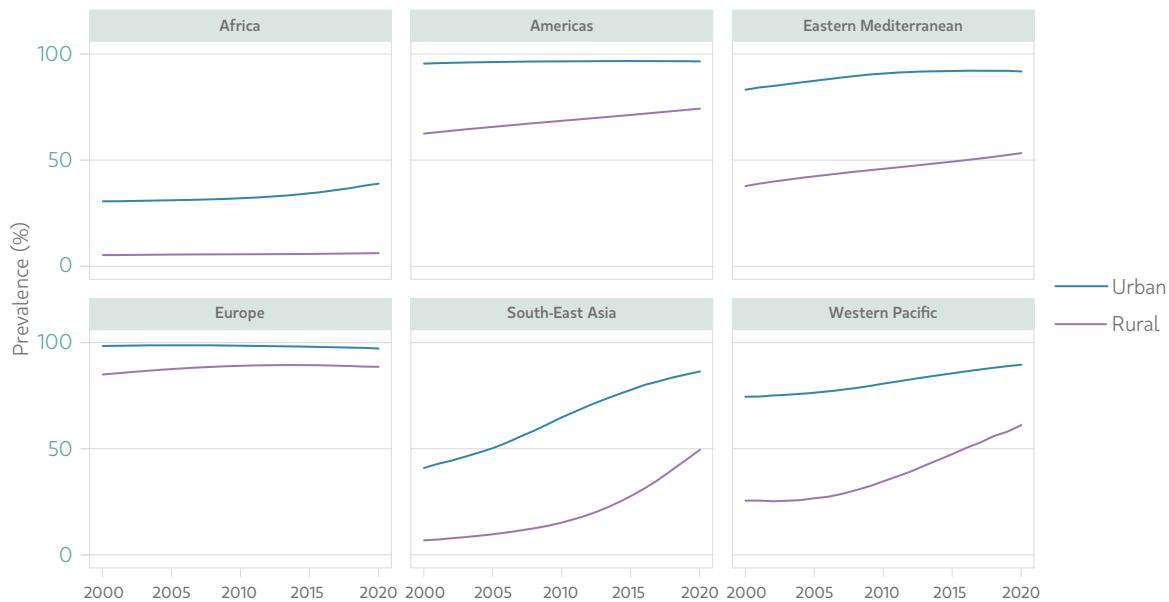
Indoor air pollution

Exposure to indoor air pollutants can lead to a wide range of adverse health outcomes from eye conditions to respiratory illnesses and cancer. Members of households who rely on the use of polluting fuels and devices also suffer a higher risk of burns, poisoning and musculoskeletal injuries. It is estimated that approximately two thirds (69.3% [UI 64.4 to 73.4]) of the global population were primarily using clean fuels and technologies for cooking in 2020, up from one half (49.5% [UI 45.4 to 53.6]) in 2000.

In all WHO regions, urban populations have systematically had greater access to clean fuels and technologies for cooking in the past two decades. The biggest improvement was in the South-East Asia Region, which experienced a seven-fold increase in coverage in its rural areas and a doubling in its urban areas. Coverage in the rural areas of the Western Pacific Region more than doubled between 2000 and 2020. Coverage has remained lowest in the African Region: only 6.2% (UI 5.1 to 7.5) of its rural population and 38.9% (UI 35.5 to 42.6) of its urban population could rely primarily on clean fuels and technologies for cooking in 2020 (Fig. 3.10) (39).

⁷ Global progress report on WASH in health care facilities: fundamentals first. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/rest/bitstreams/1321542/retrieve>).

Fig. 3.10. Proportion of population with primary reliance on clean fuels and technologies for cooking, by residence area and WHO region, 2000–2020



Source: WHO Global Health Observatory. Public health and environment [online database] (39).

The risk of acquiring SARS-CoV-2 infection is higher in crowded and inadequately ventilated spaces where infected people spend long periods of time together as the virus spreads more efficiently via respiratory droplets and aerosols in

such environments. Understanding and controlling building ventilation can improve the quality of indoor air as well as reduce the risk of SARS-CoV-2 transmission (40).

Outdoor air pollution

Almost the entire global population (99%) breathes unhealthy levels of fine particulate matter and nitrogen dioxide. Some 6000 cities in 117 countries now monitor air quality, with the data showing that people in low- and middle-income countries suffer the highest exposures to outdoor air pollution at levels exceeding WHO air quality limits. In these 117 countries, the quality of air in 17% of cities in HICs is below WHO's air quality guidelines for particulate matter with diameters equal or smaller than 2.5 µm (PM2.5) or 10 µm (PM10). In low- and

middle-income countries, air quality in less than 1% of cities meets the WHO-recommended thresholds (41)^{8,9}.

Particulate matter, especially PM2.5, is capable of penetrating deep into the lungs and entering the bloodstream, which can cause cardiovascular, cerebrovascular (stroke) and respiratory complications. Nitrogen dioxide is associated with respiratory diseases, particularly asthma, which can lead to respiratory symptoms (such as coughing, wheezing or difficulty breathing) that require hospital admission or emergency care.

Violence against women

Globally, it is estimated that 30% (UI 26 to 34) of women aged 15 years and older in 2018 had been subjected at least once in their life to physical and/or sexual violence from a male intimate partner ("intimate partner violence"), or to sexual violence from someone other than an intimate partner ("nonpartner sexual violence"), or both (42).

Such violence represents a large proportion of the violence that women experience globally. However, there are many other forms of violence against women, such as physical violence by nonpartners, cyberviolence and trafficking, and the prevalence of all forms of violence combined would likely be much higher.

⁸ The income grouping refers to the World Bank analytical income of economies as of 1 July 2021, based on the 2020 gross national income per capita estimates calculated using the World Bank Atlas method.

⁹ WHO air quality database. Update April 2022 (<https://www.who.int/data/gho/data/themes/air-pollution/who-air-quality-database>, accessed 10 May 2022).

Intimate partner violence

One in 10 (10% [UI 8 to 12]) women 15 years and older worldwide who had ever been married or partnered had experienced physical and/or sexual violence by an intimate partner in the previous 12 months, according to an analysis of data from over 300 studies conducted between 2000 and 2018 across 161 countries or areas. Globally, about one in four (26% [UI 22 to 30]) women 15 years and older had been subjected to such violence at least once in their lifetime, since the age of 15 (43).

The estimated lifetime prevalence of physical and/or sexual intimate partner violence is highest for women between the ages of 20 and 44 years. However, the analysis also showed that intimate partner violence starts early in women's lives: almost one in four (24% [UI 21–28]) ever-partnered adolescent

girls aged 15–19 years was estimated to have been subjected to such violence at least once in their lifetime (42). While there has been a substantial increase in the quality and availability of survey data on violence against women, there remains a paucity of data on women aged 50 years and older with data availability skewed towards women in the 15–49 year range.

Intimate partner violence disproportionately affects women and girls in LICs and LMICs (Fig. 3.11). In addition, the difference between past 12-month prevalence and lifetime prevalence is smaller in lower-income countries than in higher-income countries. This likely reflects the challenges in leaving abusive relationships in resource-constrained settings and societies where levels of stigmatization may be high.

Fig. 3.11. Prevalence of physical and/or sexual intimate partner violence against ever partnered women aged 15–49 years, by World Bank country income group and globally, 2018



Notes: The income grouping refers to the World Bank analytical income of economies as of 1 July 2020, based on the 2019 gross national income per capita estimates calculated using the World Bank Atlas method.

Source: Violence against women prevalence estimates, 2018: Global, regional and national prevalence estimates for intimate partner violence against women, and global and regional prevalence estimates for nonpartner sexual violence against women (42).

These estimates show that intimate partner violence against women was already highly prevalent globally before the COVID-19 pandemic, with progress grossly insufficient to meet the SDG target of eliminating all forms of violence against women by 2030. The COVID-19 pandemic is likely to have caused a major setback in efforts towards the reduction of violence against women. Helpline, police and other service

data suggest that the pandemic-related lockdown measures might have led to further increases in intimate partner violence (44). The full impact of the COVID-19 pandemic on the magnitude, severity and nature of violence against women will only be known once data from population-based surveys, which are now resuming, become available.

Nonpartner sexual violence

An estimated 6% (UI 4 to 9) of women aged 15 years and older in 2018 had been subjected to sexual violence from someone other than an intimate partner at least once in their lifetime, since the age of 15 (42). The true prevalence of nonpartner sexual violence is likely to be much higher, given the societal

stigma and repercussions surrounding the disclosure of sexual violence, as well as the significant measurement challenges that exist for this form of violence.

References

1. Third round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic: Interim report, November – December 2021. Geneva: World Health Organization; 2022 (https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2022, accessed 4 May 2022).
2. Programme budget 2022-2023: revision. Extending the thirteenth General Programme of Work, 2019-2023 to Report by the Director-General. Seventy-fifth World Health Assembly, provisional agenda item Document A75/8, 17 May Geneva: World Health Organization; 2022 (https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_8-en.pdf, accessed 18 May 2022).
3. Levels and trends in child malnutrition: key findings of the 2021 edition of the joint child malnutrition estimates. United Nations Children's Fund (UNICEF), World Health Organization, International Bank for Reconstruction and Development/The World Bank. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/bitstream/handle/10665/341135/9789240025257-eng.pdf?sequence=1&isAllowed=y>, accessed 4 May 2022).
4. Osendarp S, Akuoku J, Black R, Headey D, Ruel M, Scott N, et al. The COVID-19 crisis will exacerbate maternal and child undernutrition and child mortality in low- and middle-income countries. *Nature Food.* 2021;2(7):476–484 (<https://www.nature.com/articles/s43016-021-00319-4?msclkid=769d1c08a6c811ecb4afe4fd511c3084>).
5. FAO, IFAD, UNICEF, WFP and WHO. The state of food security and nutrition in the world 2021: Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome: Food and Agriculture Organization; 2021 (<https://doi.org/10.4060/cb4474en>, accessed 4 May 2022).
6. Global Health Observatory. Noncommunicable diseases: risk factors. Geneva: World Health Organization; 2018 (<https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/ncd-risk-factors>, accessed 4 May 2022).
7. Popkin BM, Du S, Green WD, Beck MA, Algaith T, Herbst CH, et al. Individuals with obesity and COVID-19: A global perspective on the epidemiology and biological relationships. *Obes Rev.* 2020;21(11):e
8. Bunn C, Al-Naimi S, Rajic A, Ibrahim F. Obesity as a risk factor for the admission of COVID-19 patients into ICU: A systematic review and meta-analysis. *Proc Nutr Soc.* 2022;81(OCE1):E23.
9. Földi M, Farkas N, Kiss S, Zádori N, Váncsa S, Szakó L, et al. Obesity is a risk factor for developing critical condition in COVID-19 patients: A systematic review and meta-analysis. *Obes Rev.* 2020;21(10):e
10. Global anaemia estimates, 2021 edition. Geneva: World Health Organization, 2021 (https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children, accessed 4 May 2022).
11. WHO global information system on alcohol and health (GISAH) [online database]. Global Health Observatory. Geneva: World Health Organization; 2018 (<https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/levels-of-consumption/>, accessed 4 May 2022).
12. Acuff SF, Strickland JC, Tucker JA, Murphy JG. Changes in alcohol use during COVID-19 and associations with contextual and individual difference variables: A systematic review and meta-analysis. *Psychol Addict Behav.* 2022;36(1):1–
13. Kilian C, O'Donnell A, Potapova N, López-Pelayo H, Schulte B, Miquel L, et al. Changes in alcohol use during the COVID-19 pandemic in Europe: A meta-analysis of observational studies. *Drug Alcohol Rev.* 2022 Feb doi: 10.1111/dar.Epub ahead of print.
14. Plata A, Motoki K, Spence C, Velasco C. Trends in alcohol consumption in relation to the COVID-19 pandemic: A cross-country analysis. *Int J Gastron Food Sci.* 2022;27:
15. Wang QQ, Kaelber DC, Xu R, Volkow ND. COVID-19 risk and outcomes in patients with substance use disorders: analyses from electronic health records in the United States. *Mol Psychiatry.* 2021;26(1):30–
16. Velásquez García HA, Wilton J, Smolina K, Chong M, Rasali D, Otterstatter M, et al. Mental health and substance use associated with hospitalization among people with COVID-19: A population-based cohort study. *Viruses.* 2021;13(11):
17. Hasin DS, Fink DS, Olfson M, Saxon AJ, Malte C, Keyes KM, et al. Substance use disorders and COVID-19: An analysis of nation-wide Veterans Health Administration electronic health records. *Drug Alcohol Depend.* 2022;234:
18. WHO global report on trends in prevalence of tobacco use 2000–2025, fourth edition. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/9789240039322>, accessed 4 May 2022).

19. Carreras G, Lugo A, Stival C, Amerio A, Odone A, Pacifici R, et al. Impact of COVID-19 lockdown on smoking consumption in a large representative sample of Italian adults. *Tob Control*. 2021 Mar 29:tobaccocontrol-2020.
20. Kosendiak A, Król M, Ściskalska M, Kepinska M. The changes in stress coping, alcohol use, cigarette smoking and physical activity during COVID-19 related lockdown in medical students in Poland. *Int J Environ Res Public Health*. 2021;19(1):
21. Lighting up the illicit market: smokers' responses to the cigarette sales ban in South Africa. Cape Town: University of Cape Town; 2020 (http://www.reep.uct.ac.za/sites/default/files/image_tool/images/405/Publications/reports/Lockdown%20Survey%20Final.pdf, accessed 4 May 2022).
22. Bommele J, Hopman P, Walters BH, Geboers A, Croes E, Fong GT, et al. The double-edged relationship between COVID-19 stress and smoking: implications for smoking cessation. *Tob Induc Dis*. 2020; 18:63.
23. Denlinger-Apte R, Suerken CK, Ross JC, Reboussin BA, Spangler J, Wagoner KG, et al. Decreases in smoking and vaping during COVID-19 stay-at-home orders among a cohort of young adults in the United States. *Prev Med*. 2022;156:
24. Niedzwiedz CL, Green MJ, Benzeval M, Campbell D, Craig P, Demou E, et al. Mental health and health behaviours before and during the initial phase of the COVID-19 lockdown: Longitudinal analyses of the UK Household Longitudinal Study. *J. Epidemiol Community Health*. 2021;75:224–231.
25. Alqahtani JS, Oyelade T, Aldhahir AM, Alghamdi SM, Almehmadi M, Alqahtani AS, et al. Prevalence, severity and mortality associated with COPD and smoking in patients with COVID-19: a rapid systematic review and meta analysis. *PLoS One*. 2020;15(5):e0233147.
26. Patanavanich R, Siripoon T, Amponnavarat S, Glantz SA. Active smokers are at higher risk of COVID-19 death: A systematic review and meta-analysis. *Nicotine Tob Res*. 2022 Apr 1:ntac
27. WHO report on the global tobacco epidemic 2021: addressing new and emerging products. Geneva: World Health Organization; 2021 (<https://www.who.int/teams/health-promotion/tobacco-control/global-tobacco-report-2021>, accessed 4 May 2022).
28. Countdown to 2023: WHO report on global trans-fat elimination Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/rest/bitstreams/1389769/retrieve>, accessed 4 May 2022).
29. Trans fatty acids (TFA) country score card. Global database on the implementation of nutrition action (GINA). Geneva: World Health Organization; 2022 (<https://extranet.who.int/nutrition/gina/en/scorecard/TFA>, accessed 10 May 2022).
30. NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants. *Lancet*. 2021;398(10304):957-
31. Pagdanganan CDP, Juangco J. Hypertension as a prognostic factor in the prediction of mortality in patients with COVID-19: a systematic review and meta-analysis. *Euro Heart J*. 2021;42(s1):hab724.2393.
32. Du Y, Zhou N, Zha W, Lv Y. Hypertension is a clinically important risk factor for critical illness and mortality in COVID-19: A meta-analysis. *Nutr Metab Cardiovasc Dis*. 2021;31(3):745-
33. Mahamat-Saleh Y, Fiolet T, Rebeaud ME, Mulot M, Guihur A, El Fatouhi D, et al. Diabetes, hypertension, body mass index, smoking and COVID-19-related mortality: a systematic review and meta-analysis of observational studies. *BMJ Open*. 2021;11(10):e
34. Pranata R, Lim MA, Huang I, Raharjo SB, Lukito AA. Hypertension is associated with increased mortality and severity of disease in COVID-19 pneumonia: A systematic review, meta-analysis and meta-regression. *J Renin Angiotensin Aldosterone Syst*. 2020;21(2):
35. Progress on household drinking water, sanitation and hygiene, 2000–2020: five years into the SDGs. Geneva: World Health Organization; 2021 (<https://washdata.org/sites/default/files/2022-01/jmp-2021-wash-households-highlights.pdf>, accessed 4 May 2022).
36. UN Habitat and WHO. Progress on wastewater treatment: Global status and acceleration needs for SDG indicator 6.3.1. Geneva: United Nations Human Settlements Programme (UN-Habitat) and World Health Organization; 2021 (https://unhabitat.org/sites/default/files/2021/08/sdg6_indicator_report_631_progress_on_wastewater_treatment_2021_english_pages.pdf, accessed 4 May 2022).

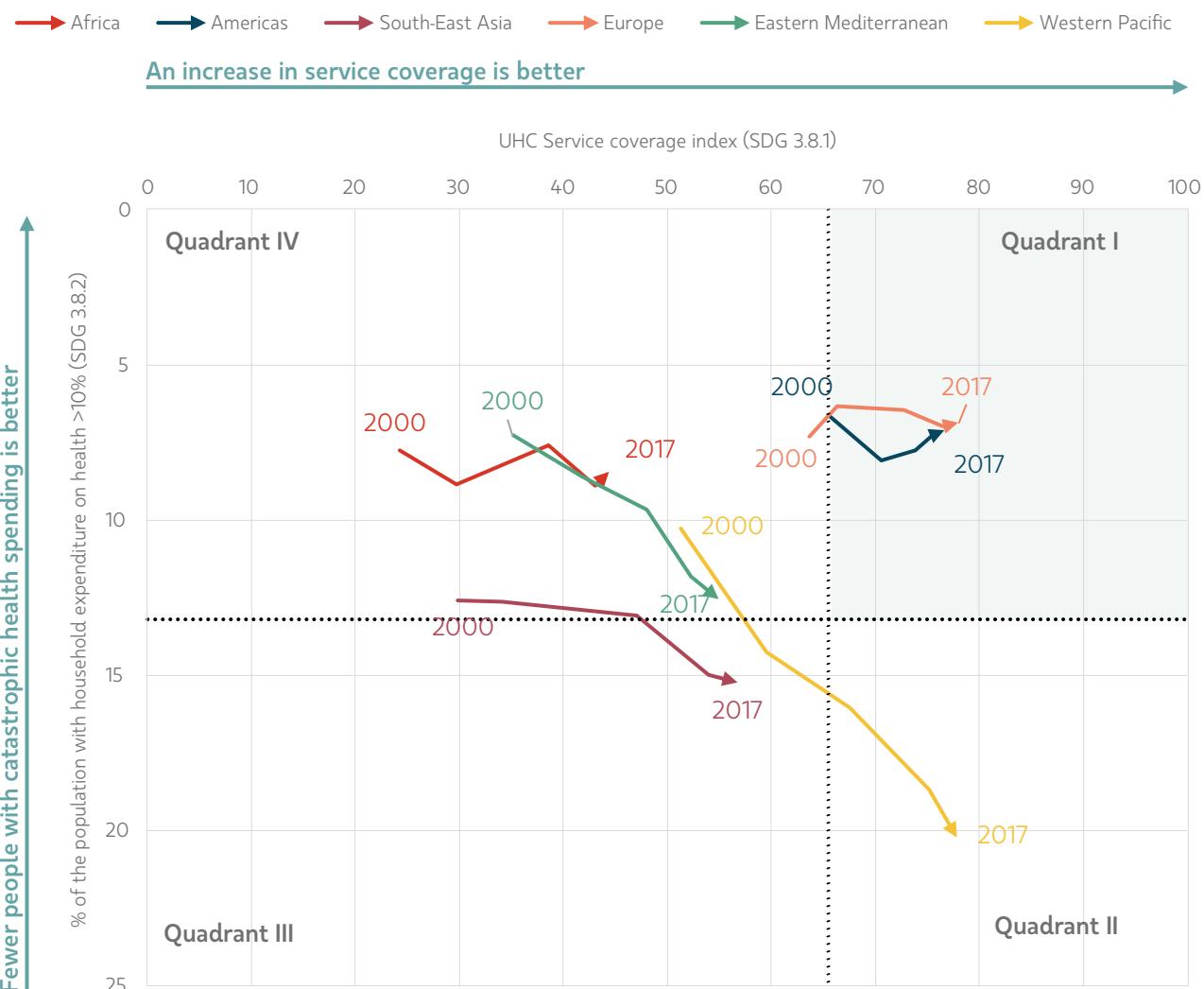
37. Global progress report on WASH in health care facilities: fundamentals first. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/rest/bitstreams/1321542/retrieve>, accessed 4 May 2022).
38. Official development assistance for the water sector (water supply and sanitation, agricultural water resources, and hydro-electric power plants). Paris: Organisation for Economic Co-operation and Development-Creditor Reporting System, 2020 (<https://stats.oecd.org/Index.aspx?DataSetCode=crs1>, accessed 4 May 2022).
39. Public health and environment [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization (<https://www.who.int/data/gho/data/themes/public-health-and-environment/GHO/public-health-and-environment>, accessed 4 May 2022).
40. Roadmap to improve and ensure good indoor ventilation in the context of COVID-Geneva: World Health Organization; 2021 (<https://www.who.int/publications/item/9789240021280>, accessed 4 May 2022).
41. Billions of people still breathe unhealthy air: new WHO data. Media release. Geneva: World Health Organization, 4 April 2022 (<https://www.who.int/news-room/detail/04-04-2022-billions-of-people-still-breathe-unhealthy-air-new-who-data>, accessed 4 May 2022).
42. Violence against women prevalence estimates, 2018: Global, regional and national prevalence estimates for intimate partner violence against women, and global and regional prevalence estimates for non-partner sexual violence against women. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/rest/bitstreams/1347689/retrieve>, accessed 4 May 2022).
43. Sardinha L, Maheu-Giroux M, Stöckl H, Meyer SR, García-Moreno C. Global, regional and national prevalence estimates of physical and/or sexual intimate partner violence against women, Lancet. 2022;399(10327):803–813.
44. Roesch E, Amin A, Gupta J, García-Moreno C. Violence against women during COVID-19 pandemic restrictions. BMJ. 2020;369:m1712.



Pathway to Universal Health Coverage

Universal health coverage (UHC) is firmly based on the 1946 WHO Constitution, which declares health a fundamental human right and commits to ensuring the highest attainable level of health for all. It represents the aspiration that everyone receives good quality health services, when and where needed, without incurring financial hardship. That ambition constitutes a set of targets in the United Nations Agenda 2030 for Sustainable Development (SDG 3.8). In addition to supporting good health and well-being, UHC also contributes to social inclusion, gender equality, poverty eradication, economic growth and human dignity.

Fig. 4.1. Progress in service coverage (SDG 3.8.1) and catastrophic health spending (SDG 3.8.2, 10% threshold), globally and by WHO region, 2000–2017



Note: The vertical dotted line corresponds to the 2017 global population-weighted proportion of the population with household out-of-pocket health expenditure exceeding 10% of their household budget (13.2% in 2017). The horizontal dotted line corresponds to the 2017 global population-weighted average UHC service coverage index (65) in 2017. Regional averages for both SDG indicators are population-weighted.

Source: SDG indicator 3.8.1: WHO global service coverage database, 2021 update; SDG indicator 3.8.2: WHO and World Bank global monitoring report on financial protection in health 2021 (2).

• The COVID-19 pandemic is likely to halt the progress made in service coverage over the last 20 years and exacerbate financial hardship by people paying out of pocket for health

The 2021 global monitoring reports on UHC and financial protection in health published by WHO and the World Bank identified mixed pre-COVID-19 trends in SDG UHC indicators since 2000. Service coverage (SDG indicator 3.8.1) has improved slowly from a global average index of 45 in 2000 to 67 in 2019 (1). However, the proportion of the population with out-of-pocket health spending exceeding 10% of their household budget (SDG indicator 3.8.2) grew from 94% of the population in 2000 to 13.2% in 2017 (2).

Fig. 4.1 depicts these trends for 2000–2017, the reference years for which regional values are available for both indicators.

- Quadrant I shows the regions with relatively high levels of service coverage and relatively low proportions of people with large out-of-pocket expenditures on health. Only two WHO regions—Europe and the Americas—were in this quadrant.
- Quadrant II includes regions with relatively high service coverage, but at a major cost to households (that is, with relatively high levels of catastrophic health spending). In 2017, the WHO Western Pacific Region was in this quadrant. It experienced rapid improvements in service coverage since 2000, but also recorded the fastest increases in catastrophic health spending.

Lack of data currently prevents a detailed and comprehensive assessment of the impact of COVID-19 on the path to UHC. Nevertheless, the combined health and economic impact of COVID-19, such as disruptions in the delivery of essential health services (3–5), rising poverty and widening income inequality, point towards the strong likelihood of a significant worsening of financial protection globally. People are likely to face greater financial constraints to access care and financial hardship is likely to worsen further among those paying out-of-pocket for health, particularly in already disadvantaged populations (1, 2).

- South-East Asia was in quadrant III in 2017, meaning it experienced relatively low service coverage and relatively high rates of catastrophic health spending.
- The African Region and the Eastern Mediterranean Region were in quadrant IV. Service coverage was relatively low and it increased in both these regions, although it was accompanied by increased catastrophic health spending in the Eastern Mediterranean Region.

WHO, the World Bank Group and the Organization for Economic Co-operation and Development (OECD) are urging stronger progress in three priority areas to accelerate progress towards UHC: primary health care; sustainable financing; and strengthening of health system capacities (particularly the health workforce) (6).

• **Box 4.1. Progress in the Universal Health Coverage billion target of the GPW 13**

The UHC billion target will not be reached by 2023, and progress is less than 1/4 of that required to reach the Sustainable Development Goals by 2030. Current estimates suggest that without course correction, we will fall short by 730 million people reaching 1 billion more people covered by universal health coverage in 2023. Due to a vast majority of countries (94%) experiencing significant disruption to essential health services caused by the pandemic, this shortfall will increase to 840 million.¹ Over the past two decades, 92 countries have experienced little change or even worsening trends in financial protection, which is now exacerbated by the ongoing pandemic.

Concerted efforts to achieve disease specific targets across all areas and strengthen health system capacities would help reduce the current gap. But stronger action to avert or reduce financial hardship due to health-related spending is also urgently needed.

The implementation of policies to minimize disjointed approaches to service coverage, the establishment of universal guarantees focused on high priority health services, and the introduction of budgetary measures to ensure funding flows to these services can accelerate progress for both financial protection and service coverage. Primary health care (PHC), with its focus on integrated health services, community

¹ WHO Triple Billion Dashboard (available at <https://portal.who.int/triplebillions/>, accessed 9 May 2022).

Primary health care is the engine for UHC

Primary health care (PHC) is the cornerstone of an equitable and resilient health system. By emphasizing multisectoral action for health, engaging with people and communities, and placing primary care and preventive and health-promoting services at the heart of an integrated health services network, PHC improves health equity, safeguards health and saves lives—all at a lower relative cost. PHC is also critical for making health systems more resilient to crisis situations, more proactive in detecting early signs of epidemics, and more prepared to act early in response to a surging demand for services. As the “front door” of a health system, PHC provides the foundation for strengthening the essential public health functions that are needed to confront crises such as COVID-19 (7-9).

Overlooking the central role of primary care slowed the effectiveness of the response to the pandemic and triggered disruption to routine care in many countries threatening progress made over the last years (6). On average, countries

reported that about 56% of 28 tracer essential services had been disrupted in the third quarter of 2020 and 41% were still being disrupted in early 2021. At the end of 2021, the extent of service disruptions reported by countries remained similar to early 2021 levels (44%). All health care settings and service delivery platforms were affected, particularly first contact services (1,5).

PHC spending accounted for more than one half of total health spending in 2019, amounting to 3.1% of gross domestic product on average. While higher-income countries spent more per capita on PHC, lower-income countries devoted a larger share of their total health spending to PHC. Nearly one half of PHC in low- and middle-income countries was funded by private sources. In a set of low- and middle-income countries, the share of PHC expenditure in total spending on infectious diseases was significantly larger than the share of PHC spending in total spending for NCDs and injuries (10).

Sexual, reproductive, maternal, newborn, child and adolescent health

Globally, an estimated 77% of women of reproductive age had their family planning needs met with modern contraceptive methods in 2020, up from 74% in 2000. The strongest progress was seen in the WHO Africa Region (11).

Ideally free at the point of use, family planning and contraception have been made accessible to hundreds of millions of women worldwide. However, that progress is under threat. Of 84

reporting countries, 38% were still experiencing COVID-19-related disruptions to those services during the last three months of 2021. Disruptions to other essential services for reproductive, maternal, newborn, child and adolescent health, and nutrition were also reported (5).

During 2015–2021, approximately 84% of live births globally were assisted by skilled health personnel, including medical

doctors, nurses and midwives—an increase of about 20 percentage points compared to 2001–2007 (12). However, regional disparities persist (with Africa lagging furthest behind) and the COVID-19 pandemic may be undermining some of the progress made. There is emerging evidence that access to competent and quality care during childbirth may have been disrupted by the COVID-19 pandemic and the measures adopted to curb its spread (13–15).

On average, there were an estimated 41.5 live births globally for every 1000 adolescent girls aged 15–19 years over the period 2015–2020, lower than the estimated 53.1 live births per 1000 adolescent girls over 2000–2005. However, there is wide regional variation. Approximately, one in every ten adolescent girls aged 15–19 years in LICs gave birth in 2015–2020, compared to about one in every seventy of their peers in HICs (16). Currently available data show no signs of significant increases or decreases in adolescent fertility due to the COVID-19 pandemic (17).

Over the past decade, routine immunization services for children have expanded greatly (Fig. 4.2), especially in regions where coverage of some vaccination programmes had been low, such as the WHO Africa and South-East Asia regions. However, some of those immunization services have been affected by

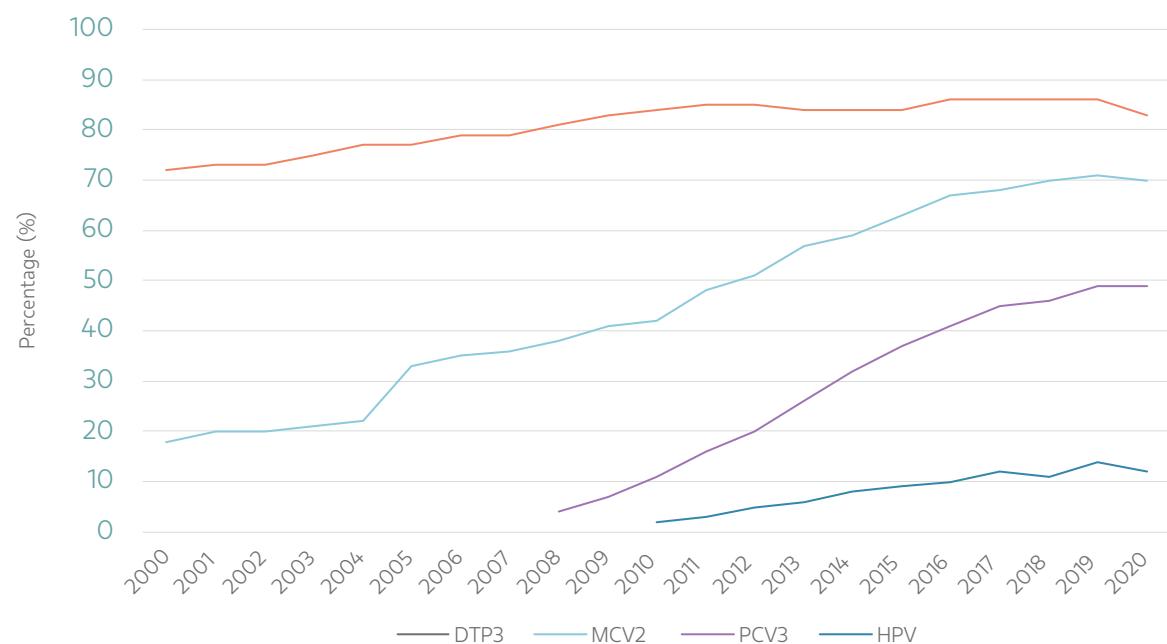
COVID-19. DTP3 (third dose) of diphtheria, tetanus toxoid and pertussis-containing vaccine) immunization coverage among one-year-olds worldwide decreased from 86% in 2019 to 83% in 2020. This resulted in 22.7 million children missing out on vaccination, 3.7 million more than in 2019 and the highest number since 2009 (18).

Global coverage of MCV2 (second-dose of measles-containing vaccine) immunization remained steady in 2019–2020 at about 70%. Global coverage of PCV3 (third dose of pneumococcal-containing vaccines) immunization more than quadrupled between 2010 (when it was about 11%) and 2019 as newer vaccines are reaching those who need them more rapidly than before. However, this progress was also disrupted in 2020 (18).

The global averages mask large variations. In addition, the situation is not currently known in several countries where COVID-19 disruptions affected the capacity to collect and report routine immunization coverage data.

When assessed by country income group, immunization coverage has increased most impressively in LICs and LMICs. In the period 2010–2020, PCV3 immunization coverage rose from 2% to 64% in LICs and from zero to 45% in LMICs (18). Coverage of MCV2 immunization in the same period increased from 8% to 36% in LICs and from 19% to 68% in LMICs (18).

Fig. 4.2. Global vaccination rates against diphtheria, tetanus toxoid and pertussis (DTP3), measles (MCV2), pneumococcal infections (PCV3) and human papillomavirus (HPV), 2000–2020



Source: WHO/UNICEF estimates of national immunization coverage (18).

School closures during the pandemic have badly affected vaccination programmes against HPV, which protect girls against cervical cancer later in life. At 14% globally, vaccination coverage for girls was still very low in 2019 and even decreased to 12%

in 2020 (Fig. 4.2). This meant that an additional 1.6 million girls missed out on receiving this life-saving vaccine during the first year of COVID-19 (18).

Communicable diseases

Programmes for preventing and controlling HIV, TB and malaria have achieved major progress in service coverage in the past two decades.

At the end of 2020, approximately 84% (UI 67 to >98) of people living with HIV worldwide knew their HIV status. In addition, 87% (UI 67 to >98) of people living with HIV who knew their HIV status were accessing life-saving antiretroviral therapy, and 90% (UI 70 to >98) of people on treatment were virally suppressed. However, those seemingly small shortfalls in coverage meant that about one quarter (27%) of people living with HIV globally were not on treatment in 2020, and roughly one third had unsuppressed viral loads in 2019 (19).

COVID-19 has also disrupted HIV programmes, with prevention and testing services especially affected. The Global Fund reported that according to data collected at 502 health facilities in 32 African and Asian countries, the number of HIV tests decreased by 41% and the number of people referred for diagnosis and initiating treatment declined by 37% during the first COVID-19 lockdowns in 2020 compared with the same period in 2019 (20). A greater use of HIV self-testing, telemedicine, multi-month dispensing of antiretroviral medicines and community-led services helped to limit the impact of these disruptions, showing the resilience of many HIV programmes and highlighting the importance of community systems as part of health systems.

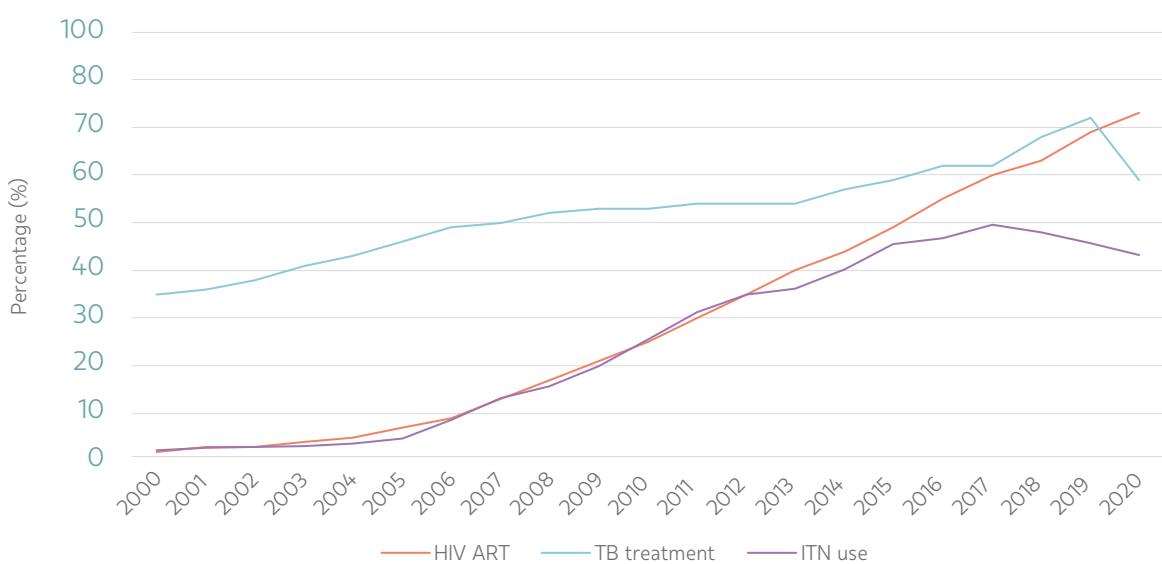
For TB, the biggest increases in treatment coverage were observed in the late 1990s and early 2000s during the roll-out of the directly-observed treatment, short-course (DOTS) strategy. Coverage continued to increase subsequently and

reached 72% globally in 2019. Subsequently, TB programmes have experienced significant COVID-19-related setbacks. For the first time in more than a decade, the global number of people dying of TB rose in 2020, largely due to reduced access to TB diagnosis and treatment (as discussed in chapter 2). Almost one half of people ill with TB missed out on access to care in 2020 and were not reported. Global TB treatment coverage (approximated as notifications divided by incidence) declined to 59% (UI 53 to 56) in 2020, down from 72% (UI 65 to 80) in 2019 (Fig. 4.3) (21). In addition, the number of people provided with treatment for drug-resistant TB and TB preventive treatment also declined significantly.

Despite the efforts of national malaria programmes, mass net distributions have rarely been able to distribute nets to all who need them in numbers sufficiently large to attain universal coverage. The percentage of the population sleeping under an insecticide-treated net (ITN) increased considerably from 2% in 2000 to 50% in 2017 and then declined (Fig. 4.3). That trend is partly due to policy shifts away from mandates of universal ITN coverage and toward recommendations for more holistic and locally-tailored strategies that utilize a range of tools to provide universal malaria protection (22).

Malaria programmes have also been disrupted during the COVID-19 pandemic. Among 45 countries providing these data, 36% reported disruptions in delivering ITNs during the fourth quarter of 2021, while 27% of 52 countries reported disruptions in malaria diagnosis and treatment (5). These disruptions may have contributed to the considerable increases in malaria cases (14 million) and deaths (69 000) between 2019 and 2020 (23).

Fig. 4.3. Global coverage of HIV antiretroviral therapy, TB treatment and ITN use, 2000–2020



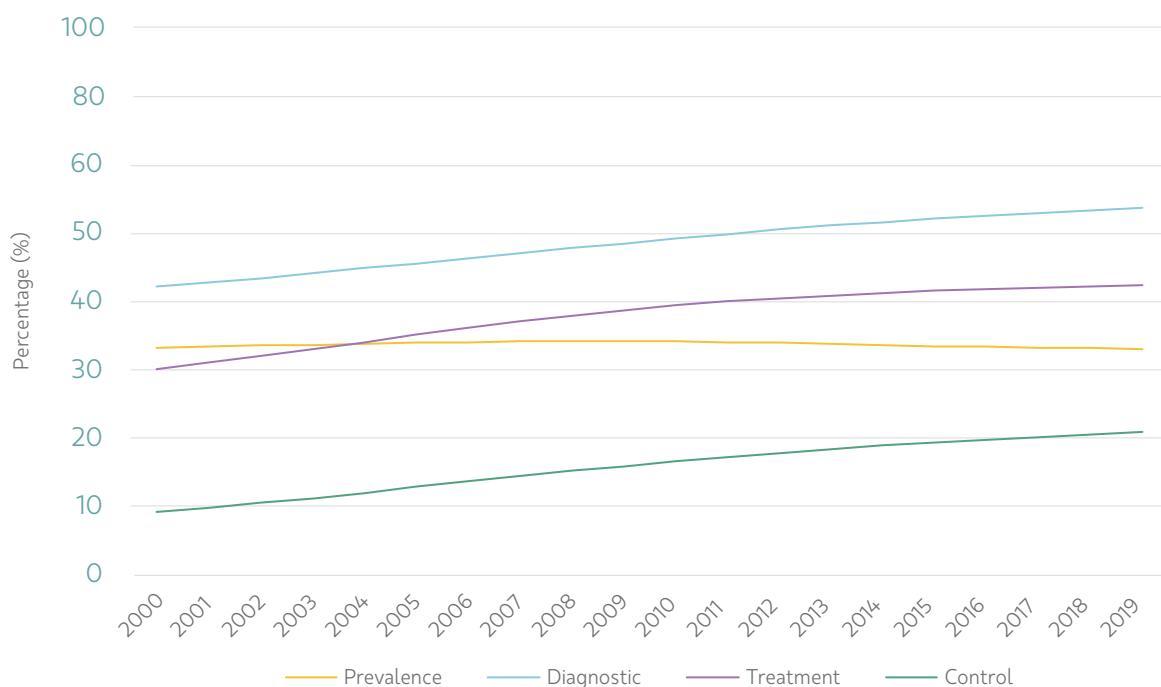
Source: WHO Global Health Observatory. (<https://www.who.int/data/gho>)

Noncommunicable diseases and mental health

While the global age-standardized prevalence of hypertension among adults aged 30–79 years remained largely stable since 2000 at around 33%, diagnostic, treatment and control rates increased substantially during that period (Fig. 4.4), according to a pooled analysis of data from 1201 population representative studies in 200 countries and territories (24). Despite increases since 2000, nearly one half of people with hypertension were unaware of their condition (not diagnosed) globally in 2019 and only around one fifth of those with hypertension were receiving effective treatment (controlled).

Disruptions in essential NCD services, such as diagnosis and treatment, have been observed since early 2020 (34,25). In mid-2021, 70% of countries reported disruptions to one or more NCD-related services during the COVID-19 pandemic. Well over one half of countries reported disruptions to hypertension management services (58%), cancer screening services (59%) and diabetes-related services (62%). Disruptions to cardiovascular emergency services were also widely reported (48% of countries) (26).

Fig. 4.4. Trends in the proportion of diagnosed, treated and controlled hypertension cases among hypertension cases globally, 2000–2019



Note: Total values were calculated as a crude average of estimates for men and women.

Source: NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants (24).

Around the world, almost one billion people are affected by mental, neurological and substance use disorders (MNS). This accounts for 10% of the global burden of disease and 25% of years lived with disability in 2019 (27). Yet, resources for diagnosing, treating and supporting people with mental health issues remain extremely limited, especially in low- and middle-income countries (28,29).

Substance use is a major factor for ill health and death globally, accounting for approximately 15% of the total MNS health burden in 2019 (27). Persons with substance use disorders frequently present in PHC and are particularly vulnerable due to their complex social and health care needs. Although effective

and brief treatments exist and are recommended, treatment coverage is very low. For example, in 18 countries out of 24 with data for 2015–2017, less than 50% of people in need of a treatment for opioid use disorders received it. Additionally, treatment coverage was under 10% in seven countries (30).

The COVID-19 pandemic led to a rise in anxiety, depression and substance misuse, together with an increased demand for mental health services around the world. At the same time, provision of these services has suffered. In a survey conducted in 130 countries in July to August 2020, 93% of countries reported disruptions in one or more of their MNS services. While preventive services were most affected, 35% of countries

reported some disruption of life-saving and emergency services and 30% reported disrupted supplies of medications (31). By the fourth quarter of 2021, access to MNS services had gradually increased again compared to earlier phases of the pandemic, with 44% of 71 countries still reporting disruptions across all mental, neurological and substance use disorder services (5).

Alarmingly, the management of MNS emergencies was still affected in 30% of countries: only 36% of countries reported providing services for the growing number of people with post-COVID-19 conditions who were experiencing mental and neurological manifestations (5).



Ensuring sustainable financing

Adequate and sustained health financing is a prerequisite for well-functioning health systems and for the achievement of UHC. Sustainable health financing entails having sufficient resources to fund the health system and to protect populations against financial hardship when they use health services.

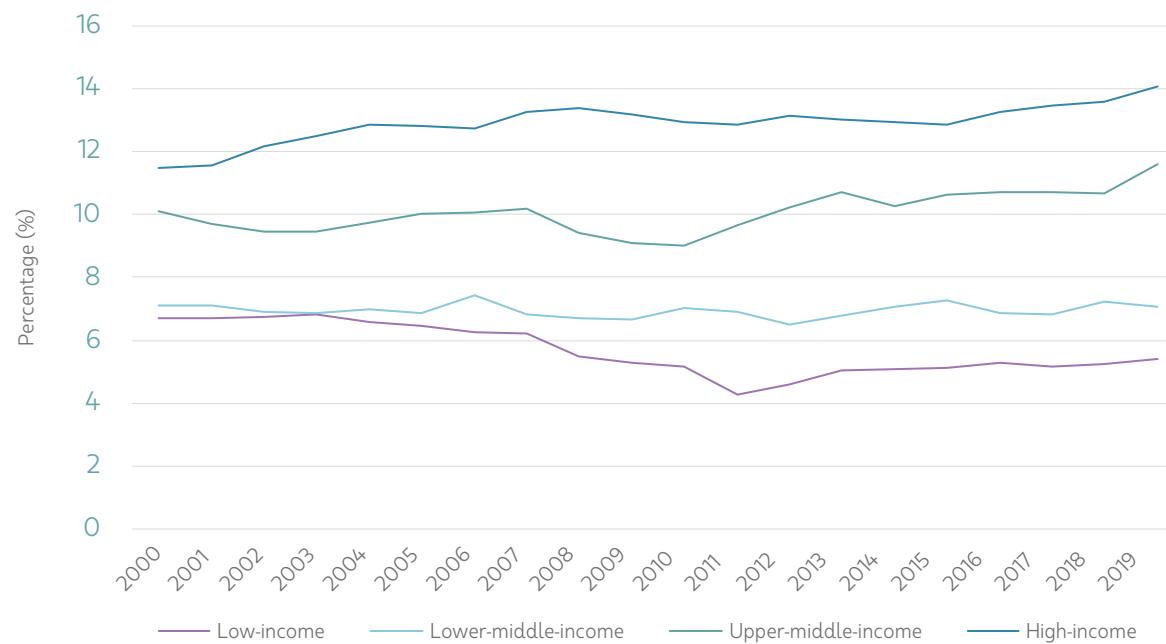
Global spending on health more than doubled in real terms between 2000 and 2019, reaching 9.8% of the global gross domestic product. Approximately 80% of that spending occurred in HICs, the bulk of it (about 70%) coming from government budgets. In LICs, out-of-pocket spending was the main source of health expenditure (44%), followed by external aid (29%) (10).

Government health spending

Domestic government health expenditure as a share of total government expenditure is an indication of the priority assigned to health in public spending and of countries' fiscal capacities. In UMICs and HICs, the share of health in government spending grew steadily from 2000 to 2019. However, it stagnated in LMICs (averaging at 7% of government spending) and declined and then stabilized in LICs (at about 5.4% of government

spending). In 2019, the share of health in government spending was 2.5 times greater in HICs (14%) than in LICs (5.4%) in 2019 (Fig. 4.5). In LICs that were highly dependent on external aid, the share of domestic government funding for health has tended to decline (and often in line with increased external aid) (10).

Fig. 4.5. Median of domestic general government health expenditure as a percentage of general government expenditure, by World Bank income group, 2000–2019



Note: The income grouping refers to the World Bank analytical income of economies as of 1 July 2021, based on the 2019 gross national income per capita estimates calculated using the World Bank Atlas method.

Source: WHO Global Health Expenditure database 2022 (<https://apps.who.int/nha/database>, accessed 5 May 2022).

The health and economic effects of COVID-19 are placing health systems under additional strain while undermining countries' abilities to finance those systems at the levels required. Countries have uneven capacities to fund their responses to sudden public health crises. Early estimates for

22 mainly high-income economies indicate that public health spending rose substantially in 2020 and at a quicker pace than in previous years. However, the share of health in government spending declined in many of the analysed countries, due to simultaneous increases in overall government spending in

response to the social and economic impact of the pandemic. Spending patterns in most low- and middle-income countries are currently unknown (10), but many have limited fiscal space to absorb and respond to the pandemic's impact on their health systems and economies.

Countries need to adopt strategies that increase resilience in health financing—that is, the ability to respond to health shocks and to safeguard or augment public spending on health. The countries that do so will be able to achieve the health financing arrangements that are strong enough to set them on the path to UHC.

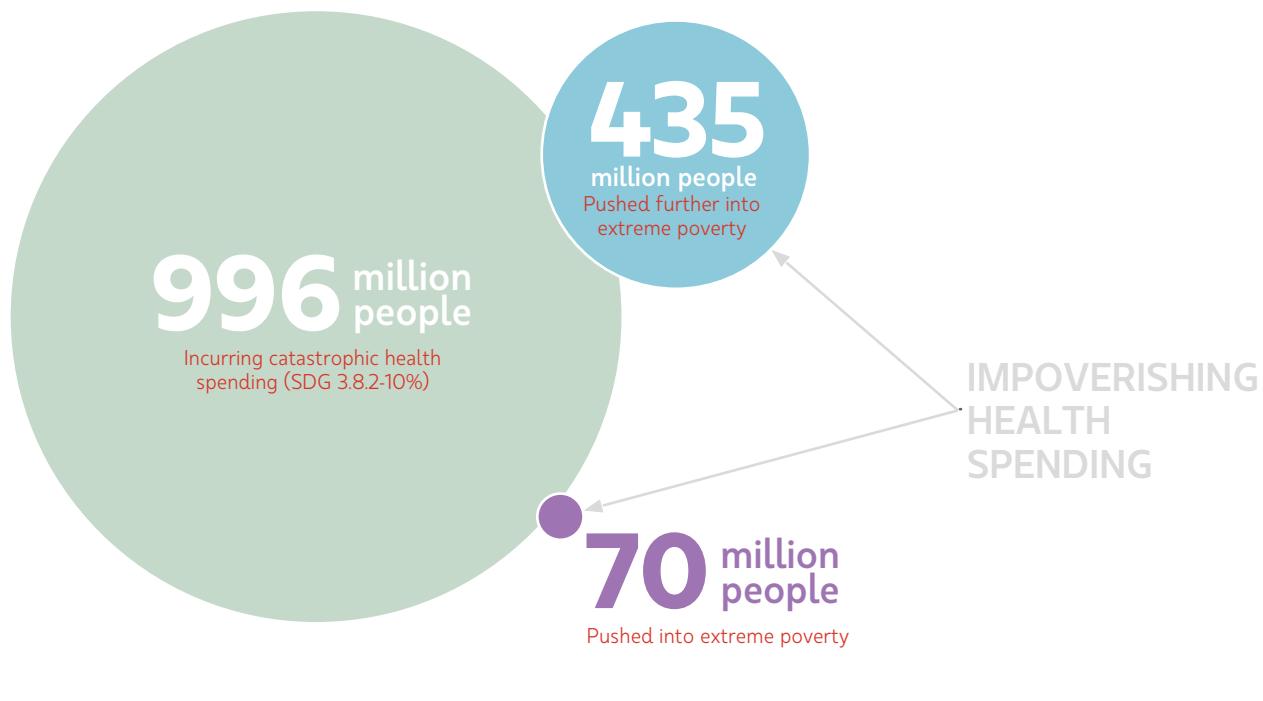
Out-of-pocket spending on health

Out-of-pocket spending is an inequitable and inefficient way to finance health care. It accounts for 44% of health expenditure on average and continues to be the largest source of health expenditure in LICs (10). In HICs, out-of-pocket spending has gradually diminished as a share of overall health spending (10).

Globally in 2017, almost one billion people spent more than 10% of their household budgets on health care; among them, 290 million spent more than 25% of their budgets on health

(2). It is estimated that approximately 70 million people were pushed into extreme poverty in 2017 by out-of-pocket health expenses, that is, below the US\$ 1.90 per day (purchasing power parity) line of extreme poverty, while a further 435 million people were pushed deeper into extreme poverty (Fig. 4.6) (2). Changes in out-of-pocket spending in low- and middle-income countries during the COVID-19 pandemic remain uncertain.

Fig. 4.6. Global financial hardship due to out-of-pocket health spending, 2017



Source: Global monitoring report on financial protection in health 2021 (2).

Although a current lack of data prevents a comprehensive assessment, the pandemic is likely to significantly undermine financial protection worldwide. This can be expected to lead to higher rates of foregone health care due to financial constraints and, for people who do seek care, a higher incidence of catastrophic spending and worsening impoverishment due to out-of-pocket health spending. A key lesson from the

COVID-19 pandemic is that counter-cyclical public policy is an available and effective strategy in many countries to cushion populations against the shocks of health crises. Increased government spending for health will be needed to support public health, strengthen equity and expand financial protection for vulnerable populations (10).

External aid

Each year, billions of dollars are spent on research and development into new or improved health products, technologies and processes, ranging from medicines and vaccines to diagnostics and assistive devices. However, the ways in which research priorities are selected and funds distributed are often poorly aligned with global public health needs,

and access and delivery considerations are typically only included as an afterthought. Countries with comparable levels of income and health needs receive different levels of overseas development aid for medical research and for maintaining basic health sectors. In 2019, LICs received only 0.2% of all direct grants for biomedical research by major funders (32).

Strengthening health systems' capacities

The COVID-19 pandemic has placed unprecedented pressure on health systems' capacities. These capacities include physical

infrastructure, such as bed availability and medical equipment, health care professionals, medicines and other health products.

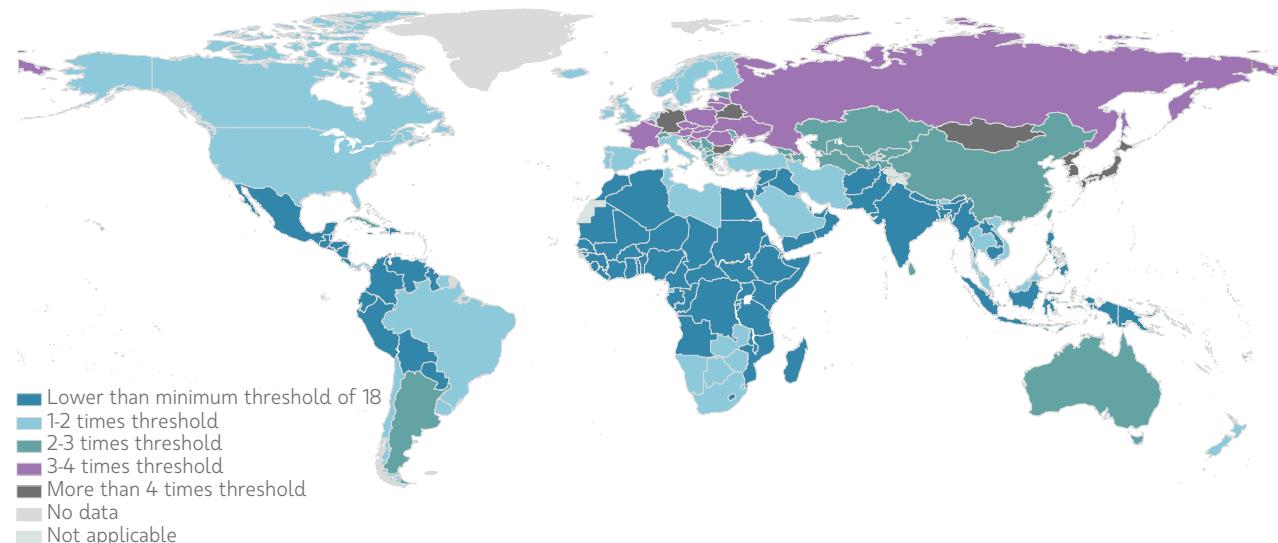
Physical infrastructure

The COVID-19 pandemic has emphasized the fundamental need for sufficient numbers of hospital beds coupled with associated equipment and health care staff to cope with unexpected increases in demand for hospitalization and intensive care. During the COVID-19 pandemic, many countries have shown considerable agility in quickly converting and/or scaling up bed capacity.

The number of beds needed in a country depends on many factors, including patterns of disease and the availability of alternative care settings. Other factors to consider include the distribution of beds, occupancy rates, and staffing and surge capacities. A hospital bed density below a threshold of 18 per

10 000 can be considered indicative of serious constraints in access to secondary and tertiary inpatient care. Currently, some countries appear to have excess hospital bed capacity, while others lack sufficient capacity. Many countries in Africa, South-East Asia and the Americas had a hospital bed density lower than the threshold in 2020, whereas the hospital bed density was at least four times higher than the threshold in a majority of countries in the European and Western Pacific regions (Fig. 4.7). In recent years, health care restructuring in North America and parts of Europe has led to a decrease in hospital bed density and acute care capacity in many countries.

Fig. 4.7. Hospital bed density per 10 000 population by country, 2020 or latest year available



Note: The threshold of 18 hospital beds per 10 000 population corresponds to the observed OECD members' minimum of 20 beds per 10 000 (based on the 2015 edition of the OECD Health Statistics database). This threshold translates to an inpatient hospital admission rate of approximately 5% of the total population per year.
Source: WHO global service coverage database, 2021 update.

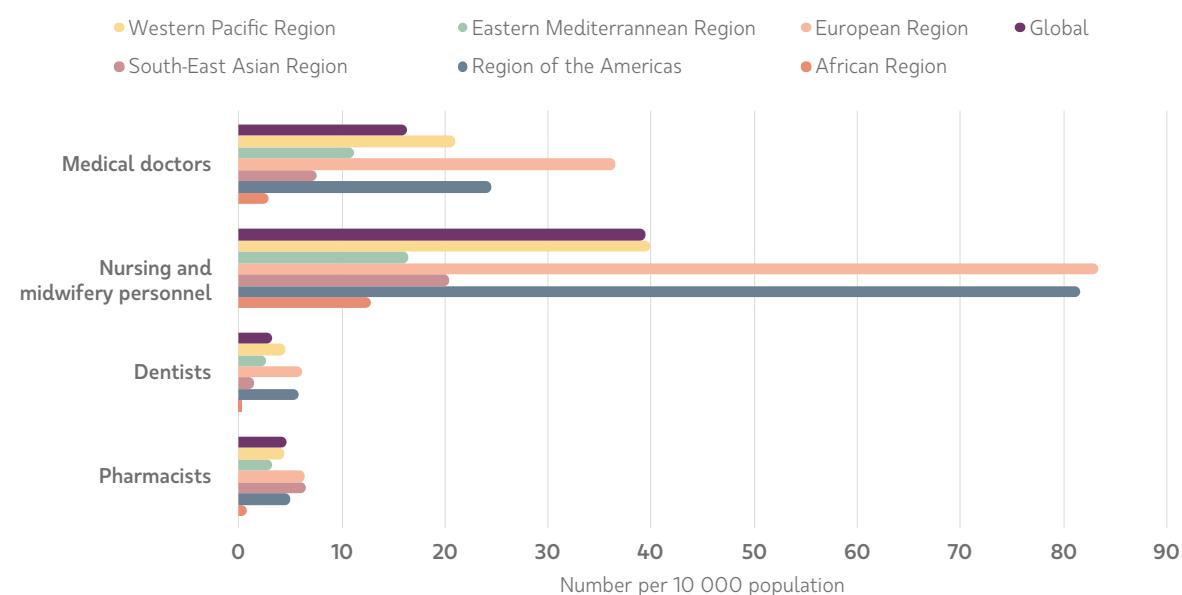
Health workforce

No matter how well equipped they are, health systems cannot function without sufficient health care workers. Even prior to COVID-19, the capacity to deliver essential health services in many countries was limited due to persistent health workforce shortages. Already in 2016, WHO had projected a global shortfall of 18 million health care workers by 2030, particularly in the WHO Africa and South-East Asia regions (33). Africa, which bears almost one quarter (24%) of the world's disease burden, had only 3% of the world's health care workers (34).

According to National Health Workforce Accounts data for 2014 to 2020, the density of nursing and midwifery personnel in the

WHO European Region and Region of the Americas continued to be highest in the world at over 80 per 10 000 population—twice the global average of 40 per 10 000 and over six times higher than in the African Region. The density of medical doctors per 10 000 population globally has improved in recent years, but regional disparities remain wide. The estimated density of medical doctors during 2014–2020 was 37 per 10 000 population in the European Region, but as low as 8 per 10 000 population in the South-East Asia Region and 3 per 10 000 in the African Region. The distribution of pharmacists and dentists also continued to be highly uneven (Fig. 4.8) (35).

Fig. 4.8. Density of medical doctors, nurses and midwives, dentists and pharmacists per 10 000 population, by WHO region, latest year available



Source: WHO National Health Workforce Accounts Database, 2022 (34).

These disparities may be widening due to impact the pandemic is having on health care workers. According to WHO estimates, the pandemic claimed the lives of approximately 115 500 (80 000 to 180 000) health care workers between January 2020 and May 2021 (36). In addition, physical and emotional exhaustion has taken a heavy toll. Between 40% and two thirds of surveyed health care workers in four countries (Italy, Spain, United Kingdom, United States of America) reported mental health problems during the pandemic, according to a report by the OECD (37). Stress and burnout have contributed to workforce attrition, with many health workers opting to leave the profession.

Many countries continued to face health staff shortages in key work categories and struggled to achieve a balanced

distribution of health care workers across regions and between urban and rural areas. This has led to severe disruptions of other essential health services, as existing health care workers were redeployed to assist in the COVID-19 response. According to the Second round of the national pulse survey on the continuity of essential health services, two thirds (66%) of countries reported that staff shortages were a significant reason for service disruptions from January to March 2021 (4).

The pandemic has reinforced the vital importance of long-term sustainable investments in the health workforce to ensure that enough health care workers are employed and retained, deployed where needed, and that they have the skills equipment to perform their jobs safely and well.

Medicines and other health products

Before the COVID-19 pandemic, an estimated two billion people lacked regular access to essential medicines (38). Access to and delivery of medicines, vaccines and diagnostic tools are vital to address existing and emerging health issues. A sample of 25 countries surveyed between 2008 and 2019 shows a substantial variation in access, with a range of 0 to 69% (median of 15%) of health facilities providing an available and affordable set of essential medicines for the treatment, prevention and management of acute and chronic diseases.

In over one quarter (28%) of countries, no facility provided all these basic medicines (39).

With the COVID-19 pandemic, the world now faces unprecedented challenges to access essential medicines and other health commodities. Drug shortages, hoarding of medicines and supplies, and the circulation of falsified health products have already exacerbated this global health challenge (38).



References

1. WHO, World Bank. Tracking universal health coverage: 2021 Global Monitoring Report. Conference edition. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/9789240040618>, accessed 6 May 2022).
2. Global monitoring report on financial protection in health Geneva: World Health Organization; 2021 (<https://www.who.int/publications-detail-redirect/9789240040953>, accessed 5 May 2022).
3. Pulse survey on continuity of essential health services during the COVID-19 pandemic. Interim report. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/rest/bitstreams/1297631/retrieve>, accessed 5 May 2022).
4. Second round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic. Interim report. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/rest/bitstreams/1343409/retrieve>, accessed 5 May 2022).
5. Third round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic: November – December Interim report. Geneva: World Health Organization; 2022 (https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-20221, accessed 5 May 2022).
6. Colombo F, Jakab Z, Uribe JP. Pathway to UHC: three priorities for stronger, more resilient, more inclusive health systems, 10 December 2021 (<https://blogs.worldbank.org/health/pathway-uhc-three-priorities-stronger-more-resilient-more-inclusive-health-systems>, accessed 5 May 2022).
7. A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals. Geneva: World Health Organization and United Nations Childrens Fund (UNICEF); 2018 (<https://www.who.int/docs/default-source/primary-health/vision.pdf>, accessed 5 May 2022).
8. Realising the potential of primary health care. OECD Health Policy Studies. Paris: Organisation for Economic Co-operation and Development; 2020.
9. Strengthening the frontline: how primary health care helps health systems adapt during the COVID 19 pandemic. OECD Policy responses to coronavirus (COVID-19). Paris: Organisation for Economic Co-operation and Development; 2021.
10. Global expenditure on health: public spending on the rise. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/handle/10665/350560>, accessed 6 May 2022).
11. Estimates and Projections of Family Planning Indicators 2021, United Nations, Department of Economic and Social Affairs, Population Division; 2021 (https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2021_fpi_country_profiles.pdf, accessed 6 May 2022).
12. UNICEF/WHO joint database on births attended by skilled health personnel 2022 (<https://data.unicef.org/topic/maternal-health/delivery-care/>, accessed 5 May 2022).
13. Fore H. A wake-up call: COVID-19 and its impact on children's health and wellbeing. *The Lancet Global Health*. 2020;8(7).
14. Kotlar B. The Impact of the COVID-19 pandemic on maternal and perinatal health: A scoping review. *Reprod Health*. 2021;18(10).
15. Roberton T, Carter ED, Chou VB, Stegmuller AR, Jackson BD, Tam Y, et al. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: A modelling study. *Lancet Glob Health*. 2020;8(7).
16. United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects Age-specific fertility rates by region, subregion and country 1950-2100 (<https://population.un.org/wpp/Download/Standard/Fertility/>, accessed 10 May 2022).
17. How will the COVID-19 pandemic affect births? Technical brief. New York: United Nations Population Fund (UNFPA); December 2021 (<https://www.unfpa.org/sites/default/files/pub-pdf/How%20will%20the%20COVID-19%20pandemic%20affect%20births.pdf>, accessed 5 May 2022).
18. WHO/UNICEF estimates of national immunization coverage. Geneva: World Health Organization (<https://www.who.int/teams/immunization-vaccines-and-biologicals/immunization-analysis-and-insights/global-monitoring/immunization-coverage/who-unicef-estimates-of-national-immunization-coverage>, accessed 10 May 2022).
19. UNAIDS data Geneva: Joint United Nations Programme on HIV/AIDS; 2021 (https://www.unaids.org/sites/default/files/media_asset/JC3032_AIDS_Data_book_2021_En.pdf, accessed 5 May 2022).

20. The impact of COVID-19 on HIV, TB and Malaria Services and Systems for Health, Geneva: Global Fund to Fight AIDS, Tuberculosis and Malaria, 2021 (https://www.theglobalfund.org/media/10776/covid-19_2020-disruption-impact_report_en.pdf, accessed on 12 May 2022).
21. Global tuberculosis report Geneva: World Health Organization; 2021 (<https://www.who.int/publications/item/9789240037021>, accessed 5 May 2022).
22. Bertozi-Villa A, Bever CA, Koenker H, Weiss DJ, Vargas-Ruiz C, Nandi AK, et al. Maps and metrics of insecticide-treated net access, use, and nets-per-capita in Africa from 2000-Nat Commun. 2021;12(1):
23. World malaria report Geneva: World Health Organization; 2021 (<https://www.who.int/publications/item/9789240040496>, accessed 5 May 2022).
24. NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants., Lancet 2021;398(10304):957–980.
25. The impact of the COVID-19 pandemic on noncommunicable disease resources and services: results of a rapid assessment. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/rest/bitstreams/1299882/retrieve>, accessed 5 May 2022).
26. Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2021 global survey. Geneva: World Health Organization; [in press].
27. Global health estimates 2019: disease burden by cause, age, sex, by country and by region, 2000–Geneva: World Health Organization; 2020 (<https://www.who.int/gho/data/themes/mortality-and-global-health-estimates/global-health-estimates-leading-causes-of-dalys>, accessed 11 May 2022).
28. Chisholm D, Docrat S, Abdulmalik J, et al. Mental health financing challenges, opportunities and strategies in low- and middle-income countries: findings from the Emerald project. BJPsych Open. 2019;5(5):e
29. Mental health atlas Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/rest/bitstreams/1376861/retrieve>, accessed 5 May 2022).
30. United Nations Department of Social and Economic Affairs. SDG Indicators Database [online database] (<https://unstats.un.org/sdgs/dataportal>, accessed 5 May 2022).
31. The impact of COVID-19 on mental, neurological and substance use services: Results of a rapid assessment. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/rest/bitstreams/1310579/retrieve>, accessed 5 May 2022).
32. Investments on grants for biomedical research by funder, type of grant, health category and recipient. Global Health Observatory [online database]. Geneva: World Health Organization (<https://www.who.int/observatories/global-observatory-on-health-research-and-development/monitoring/investments-on-grants-for-biomedical-research-by-funder-type-of-grant-health-category-and-recipient>, accessed 5 May 2022).
33. Global strategy on human resources for health: workforce 2030. Geneva: World Health Organization; 2016 (<https://apps.who.int/iris/handle/10665/250368>, accessed 5 May 2022).
34. Health workers: a global profile. Geneva: World Health Organization; 2006 (https://www.who.int/whr/2006/06_chap1_en.pdf?ua=1, accessed 5 May 2022).
35. WHO National Health Workforce Accounts database [online database]. Geneva: World Health Organization (<https://apps.who.int/nhwportal/>, accessed 5 May 2022).
36. The impact of COVID-19 on health and care workers: a closer look at deaths. Geneva: World Health Organization; 2021(<https://apps.who.int/iris/handle/10665/345300>, accessed 5 May 2022).
37. Health at a glance 2021—OECD indicators. Paris: Organisation for Economic Development and Cooperation; 2021 (<https://www.oecd-ilibrary.org/docserver/ae3016b9-.pdf?ua=1>, accessed 5 May).
38. Access to medicines: making market forces serve the poor. Geneva: World Health Organization; 2017 (https://cdn.who.int/media/docs/default-source/essential-medicines/fair-price/chapter-medicines.pdf?sfvrsn=adccfc8f_4&download=true, accessed 5 May 2022)
39. Newton PN, Bond KC, Adeyeye M, Antignac M, Asheneff A, Awab GR, et al. COVID-19 and risks to the supply and quality of tests, drugs, and vaccines. Lancet Glob Health. 2020;8:e754–5.

• Annex 1 - Regional highlights

Explanatory notes

Unless otherwise noted, the statistics shown below represent official WHO statistics for selected health-related SDG indicators and selected Thirteenth General Programme of Work indicators, based on evidence available in early 2022. They have been compiled primarily from publications and databases produced and maintained by WHO or by United Nations groups of which WHO is a member. Unless otherwise noted, all statistics presented here are available in Annex 2. Owing to limited space, indicators are often referred to using SDG targets, along with a shorter indicator name (Annex 2 provides full indicator names and relevant references). Comparable estimates are subject to considerable uncertainty, especially for countries where the availability and quality of the underlying primary data are limited (1). Uncertainty intervals and other details on the indicators and statistics presented here can be found at the WHO Global Health Observatory, a WHO online portal that provides access to data and analyses for monitoring the global health situation (<https://www.who.int/gho/en/>).

African Region

COVID-19 and threats to universal health coverage progress

Progress towards UHC require that countries do well in both: service coverage, tracked under SDG 3.8.1 (on a 0-100 scale) and, financial risk protection under 3.8.2 and defined as the proportion of the population with out-of-pocket health spending exceeding 10% or 25% of their household budget (incidence of catastrophic health spending). UHC in the region is not dependent on a Member State's level of income. As shown in Fig. A1.1, LICs and LMICs are represented in all situations, above and below the regional averages for the two depicted indicators (2, 3).

There has been encouraging, albeit slow, progress towards UHC service coverage in the African Region, from 3 out of 47 countries with a service coverage index above 40/100 in 2000; to 34 in 2019. Improvements were driven primarily by greater utilization of services for infectious diseases. In 2019, capacity and access were the limiting components of UHC service coverage (value of 29/100) compared to the other components: infectious diseases (47/100), reproductive, maternal, newborn, child and adolescent health (55/100), and NCDs (69/100) (2).

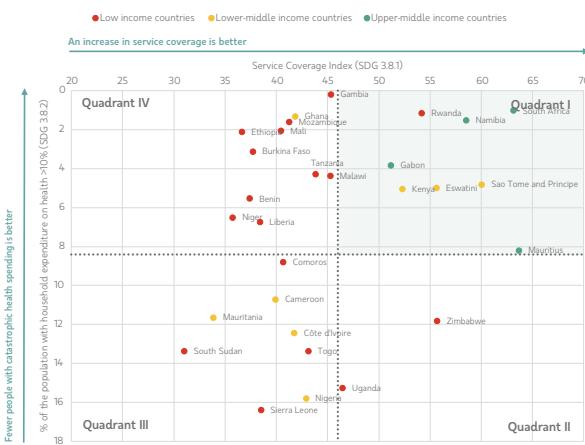
Progress towards financial risk protection has been more limited. Eleven countries in the region experienced a >0.1 annual average percentage point increase in the incidence of catastrophic health spending per year in the 2000–2017 period. Over the past two decades, there are 14 countries where the proportion of people further impoverished by out-of-pocket health spending among those living in extreme poverty (that is, incomes below US\$1.90 per day, purchasing power parity) showed an increase, rather than a decrease (2, 3).

Across the WHO African Region, COVID-19 continues to disrupt essential health services as health systems struggle to deliver routine services while mounting emergency responses to the pandemic. By November 2021, 91% of the countries were still reporting one or more disruptions to essential health services. The most affected were elective and/or outpatient services, followed by quality of care due to availability and functionality of staff, equipment, supplies and medicines were not immediately stabilized. Mitigation measures have varied and commonly include enhanced community communication (94% of countries), procurement in surge commodities (such as personal protective equipment, medicines and therapeutics [92%]), rapid training and job aids for new roles (77%), and provision of home-based care where appropriate (61%) (6).

If the region is to quicken and expand its progress towards UHC, countries must invest more in the resilience of their health systems. These improvements should encompass steps aimed at specific and known health threats (that is, targeted resilience, which is a function of emergency preparedness capacity), as well as interventions to enhance systems' capacities to anticipate, absorb, adapt and transform when faced with unforeseen threats (that is, inherent system resilience, a function of specific investments in the health system).

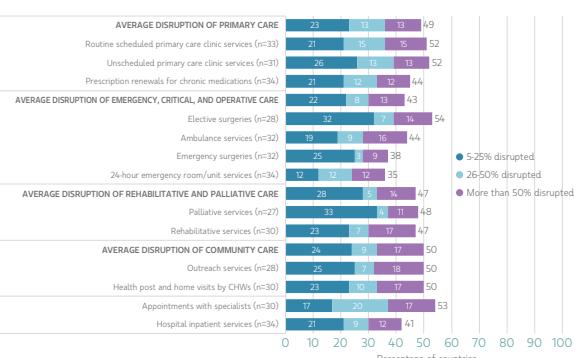
Ensuring essential services continuity will depend on building inherent health system resilience across the region. The focus will have to be on frontline service provision capacity for awareness of risks, diversity and versatility in service provision, localized resource mobilization and adaptive transformation following shocks (7).

Fig. A1.1. Relative status of UHC service coverage and financial risk protection in the WHO African Region, most recent year in both dimensions since 2014



Note: The graph shows the most recent data available in both dimensions of UHC; year of data varies depending on availability. The vertical and horizontal dotted lines correspond to the 2019 and 2017 population-weighted average across all countries in the WHO African Region for SDG 3.8.1 and SDG 3.8.2 respectively. The World Bank income group refers to the group in which the country was in the most recent year available for the two indicators. Angola is excluded from the graph (service coverage index is 39 whereas the % of the population with household expenditure on health >19% is 36%).
Source: UHC global monitoring report, 2021 (2).

Fig. A1.2. Average percentage of countries reporting disruptions for specific services, by service delivery setting, May to November 2021



Source: Third round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic: November–December 2021 (3).

Summary of SDG 3 indicators for which country-level values are reported as comparable estimates^a

	3.1.1	3.2.1	3.2.2	3.3.1	3.3.2	3.3.3	3.3.4	3.4.1	3.4.2	3.5.2	3.6.1	3.8.1	3.9.1	3.9.2	3.9.3	3.a.1	3.b.1	3.b.1	3.b.1	
	Maternal mortality ratio ^b	Under five mortality rate ^c	Neonatal mortality rate ^c	New HIV infections ^d	Tuberculosis incidence ^e	Malaria incidence ^f	Hepatitis B prevalence ^g	Probability of dying from the four major NCDs ^h	Suicide mortality rate ⁱ	Alcohol consumption ^j	Road traffic mortality rate ^k	UHC service coverage index ^l	Air pollution mortality rate ^m	WASH mortality rate ⁿ	Unintentional poisoning mortality rate ^o	Tobacco use prevalence ^p	DTP3 immunization ^q	MCV2 immunization ^r	PCV3 immunization ^s	HPV vaccine ^t
Member State	2017	2020	2020	2020	2020	2020	2020	2019	2019	2019	2019	2019	2016	2016	2019	2020	2020	2020	2020	
Algeria	112	23	16	0.04	59	0.08	13.9	2.5	0.6	20.9	75	49.7	1.9	0.7	21.0					
Angola	241	71	27	0.69	350	251.6	4.57	22.2	6.1	7.8	26.1	39	118.5	48.8	2.0		51	41	47	
Benin	397	86	30	0.19	55	388.3	2.87	22.6	7.8	2.2	26.8	38	205.0	59.7	2.6	6.9	72	68		
Botswana	144	45	22	4.39	236	1.1	0.18	27.0	16.1	6.6	26.4	54	101.3	11.8	1.8	19.4	95	66	90	
Burkina Faso	320	85	26	0.10	46	389.9	1.66	23.9	7.5	11.0	31.0	43	206.2	49.6	3.1	14.3	91	71	91	
Burundi	548	54	21	0.15	103	294.9	1.35	25.0	6.2	7.5	35.5	44	179.9	65.4	8.2	11.8	93	83	93	
Cabo Verde	58	14	9		39	0.0	0.26	17.4	12.9	6.4	26.8	69	99.5	4.1	0.4	11.4	93	86		
Cameroon	529	72	26	0.60	174	260.0	1.75	23.9	9.0	5.5	30.2	44	208.1	45.2	2.6	7.3	69	28	69	
Central African Republic	829	103	39		540	336.0	3.75	36.0	12.3	1.7	37.7	32	211.9	82.1	2.8		42	52		
Chad	1140	110	33	0.22	144	206.3	10.79	22.7	6.4	1.3	32.4	28	280.1	101.0	3.5	8.3	87			
Comoros	273	61	29	0.01	35	5.2	1.16	20.6	5.4	1.1	26.6	44	172.4	50.7	2.4	20.3				
Congo	378	45	19	1.94	379	213.2	2.56	22.6	6.5	9.2	29.7	40	130.7	38.7	1.3	14.5	73	29	71	
Côte d'Ivoire	617	78	33	0.24	135	287.0	3.44	21.7	8.9	3.0	24.1	45	269.1	47.2	2.5	9.4	80	79	13	
Democratic Republic of the Congo	473	81	27	0.18	319	324.2	3.28	24.0	6.7	1.1	34.9	39	163.9	59.8	2.0	12.8	57	58		
Equatorial Guinea	301	78	29		280	240.8	6.07	22.1	7.9	6.9	27.2	43	177.7	22.3	1.6		53			
Eritrea	480	39	18	0.07	81	44.8	1.02	26.8	10.9	2.1	37.9	50	173.7	45.6	3.3	7.5	95	85	95	
Eswatini	437	47	20	5.28	319	0.7	0.83	35.2	29.4	8.8	33.5	58	137.0	27.9	3.3	9.2	83	70	83	
Ethiopia	401	49	27	0.12	132	54.1	1.59	17.1	5.4	2.2	28.2	38	144.4	43.7	3.3	5.1	71	46	67	
Gabon	252	42	20	0.48	527	215.5	2.12	21.3	8.4	8.1	23.9	49	76.0	20.6	1.3		63			
Gambia	597	49	26	0.93	157	87.3	1.60	21.1	4.8	3.4	29.6	48	237.0	29.7	1.8	11.1				
Ghana	308	45	23	0.63	143	162.8	2.13	22.5	6.6	2.8	25.7	45	203.8	18.8	1.7	3.5	94	79	95	
Guinea	576	96	30	0.42	179	319.5	6.07	24.9	7.0	1.1	29.7	37	243.3	44.6	2.3		47			
Guinea-Bissau	667	77	35	0.88	361	88.9	2.11	24.9	7.0	5.5	32.2	37	214.7	35.3	2.3	9.0	74			
Kenya	342	42	20	0.72	259	50.9	0.40	21.0	6.1	2.1	28.3	56	78.1	51.2	2.4	11.1	89	49	90	
Lesotho	544	90	44	4.91	650	1.22	42.7	72.4	5.1	31.9	48	177.6	44.4	5.2	24.3	87	69	87		
Liberia	661	78	31	0.29	314	358.0	4.66	17.8	4.5	5.4	38.9	42	170.2	41.5	1.7	8.2	65	30	65	
Madagascar	335	50	20	0.22	238	133.5	2.13	26.0	5.5	2.0	29.2	35	159.6	30.2	2.1	27.8	68	24	65	
Malawi	349	39	19	1.21	141	1.39	22.6	5.4	4.1	33.4	48	115.0	28.3	1.7	10.8	94	75	93		
Mali	562	91	32	0.27	52	357.5	4.62	22.3	4.1	1.3	22.7	42	209.1	70.7	2.9	8.3	70	26	66	
Mauritania	766	71	31		87	30.0	3.35	16.1	3.1	0.0	25.6	40	169.5	38.6	1.5	10.7	71		70	
Mauritius	61	17	11	0.80	12	0.41	23.2	9.5	4.8	12.2	65	38.3	0.6	0.8	20.2	93	87	86		
Mozambique	289	71	28	3.50	368	320.2	0.59	30.6	13.6	2.7	30.0	47	10.0	27.6	3.7	14.3	79	62	65	
Namibia	195	40	20	2.44	460	10.0	0.36	22.6	9.7	3.1	34.8	62	145.0	18.3	1.9	15.1				
Niger	509	78	24	0.05	83	324.1	3.44	21.0	5.3	0.5	25.5	37	251.8	70.8	3.3	7.4	81	60	81	
Nigeria	917	114	35	0.42	219	318.8	2.94	16.9	3.5	6.2	20.7	44	207.4	68.6	3.3	3.7	57	12	57	
Rwanda	248	40	18	0.34	58	230.5	0.49	20.2	5.6	8.0	29.4	54	121.4	19.3	1.7	13.7	91	91	68	
Sao Tome and Principe	130	16	8		118	8.8	1.31	21.0	1.5	5.8	27.9	60	162.4	11.4	0.7	5.7				
Senegal	315	38	21	0.08	117	49.9	0.93	19.5	6.0	0.7	23.5	49	160.7	23.9	1.9	6.9	91	92	31	
Seychelles	53	14	8		11	0.09	21.1	8.1	8.8	11.3	70	49.3	0.2	0.5	20.2	97	99	94	24	
Sierra Leone	1120	108	31	0.70	298	328.2	1.98	23.5	6.7	5.3	33.0	39	324.1	81.3	2.8	13.5	91	67	91	
South Africa	119	32	11	4.60	554	0.8	3.10	24.1	23.5	9.5	22.2	67	86.7	13.7	1.7	20.3	84	76	83	
South Sudan	1150	98	40	1.37	232	286.9	13.03	16.8	3.9		36.7	32	165.1	63.3	2.3		49			
Togo	396	64	24	0.45	36	228.9	3.27	23.9	8.8	2.7	28.7	44	249.6	41.6	1.9	6.8	82	46	82	
Uganda	375	43	19	0.95	196	283.8	0.96	21.2	4.6	12.5	29.4	50	155.7	31.6	1.7	8.4	89	89	30	
United Republic of Tanzania	524	49	20	1.26	222	120.2	0.99	17.4	4.3	12.0	31.1	46	139.0	38.4	2.0	8.7	86	67	80	
Zambia	213	61	24	3.64	319	186.9	1.32	24.6	7.3	4.5	20.5	55	127.2	34.9	2.6	14.4	84	66	69	
Zimbabwe	458	54	26	1.74	193	98.5	2.74	28.4	14.1	4.5	41.2	55	133.0	24.6	3.5	11.7	86	74	86	

^a Comparable estimates refer to country values of the same reference year, which may be adjusted or modelled to allow comparisons between countries and are produced for countries with underlying primary data and, in some cases, for those without. Refer to Annex 2 for the full set of SDG 3 indicators. Shading from blue to orange represents low to high for mortality, incidence and prevalence indicators; and from high to low for immunization coverage and service index indicators. Each indicator is graphed on an individual scale.

^b per 100 000 live births ^c per 100 000 population ^d between ages 30-69 (%) ^e per 100 000 population ^f litres of pure alcohol per capita ≥15 years ^g among children under 5 years (%) ^h age-standardized, among adults 18+ (%) ⁱ among 1-year-olds (%) ^j age-standardized, per 100 000 population ^k by the nationally recommended age (%) ^l among 15 year-old girls (%) ^m MCV2 immunization ⁿ PCV3 immunization ^o DTP3 immunization ^p MCV2 immunization ^q PCV3 immunization ^r DTP3 immunization ^s MCV2 immunization ^t PCV3 immunization

•Region of the Americas

Inequalities in TB, HIV and malaria incidence (SDG target 3.3) across countries during the COVID-19 pandemic

Despite significant progress in the reduction of associated morbidity and mortality since 2000, TB, HIV, and malaria epidemics continue to constitute a substantial burden of disease in the Region of the Americas, especially in the working-age population, and with considerable health, social and economic consequences.

Tracking and addressing the inequalities in the distribution of these diseases across countries are particular concerns that have been heightened during the ongoing COVID-19 pandemic, which struck hard in the countries of the Americas, especially in 2020. This created new vulnerabilities and tested the resilience of governments, health systems, economies, communities and individuals.

Prior to the COVID-19 pandemic, the overall regional TB incidence trended slightly upward, from 27.6 cases per 100 000 population in 2015 to 28.7 cases in 2019 and 28.4 cases in 2020. The difference between TB incidence in the 20% of countries with the lowest and the highest income per capita, a simple measure of absolute inequality, was decreasing prior to the pandemic. There were an estimated 75.5 more TB incident cases per 100 000 in the poorest 20% of countries in the region compared to the richest 20% of countries in 2015, and this gap decreased to 67.9 cases per 100 000 in 2019. This modest, though promising, trend was reversed after the first year of the COVID-19 pandemic, with the difference in TB incidence between the richest and poorest countries rising to 69.2 cases per 100 000 population (Fig. A1.3B).

Regional HIV incidence in 2020 was 16.1 per 100 000 population, down from 16.3 in 2019 and 17.2 in 2015. The difference in HIV incidence between the lowest and the highest country income quintiles was also decreasing, from a difference of 4.1 HIV incident cases per 100 000 between the richest and the poorest 20% of countries in 2015 to a difference of 3.7 in 2019. However, that trend shifted in 2020 when HIV incidence was higher in the richest country quintile than in the poorest quintile.

Among endemic territories, overall regional malaria incidence rose sharply from 77.9 cases per 100 000 population in 2015 to 135.0 cases per 100 000 in 2019. However, the difference in incidence between the poorest and richest countries in the region remained steady during that period, with a difference of 45.0 malaria incident cases per 100 000 population between the richest and poorest country quintiles in 2019 compared with 43.6 in 2015. The average regional malaria incidence rate decreased modestly to 109.3 per 100 000 population in the first year of the COVID-19 pandemic, but the distribution of these cases shifted sharply towards the poorest countries in the region. There were 129.2 more malaria incident cases per 100 000 population in the poorest 20% of countries compared with the richest 20% in 2020, almost a three-fold increase since 2019 (Fig. A1.3C).

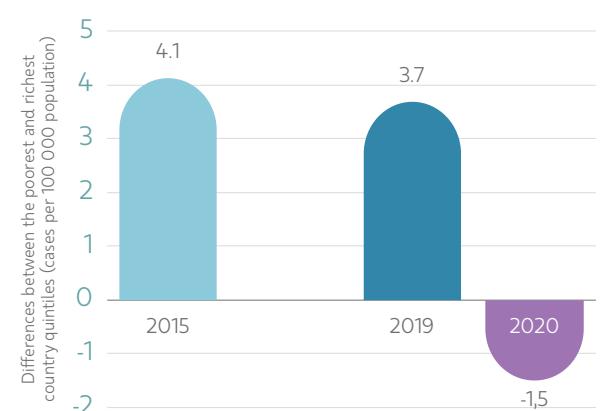
It is of paramount importance to apply an equity lens when assessing progress towards the health-related SDGs. This requires not only building the institutional capacity to measure and monitor social inequalities in health, but also making use of such data and evidence to inform equity-sensitive, policy decision-making and to strengthen accountability so that greater equity can be achieved, thereby fulfilling the pledge to "leave no one behind".

Fig. A1.3. Changes over time in the gap between the richest and poorest country quintiles: (A) TB incidence (SDG 3.3.2); (B) HIV incidence (SDG 3.3.1); and (C) malaria incidence (SDG 3.3.3), Region of the Americas, 2015, 2019–2020.

A. TB incidence



B. HIV incidence



C. malaria incidence



Summary of SDG 3 indicators for which country-level values are reported as comparable estimates^a

	3.1.1	3.2.1	3.2.2	3.3.1	3.3.2	3.3.3	3.3.4	3.4.1	3.4.2	3.5.2	3.6.1	3.8.1	3.9.1	3.9.2	3.9.3	3.a.1	3.b.1	3.b.1	3.b.1	HPV vaccine ⁿ	
Member State	2017	2020	2020	2020	2020	2020	2020	2019	2019	2019	2019	2019	2016	2016	2019	2020	2020	2020	2020	2020	
Antigua and Barbuda	42	6	3			2		0.19	17.5	0.4	9.4	0.0	72	29.9	0.1	0.7	96	78			
Argentina	39	9	5	0.13	31			0.01	15.7	8.4	9.5	14.1	73	26.6	0.4	0.4	24.5	74	71	75	
Bahamas	70	12	7	0.28	9			0.16	19.9	3.5	4.8	7.7	70	19.9	0.1	0.2	10.6	83	83	83	
Barbados	27	12	8		2			0.18	16.0	0.6	10.4	8.2	74	31.1	0.2	0.7	8.5	85	78	86	
Belize	36	12	8	0.53	23	0.0	0.60	16.5	7.1	6.4	22.6	67	68.6	1.0	0.4	8.5	79	87	111		
Bolivia (Plurinational State of)	155	25	13	0.08	105	3.1	0.14	17.9	6.2	3.9	21.1	67	63.7	5.6	0.6	12.7	68	46	68	24	
Brazil	60	15	9	0.23	45	3.9	0.03	15.5	6.9	7.3	16.0	75	29.9	1.0	0.1	12.8	77	44	79	72	
Canada	10	5	3		6			0.34	9.6	11.8	8.8	5.3	89	7.0	0.4	0.3	13.0	91	83	84	
Chile	13	7	4	0.26	15			0.03	10.0	9.0	8.9	14.9	80	25.3	0.2	0.4	29.2	93	83	89	
Colombia	83	13	7	0.18	37	9.4	0.15	9.7	3.9	5.5	15.4	78	37.0	0.8	0.1	8.5	88	88	89	34	
Costa Rica	27	8	6	0.34	10	0.1	0.02	9.5	8.1	4.1	14.8	78	23.3	0.9	0.1	8.8	95	93	95	77	
Cuba	36	5	2	0.18	6			0.03	16.6	14.5	6.3	8.9	80	49.5	1.0	0.2	17.9	99	98		
Dominica		35	30		47			0.20					67				97	90		69	
Dominican Republic	95	34	23	0.32	41	0.2	0.10	19.1	4.9	6.7	64.6	66	43.0	2.2	0.4	10.6	82	55	69	7	
Ecuador	59	13	7	0.12	48	3.8	0.09	11.0	7.6	3.3	20.1	80	24.5	0.6	0.3	11.3	70	70	76	36	
El Salvador	46	13	6	0.13	55			0.02	10.7	6.1	4.1	20.9	76	41.9	2.0	0.2	7.9	72	56	78	
Grenada	25	16	11		3			0.12	23.3	0.7	9.0	8.0	70	45.3	0.3	0.1	72	79		32	
Guatemala	95	24	11	0.05	27	0.1	0.03	16.5	5.9	1.6	22.9	57	73.8	6.3	1.6	10.9	83	79	86	20	
Guyana	169	28	17	0.43	79	28.2	0.40	29.2	40.3	5.3	22.3	74	107.8	3.6	0.1	12.1	99	97	89	25	
Haiti	480	60	25	0.45	168	3.7	1.04	31.3	9.6	3.0	18.8	47	184.3	23.8	1.4	7.7	51	41	51		
Honduras	65	16	9	0.07	30	0.1	0.03	18.7	2.1	3.9	16.1	63	60.7	3.6	0.5		80	79	80	47	
Jamaica	80	13	9	0.53	2			0.55	16.9	2.4	4.2	15.1	70	25.4	0.6	0.1	9.4	96	89		3
Mexico	33	14	8	0.16	24	0.1	0.03	15.6	5.3	5.0	12.8	74	36.7	1.1	0.4	13.1	74	78	75	5	
Nicaragua	98	16	9	0.11	42	11.5	0.09	15.3	4.4	5.1	16.9	70	55.7	2.2	0.3		92	98	92		
Panama	52	14	8	0.44	32	0.6	0.07	10.7	2.9	7.8	13.9	77	25.8	1.9	0.1	5.0	74	74	74	44	
Paraguay	84	19	10	0.13	48			0.42	16.0	6.0	7.0	22.0	61	57.5	1.5	0.2	11.5	79	72	82	37
Peru	88	13	7	0.13	116	2.3	0.06	9.7	2.8	6.8	13.6	78	63.9	1.3	0.4	8.1	72	52	74	16	
Saint Kitts and Nevis		15	10		4			0.06		6.3		72					99	99			
Saint Lucia	117	24	13		2			0.22	17.7	7.9	9.6	29.8	72	30.0	0.6	0.1		86	71		74
Saint Vincent and the Grenadines	68	14	9		7			0.15	20.7	1.0	7.2	7.4	73	47.6	1.3	<0.1		97	99		12
Suriname	120	18	11	0.30	29	1.7	0.07	22.7	25.4	7.4	15.3	67	56.7	2.0	0.3		51	50		4	
Trinidad and Tobago	67	17	11	0.07	18			0.19	17.1	8.7	6.5	9.3	73	38.6	0.1	0.1					
United States of America	19	6	3		2			0.01	13.6	16.1	10.0	12.7	83	13.3	0.2	0.5	23.0	93	95	82	49
Uruguay	17	6	4	0.19	32			0.15	16.5	21.2	6.9	14.8	79	17.5	0.4	0.5	21.5	92	91	94	25
Venezuela (Bolivarian Republic of)	125	24	15	0.08	47	16.3	0.15	14.8	2.1	3.6	39.0	70	34.6	1.4	0.2		54	28	0		

^a Comparable estimates refer to country values of the same reference year, which may be adjusted or modelled to allow comparisons between countries and are produced for countries with underlying primary data and, in some cases, for those without. Refer to Annex 2 for the full set of SDG 3 indicators. Shading from blue to orange represents low to high for mortality, incidence and prevalence indicators; and from high to low for immunization coverage and service index indicators. Each indicator is graphed on an individual scale.

^b per 100 000 live births

^e per 100 000 population

h between ages 30-69 (%)

^k age-standardized, among adults 18+ (%) ⁿ among 15 year-old girls (%)

c per 1000 live

f per 1000 population at risk

litre

¹ among 1-year-olds (%)

^d per 1000 uninfected population

9 among children under 5 years (%)

j age-standardized, per 100 000 population

^m by the nationally recommended age (%)

•Eastern Mediterranean Region

Building capacity to calculate excess mortality during the COVID-19 pandemic

All-cause mortality registration systems are important to determine the actual toll a pandemic such as COVID-19 is taking on individuals and communities. WHO has been working with countries of the Eastern Mediterranean Region since 2012 to improve their mortality registration systems. A total of 16 countries in the region currently report annual mortality data by cause of death to WHO. However, the COVID-19 pandemic has highlighted the urgent need for more frequent data to monitor sudden changes in mortality. To that end, WHO has strengthened country capacities to report weekly mortality data by all causes (natural and non-natural) and COVID-19 deaths on an online platform.

Focal persons from information health units and mortality and cause-of-death registration programmes were familiarized with the online platform through regular virtual meetings. Technical support to countries focused on the process of compiling, reviewing and validating total numbers of deaths and COVID-19 deaths in order to generate reliable data for calculating age- and sex-specific mortality indicators. The validation process was two-fold: continuous communication with death registration programme focal persons at national level, and regular WHO Regional Office feedback to maintain instant reporting of quality accepted and complete data. This approach made it possible to set weekly benchmarks and assess excess mortality in 2020 compared to previous years (8), with countries able to use the data for planning and decision-making.

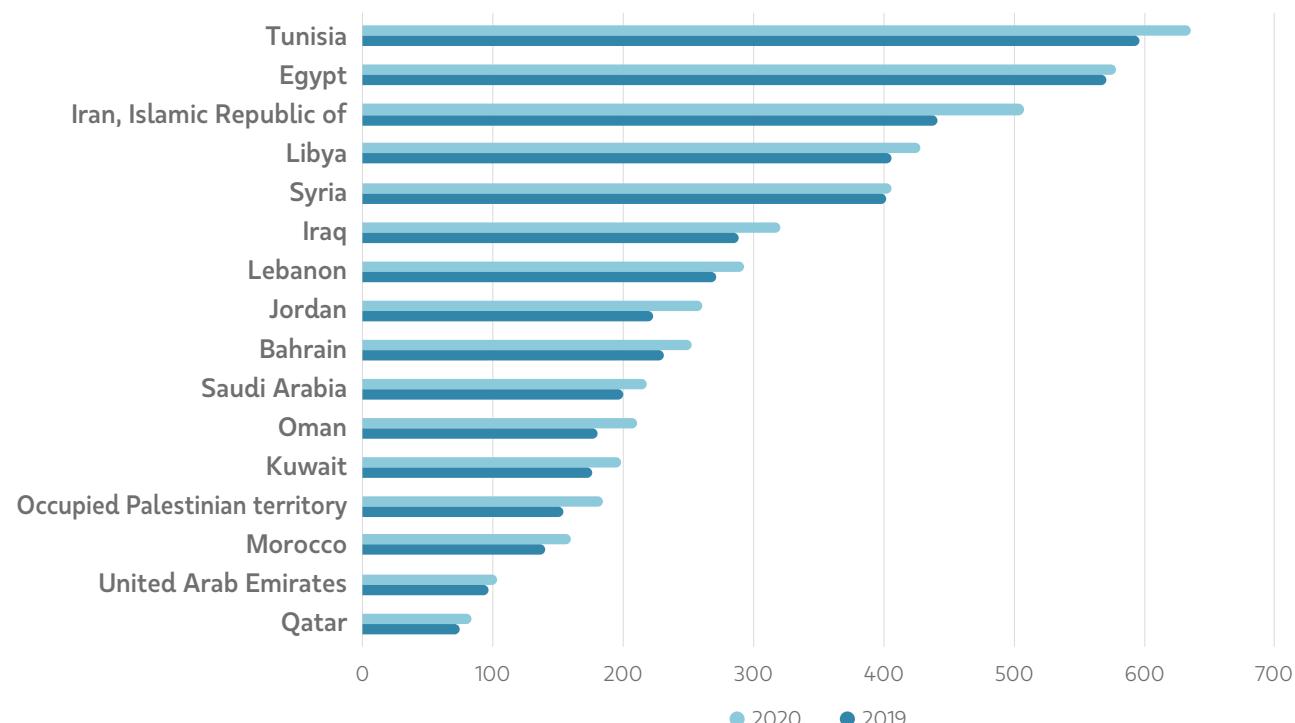
Several meetings with mortality data focal points were held to introduce innovations related to the implementation of mortality surveillance systems and collection of data by age and sex. This led

to the establishment of rapid mortality surveillance in Jordan and the Syrian Arab Republic. Capacity-building workshops were also organized to train country teams responsible for health information systems on the use of excess mortality calculator and interpretation of results (9).

Countries with strong digital integrated health information platforms (for example, Oman) were able to develop weekly mortality curves by age and sex, as well as identify excess mortality in 2020. Lebanon also made significant improvements in its death registration system. Despite its limited infrastructure, Lebanon used available mortality data by all causes of death to validate COVID-19 deaths and assess the true impact of the COVID-19 pandemic. Iraq and Tunisia also reported on monthly total deaths and were able to determine excess deaths in 2020 in comparison to 2019.

Seven countries in the Eastern Mediterranean Region have reported total deaths during the pandemic period, data that have contributed to estimations of COVID-19 excess mortality at the regional and global levels. Countries with a high coverage of death registration and efficient registration systems showed little difference between estimated and reported total deaths in 2020 (Fig. A1.4). Reporting on mortality data by causes of death using the standardized reporting of the International Classification of Diseases (10th revision) was key to enable countries to identify the impact of COVID-19 to cause deaths within their top 10 leading causes of death. Mortality data for Lebanon, Oman, Qatar, Tunisia and the United Arab Emirates were publicly available by causes of death, which was helpful for identifying the top 10 leading causes of death in 2020, including COVID-19 direct deaths, and for estimating excess deaths associated with COVID-19 mortality during that year.

Fig. A1.4. Reported crude deaths rates (per 100 000 population), adjusted for COVID-19 deaths, Eastern Mediterranean Region, 2019 and 2020



Summary of SDG 3 indicators for which country-level values are reported as comparable estimates^a

	3.1.1	3.2.1	3.2.2	3.3.1	3.3.2	3.3.3	3.3.4	3.4.1	3.4.2	3.5.2	3.6.1	3.8.1	3.9.1	3.9.2	3.9.3	3.a.1	3.b.1	3.b.1	3.b.1
Member State	2017	2020	2020	2020	2020	2020	2020	2019	2019	2019	2019	2019	2019	2016	2016	2019	2020	2020	2020
Afghanistan	638	58	35	0.04	193	8.4	0.39	35.3	4.1	<0.1	15.9	37	211.1	13.9	1.0	23.3	70	43	68
Bahrain	14	7	3		13		0.03	16.1	8.9	1.1	5.2	71	40.1	<0.1	0.3	14.9	98	99	99
Djibouti	248	56	30	0.13	224	97.6	0.26	22.0	9.6	0.4	23.5	48	159.0	31.3	2.5		70	60	70
Egypt	37	19	10	0.03	11		0.20	28.0	3.0	0.1	10.1	70	108.9	2.0	0.2	24.3	94	94	
Iran (Islamic Republic of)	16	13	8	0.03	13	0.0	0.05	14.8	5.2	1.0	21.5	77	50.9	1.0	1.0	13.6	99	98	
Iraq	79	25	14		27		0.29	23.5	3.6	0.4	27.3	55	75.1	3.0	0.2	18.5	74	93	0
Jordan	46	15	9	0.01	5		0.56	15.3	1.6	0.5	17.0	60	51.2	0.6	0.5	34.8	77	90	
Kuwait	12	9	5		19		0.03	11.9	2.9	0.0	15.4	70	103.8	<0.1	0.4	17.9			
Lebanon	29	7	4	0.03	13		0.07	19.9	2.8	1.5	16.4	72	51.4	0.8	0.6	38.2	71	64	74
Libya	72	11	6	0.05	59		0.43	18.6	4.5	<0.1	21.3	60	71.9	0.6	0.8		73	72	73
Morocco	70	19	12	0.02	98		0.16	24.1	7.2	0.5	17.0	73	49.1	1.9	0.7	14.5			
Oman	19	11	5		7		0.13	21.5	4.9	0.9	10.6	69	53.9	<0.1	0.9	8.0	99	99	99
Pakistan	140	65	40	0.12	259	2.5	0.91	29.4	8.9	0.3	13.0	45	173.6	19.6	1.6	20.2	77	74	80
Qatar	9	6	4	0.07	34		0.05	10.7	5.8	1.5	7.3	74	47.4	<0.1	0.3	11.8	82	90	70
Saudi Arabia	17	7	3	0.05	8	<0.1	0.00	20.9	6.0	0.0	35.9	73	83.7	0.1	0.8	14.3	95	96	95
Somalia	829	115	37	0.02	259	52.2	6.32	30.4	7.9	0.0	27.4	27	212.8	86.6	4.9		42		
Sudan	295	57	27	0.09	63	73.4	1.66	22.8	3.8		26.8	44	184.9	17.3	1.7		90	68	90
Syrian Arab Republic	31	22	11	0.01	19		0.69	22.1	2.0	0.2	14.9	56	75.2	3.7	0.6	49	53		
Tunisia	43	17	12	0.03	36		0.12	15.7	3.3	2.0	16.5	70	56.1	1.0	0.7	24.6	92	92	82
United Arab Emirates	3	7	4	0.13	1		0.02	18.5	6.4	3.8	8.9	78	54.7	<0.1	0.4		90	92	84
Yemen	164	60	28	0.04	49	40.6	1.76	27.6	5.8	<0.1	29.4	44	194.2	10.2	1.8	20.3	72	46	72

^a Comparable estimates refer to country values of the same reference year, which may be adjusted or modelled to allow comparisons between countries and are produced for countries with underlying primary data and, in some cases, for those without. Refer to Annex 2 for the full set of SDG 3 indicators. Shading from blue to orange represents low to high for mortality, incidence and prevalence indicators; and from high to low for immunization coverage and service index indicators. Each indicator is graphed on an individual scale.

^b per 100 000 live births

^e per 100 000 population

^h between ages 30-69 (%)

^k age-standardized, among adults 18+ (%)

ⁿ among 15 year-old girls (%)

^c per 1000 live births

^f per 1000 population at risk

ⁱ litres of pure alcohol per capita ≥15 years

^l among 1-year-olds (%)

^d per 1000 uninfected population

^g among children under 5 years (%)

^j age-standardized, per 100 000 population

^m by the nationally recommended age (%)

•European Region

Disruptions of essential health services

COVID-19 has added pressure to all three pillars of UHC: access to health services, quality of care, and financial protection.

In 2020, the results of the first WHO pulse survey revealed that over 40% of essential health services in the WHO European region had been at least partially disrupted (4), with the disruptions occurring across all aspects of health systems. Results from the second WHO pulse survey showed that substantial disruptions persisted in 2021, with around 29% of services at least partially disrupted in the first three months of 2021 (5).¹ During the rest of 2021, the extent and magnitude of those disruptions decreased compared to 2020 (6).

The main causes of the disruptions have also shifted. On the supply side, shortages of personal protective equipment seemed to become less of a challenge, while the cancellation of elective care and shortages of staff and inpatient beds continued to be problems. On the demand side, the effects of the disruptions were aggravated by people's reluctance to seek health care. This was attributed partly to governments' appeals to the public to avoid using health facilities unless absolutely necessary, people's assumptions that care would not be available, and their concerns about possibly acquiring or transmitting coronavirus infection at health facilities. Travel restrictions and financial barriers contributed to the decline in the use of health care services.

Existing inequalities have also shaped the extent to which people have been affected by health service disruptions during COVID-19. Older people, those living in deprived areas, people with disabilities or with chronic conditions, and minority populations (such as refugees and migrants and lesbian, gay, bisexual, transgender/transsexual, intersex

and queer/questioning communities) have experienced poorer access to health care compared to the rest of the population.

During the pandemic, countries in the WHO European Region have purposefully sought to adapt health insurance coverage policies to minimize financial barriers blocking access to COVID-19 treatment. Several Member States have exempted COVID19-related services from co-payments and a few have extended these exemptions to other health services, such as teleconsultations. In addition, some Member States have extended their health insurance coverage policies to irregular migrants and other people who are usually excluded from coverage.

At the same time, the pandemic may have increased unmet health care needs and worsened financial hardship in several ways. For instance, the disruption of health services may have led to increased out-of-pocket health spending among people seeking quicker access to treatment and care. The economic shock of the pandemic has also reduced household incomes, especially for poorer households. Those economic shocks are also reducing government revenue, while increasing the need for publicly financed health care (10).

Fallout from the COVID-19 pandemic has substantially hampered supply and demand for essential health services. The disruptions have aggravated existing inequalities in vulnerable and minority groups' access to health services. While several countries in the WHO European Region acted rapidly to reduce financial barriers to COVID-19 treatment, the increasing demand for quicker access to care may have led to increased out-of-pocket payments for health and thus may have aggravated financial hardship.



¹ Responses were obtained from 23 of 53 WHO European Region Member States.

Summary of SDG 3 indicators for which country-level values are reported as comparable estimates^a

	3.1.1	3.2.1	3.2.2	3.3.1	3.3.2	3.3.4	3.4.1	3.4.2	3.5.2	3.6.1	3.8.1	3.9.1	3.9.2	3.9.3	3.a.1	3.b.1	3.b.1	3.b.1
	Maternal mortality ratio ^b	Under-five mortality rate ^c	Neonatal mortality rate ^c	New HIV infections ^d	Tuberculosis incidence ^e	Hepatitis B prevalence ^f	Probability of dying from the four major NCDs ^g	Suicide mortality rate ^h	Alcohol consumption ⁱ	Road traffic mortality rate ^j	UHC service coverage index ^k	Air pollution mortality rate ^l	WASH mortality rate ^m	Unintentional poisoning mortality rate ⁿ	Tobacco use prevalence ^o	DTP3 immunization ^p	MCV2 immunization ^q	PCV3 immunization ^q
Member State	2017	2020	2020	2020	2020	2020	2019	2019	2019	2019	2019	2016	2019	2020	2020	2020	2020	2020
Albania	15	10	8	0.03	15	0.29	11.4	4.3	6.8	11.7	62	68.0	0.2	0.3	22.4	98	94	92
Andorra	3	3	1	0.02	3	0.06	19.9	3.3	4.7	20.0	69	54.8	0.2	0.7	31.8	99	93	96
Armenia	26	11	6	0.11	23	0.06	10.4	14.6	11.9	4.9	82	15.3	0.1	0.2	25.5	91	94	92
Austria	5	4	2	0.04	5	0.16	10.4	14.6	11.9	4.9	82	15.3	0.1	0.2	26.4	85	84	8
Azerbaijan	26	19	10	0.04	58	0.06	27.2	4.1	1.0	6.7	65	63.9	1.1	0.9	24.0	79	79	79
Belarus	2	3	1	0.13	26	0.29	23.8	21.2	11.0	7.6	74	60.7	0.1	0.3	30.5	97	98	
Belgium	5	4	2	0.09	8	0.09	10.6	18.3	10.8	5.8	85	15.7	0.3	0.4	23.4	97	85	94
Bosnia and Herzegovina	10	6	4	0.02	26	0.63	18.7	10.9	7.8	13.5	65	79.8	0.1	0.4	35.0			
Bulgaria	10	6	3	0.09	19	0.09	24.2	9.7	12.5	9.2	70	61.8	0.1	0.5	39.0	91	84	85
Croatia	8	5	3	0.02	7	0.12	16.1	16.4	8.7	7.9	73	35.5	0.1	0.4	36.9	94	91	
Cyprus	6	3	2	0.34	8	0.34	8.2	3.6	10.8	5.8	79	20.1	0.3	0.3	35.1			
Czechia	3	3	2	0.13	4	0.13	14.3	12.2	14.3	5.9	78	29.6	0.2	0.4	30.7	97	90	
Denmark	4	4	3	0.02	5	0.68	10.8	10.7	10.1	3.7	85	13.2	0.3	0.1	17.5	97	90	96
Estonia	9	2	1	0.16	10	0.29	14.9	14.9	10.8	4.5	78	25.0	<0.1	0.6	29.7	91	87	55
Finland	3	2	1	0.81	4	0.81	9.6	15.3	10.7	3.9	83	7.2	<0.1	0.4	21.6	91	93	89
France	8	4	3	0.15	8	10.6	13.8	12.2	8.4	9.7	0.3	0.3	33.4			33		
Georgia	25	9	5	0.17	70	0.06	24.9	9.2	9.5	12.4	65	101.8	0.2	0.6	31.7	88	77	82
Germany	7	4	2	0.03	6	0.21	12.1	12.3	12.8	3.8	86	16.0	0.6	0.3	22.0	93	93	83
Greece	3	4	2	0.14	12.5	5.1	10.5	8.3	78	27.6	<0.1	0.2	33.5	99	83	96		
Hungary	12	4	2	0.90	5	0.90	22.1	16.6	11.1	7.7	73	38.8	0.2	0.5	31.8	99	99	99
Iceland	4	2	1	0.04	3	0.15	8.7	11.9	9.2	2.0	87	8.7	0.1	1.0	12.0	93	93	93
Ireland	5	3	2	0.08	5	0.04	9.7	9.6	12.7	3.1	83	11.9	0.1	0.3	20.8	94		86
Israel	3	4	2	0.04	2	0.05	8.8	5.3	4.4	3.9	84	15.4	0.2	<0.1	21.2	98	96	94
Italy	2	3	2	0.04	7	0.33	9.0	6.7	8.0	5.3	83	15.0	0.1	0.3	23.1	94	86	91
Kazakhstan	10	10	5	0.19	69	0.15	22.4	17.6	5.0	12.7	76	62.7	0.4	1.9	23.2	88	91	89
Kyrgyzstan	60	18	12	0.11	105	0.15	20.3	7.4	4.9	12.7	70	110.7	0.8	0.9	25.4	87	93	90
Latvia	19	4	2	0.27	23	0.27	21.6	20.1	13.2	8.1	72	41.3	<0.1	1.2	37.0	99	94	91
Lithuania	8	3	2	0.05	29	0.05	19.3	26.1	12.8	8.1	70	34.0	0.1	1.7	32.0	91	91	83
Luxembourg	5	3	2	0.06	6	0.06	9.7	11.3	12.4	4.1	86	11.6	<0.1	0.2	21.1	99	90	96
Malta	6	6	4	0.20	36	0.20	10.5	6.1	8.3	4.1	81	20.2	<0.1	0.1	24.0	98	99	85
Monaco	3	2	0	0.15	0	0.15	0	16.2	8.5									
Montenegro	6	2	1	0.04	16	0.67	22.3	21.0	12.2	7.6	67	78.6	<0.1	0.6	31.4	84	76	
Netherlands	5	4	3	0.02	4	0.08	10.3	11.8	9.7	4.0	86	13.7	0.2	0.1	22.2	94	89	93
North Macedonia	7	6	4	0.08	12	0.08	22.7	9.4	6.4	5.1	68	82.2	0.1	0.5	84	68	30	30
Norway	2	2	1	0.01	3	0.02	8.7	11.8	7.1	2.1	86	8.6	0.2	0.3	16.2	97	95	96
Poland	2	4	3	0.01	10	0.01	17.0	11.3	11.9	9.4	74	37.9	0.1	0.5	24.0	90	95	62
Portugal	8	3	2	0.07	16	0.02	11.0	11.5	12.1	8.2	84	9.8	0.2	0.3	25.4	99	95	98
Republic of Moldova	19	14	11	0.24	74	0.20	24.1	14.7	12.9	7.3	67	78.3	0.1	0.5	29.0	86	93	72
Romania	19	7	3	0.04	64	0.29	21.0	9.7	12.3	10.3	71	59.3	0.4	1.9	28.0	87	75	85
Russian Federation	17	5	2	0.55	46	0.55	24.2	25.1	10.5	12.0	75	49.4	0.1	0.8	26.8	97	96	87
San Marino	2	2	1	0	0.13	0	0.13	0	8.9	7.5	71	62.5	0.7	0.3	39.8	92	84	87
Serbia	12	6	4	0.02	13	0.04	22.0	11.4	8.9	7.5	71	62.5	0.7	0.3				
Slovakia	5	6	3	0.31	3	0.31	15.5	12.1	11.1	6.1	77	33.5	<0.1	0.5	31.5	97	98	96
Slovenia	7	2	1	0.01	4	1.12	11.4	19.8	12.1	5.1	80	22.6	<0.1	0.2	22.0	95	91	70
Spain	4	3	2	0.08	7	0.13	9.6	7.7	12.7	3.9	86	9.9	0.2	0.4	27.7	98	94	88
Sweden	4	3	1	0.13	4	0.13	8.4	14.7	9.0	3.1	87	7.2	0.2	0.2	24.0	97	95	82
Switzerland	5	4	3	0.16	5	0.16	7.9	14.5	11.2	2.2	87	10.1	0.1	0.2	25.5	96	93	86
Tajikistan	17	32	14	0.09	84	0.18	28.3	4.3	0.9	15.7	66	129.3	2.7	0.4		97	97	
Turkey	17	9	5	0.11	15	0.11	15.6	2.4	1.8	6.7	79	46.6	0.3	0.4	30.7	98	93	95
Turkmenistan	7	42	24	0.07	47	0.07	27.7	5.7	3.1	13.5	73	79.3	4.0	0.6	5.5	98	99	23
Ukraine	19	8	5	0.21	73	0.25	25.5	21.6	8.3	10.2	73	70.7	0.3	0.5	2.5	81	82	
United Kingdom of Gre..	7	4	3	0.41	7	0.41	10.3	7.9	11.4	3.2	88	13.8	0.2	0.3	15.4	93	87	64
Uzbekistan	29	14	8	0.08	66	0.16	25.3	8.0	2.6	11.7	71	81.1	0.4	0.8	17.6	95	99	100

^a Comparable estimates refer to country values of the same reference year, which may be adjusted or modelled to allow comparisons between countries and are produced for countries with underlying primary data and, in some cases, for those without. Malaria incidence is not included in this graph because all countries in this region are certified malaria free, or considered to have eliminated malaria. Refer to Annex 2 for the full set of SDG 3 indicators. Shading from blue to orange represents low to high for mortality, incidence and prevalence indicators; and from high to low for immunization coverage and service index indicators. Each indicator is graphed on an individual scale.

^b per 100 000 live births

^e per 100 000 population

^h litres of pure alcohol per capita ≥15 years

^k among 1-year-olds (%)

^c per 1000 live births

^f among children under 5 years (%)

^l age-standardized, per 100 000 population

^l by the nationally recommended age (%)

^d per 1000 uninfected population

^g between ages 30-69 (%)

^j age-standardized, among adults 18+ (%)

^m among 15 year-old girls (%)

South-East Asia Region

Data-informed decision-making is vital for pandemic control and essential health services

As the COVID-19 pandemic took hold in 2020, it was quickly apparent that essential services for sexual, reproductive, maternal, newborn, child and adolescent health were being disrupted in the WHO South-East Asia Region.

Several mapping exercises were conducted to study the extent of disruption and modelling exercises were performed to assess the likely effects. Modelling was done in collaboration with UNICEF's Regional Office and the SickKids' Center for Global Child Health in Bangladesh, India, Nepal and Sri Lanka, while studies on the impact on sexual, reproductive, maternal, newborn, child and adolescent health services were carried out through national institutions. These exercises provided some information for decision-making early in the pandemic, but it also became clear that regular monitoring information was needed to respond effectively and to maintain essential health services (7).

In five countries (Bangladesh, India, Myanmar, Nepal and Timor-Leste), a two-phased, country-focused mitigation project was initiated jointly by WHO Headquarters and the Regional Office. The aim was to support country efforts to prevent additional increases in malnutrition, mental and physical ill health, and mortality among pregnant women, mothers, children, adolescents and older people by maintaining service delivery at levels as close as possible to those prior to the pandemic. The main data sources for the project were routine sexual, reproductive, maternal, newborn, child and adolescent health management information, and maternal death surveillance and response surveillance data.

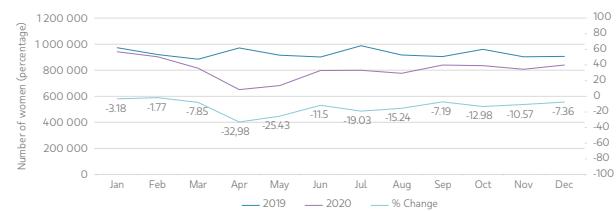
Based on the global list of indicators for monitoring the effects of COVID-19 on essential health services (12), the WHO Regional Office, in consultation with the mitigation project countries, selected 34 indicators for monitoring the delivery of sexual, reproductive, maternal, newborn, child and adolescent health services using data from health management information systems which countries customized and adapted. The most commonly reported indicators included facility births, antenatal care provision, DPT3 vaccine, consultations for acute respiratory infections and diarrhoea in children, caesarean sections and contraception distribution. The least-reported indicators were related to newborn health (postnatal care and early initiation of breastfeeding), child malnutrition, post-abortion complications, and adolescent sexual and reproductive health. Data were used for policy dialogues and to select mitigation options.

Figs. A1.5–7 illustrate how routine health management information can help in analysing and prioritizing actions for overcoming disruptions in health services. The figures show the declining use of services during lockdown periods and gradual improvement due to several mitigation strategies employed by countries to maintain essential services. These responses included tele-counselling, the use of community-based health care workers and continued publicity about the safety of attending health facilities.

The use of routine, timely, high-quality and reliable health management information data must be further developed and improved. For example, common issues encountered during the five-country project included a lack of subnational data for vulnerable populations, a lack of private sector reporting, and incomplete data sharing. Countries need to focus more on improving the quality and completeness of health management indicator data as part of their regular monitoring and use of data for decision-making. Continuous monitoring and appropriate actions are

needed to track and assess progress towards achieving the SDGs, including during crises.

Fig. A1.5. Number of women who received injectables in Bangladesh and percentage change, 2019–2020



Source: Analysis from the Management Information System of the Directorate General of Family Planning, Bangladesh, 2019–2020.

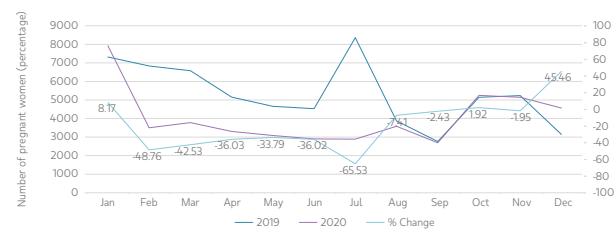
Fig. A1.6. Number of newborns who received a prenatal care first visit within 24 hours of delivery in Nepal and percentage change, 2019–2020



Note: The mid-year increases in the number of postnatal care visits of newborns noted in both 2019 and 2020 were related to a streamlining of data at the end of the fiscal year.

Source: Analysis from the Health Management Information System of the Ministry of Health and Population, Nepal, 2019–2020.

Fig. A1.7. Number of women who visited antenatal clinics (total) in Timor-Leste and percentage change, 2019–2020



Note: The sudden increase in antenatal clinic visits in 2020 was due to the relaxation of social restrictions and probably also reflected reporting issues.

Source: Based on an analysis of the Health Management Information System of the Ministry of Health, Timor Leste, 2019–2020.

Summary of SDG 3 indicators for which country-level values are reported as comparable estimates^a

	3.1.1	3.2.1	3.2.2	3.3.1	3.3.2	3.3.3	3.3.4	3.4.1	3.4.2	3.5.2	3.6.1	3.8.1	3.9.1	3.9.2	3.9.3	3.a.1	3.b.1	3.b.1	3.b.1	
	Maternal mortality ratio ^b	Under five mortality rate ^c	Neonatal mortality rate ^c	New HIV infections ^d	Tuberculosis incidence ^e	Malaria incidence ^f	Hepatitis B prevalence ^g	Probability of dying from the four major NCDs ^h	Suicide mortality rate ⁱ	Alcohol consumption ^j	Road traffic mortality rate ^k	UHC service coverage index ^l	Air pollution mortality rate ^m	WASH mortality rate ⁿ	Unintentional poisoning mortality rate ^o	Tobacco use prevalence ^p	DTP3 immunization ^q	MCV2 immunization ^r	PCV3 immunization ^s	HPV vaccine ^t
Member State	2017	2020	2020	2020	2020	2020	2020	2019	2019	2019	2019	2019	2016	2016	2019	2020	2020	2020	2020	
Bangladesh	173	29	17		218	0.4	0.51	18.9	3.7	0.0	15.3	51	149.0	11.9	0.3	34.7	98	93	99	
Bhutan	183	28	15	0.09	165	<0.1	0.14	18.5	4.6	0.2	16.2	62	124.5	3.9	0.2	95	92	90	81	
Democratic People's Republic of Korea	89	17	9		523	0.2	0.20	23.9	9.4	4.2	24.2	68	207.2	1.4	1.4	17.4	97	99		
India	145	33	20	0.04	188	3.2	0.16	21.9	12.7	5.6	15.6	61	184.3	18.6	0.3	27.2	85	81	21	
Indonesia	177	23	12	0.10	301	2.9	1.30	24.8	2.4	0.2	11.3	59	112.4	7.1	0.3	37.6	77	49	4	7
Maldives	53	6	4		37		0.21	11.6	2.7	2.8	1.6	69	25.6	0.3	<0.1	25.2	99	96	68	
Myanmar	250	44	22		308	2.5	1.11	24.9	2.9	2.1	20.4	61	156.4	12.6	1.3	44.1	84	90	86	
Nepal	186	28	17	0.03	235	<0.1	0.16	21.5	9.0	0.6	16.3	53	193.8	19.8	1.7	30.4	84	74	80	
Sri Lanka	36	7	4	0.01	64		0.34	13.2	14.0	2.9	19.7	67	79.8	1.2	0.4	22.0	96	96	51	
Thailand	37	9	5	0.10	150	0.2	0.27	13.7	8.8	8.5	32.2	83	61.5	3.5	0.2	22.1	97	87		
Timor-Leste	142	42	19	0.10	508	<0.1	0.72	19.9	3.7	0.5	11.9	53	139.8	9.9	0.4	39.2	86	78		

^a Comparable estimates refer to country values of the same reference year, which may be adjusted or modelled to allow comparisons between countries and are produced for countries with underlying primary data and, in some cases, for those without. Refer to Annex 2 for the full set of SDG 3 indicators. Shading from blue to orange represents low to high for mortality, incidence and prevalence indicators; and from high to low for immunization coverage and service index indicators. Each indicator is graphed on an individual scale.

^b per 100 000 live births

^c per 100 000 population

^d between ages 30-69 (%)

^e age-standardized, among adults 18+ (%)

^f among 15 year-old girls (%)

^g per 1000 live births

^h per 1000 population at risk

ⁱ litres of pure alcohol per capita ≥15 years

^j age-standardized, among 1-year-olds (%)

^k per 1000 uninfected population

^l among children under 5 years (%)

^m age-standardized, per 100 000 population

ⁿ by the nationally recommended age (%)

•Western Pacific Region

Using new analytic approaches and integrated data during COVID-19

The COVID-19 pandemic has accelerated the arrival of many of the challenges set out in the WHO Western Pacific Region's *For the Future* vision (13). It has also reaffirmed the fact that health, the economy and the broader well-being of societies are inextricably linked.

Among the important responses to the pandemic is the development and use of new data analysis approaches to measure the broader impact of COVID-19 on populations through collaborations between health and non-health sectors.

The WHO Western Pacific Regional Office launched the Western Pacific Health Data Platform in the first quarter of 2022 to meet the demand for a "one-stop" repository of health-related data that can guide systematic decision-making (Fig. A1.10). The "Data Explorer" is a key feature of the new platform. It is a unique data analysis tool that allows users to search, visualize and download indicators from multiple sources (including the WHO Global Health Observatory and programme databases and the World Bank Open Data Portal) (Fig. A1.11). The platform also hosts data applications, country profiles and dashboards on a wide range of health topics.

Given the interplay between health and other aspects of social and economic development, the WHO Western Pacific Regional Office is continually promoting multisectoral collaboration around innovative approaches for measuring results and impact. These approaches are also valuable for identifying difficulties and devising solutions that are not necessarily revealed through standard processes.

In Cambodia, for example, WHO is supporting the monitoring of progress towards UHC at national and subnational levels jointly by the National Institute of Public Health, the Ministries of Health, Economy and Finance, and the General Secretariat of the National Social Protection Council. In the Philippines, WHO is supporting a comprehensive assessment of the Philippine Civil Registration and Vital Statistics System, in conjunction with the Department of Health and Philippine Statistics Authority.

Public health is a core element of sustainable development. It contributes to socioeconomic development, but it is also affected by socioeconomic changes. Sharing and using relevant data across sectors can help track and evaluate these contributions and countries' progress towards the SDGs and national targets.

Fig. A1.8. Western Pacific Health Data Platform (home page)



Source: (<https://data.wpro.who.int/>)

Fig. A1.9. Western Pacific Health Data Platform (Data Explorer)



Source: (<https://data.wpro.who.int/>, accessed 7 May, 2022).

Summary of SDG 3 indicators for which country-level values are reported as comparable estimates^a

	3.1.1	3.2.1	3.2.2	3.3.1	3.3.2	3.3.3	3.3.4	3.4.1	3.4.2	3.5.2	3.6.1	3.8.1	3.9.1	3.9.2	3.9.3	3.a.1	3.b.1	3.b.1	3.b.1	
	Maternal mortality ratio ^b	Under five mortality rate ^c	Neonatal mortality rate ^c	New HIV infections ^d	Tuberculosis incidence ^e	Malaria incidence ^f	Hepatitis B prevalence ^g	Probability of dying from the four major NCDs ^h	Suicide mortality rate ⁱ	Alcohol consumption ^j	Road traffic mortality rate ^k	UHC service coverage index ^l	Air pollution mortality rate ^m	WASH mortality rate ⁿ	Unintentional poisoning mortality rate ^o	Tobacco use prevalence ^p	DTP3 immunization ^q	MCV2 immunization ^r	PCV3 immunization ^s	HPV vaccine ^t
Member State	2017	2020	2020	2020	2020	2020	2020	2019	2019	2019	2019	2019	2016	2016	2019	2020	2020	2020	2020	
Australia	6	4	2	0.03	7		0.13	8.6	12.5	10.4	4.9	87	8.4	0.1	0.1	13.6	95	94	97	66
Brunei Darussalam	31	12	6		83		0.10	18.5	2.7	0.5	7.5	77	13.3	<0.1	<0.1	16.2	99	97		86
Cambodia	160	26	13	0.07	274	5.8	0.19	22.5	4.9	7.8	19.6	61	149.8	6.5	0.5	21.1	92	80	90	
China	29	7	3		59		0.22	15.9	8.1	6.0	17.4	82	112.7	0.6	1.8	25.6	99	99		
Cook Islands		7	4		13		0.10			10.9		54				24.0				
Fiji	34	27	12	0.16	66		0.13	37.7	9.0	3.7	13.5	61	99.0	2.9	0.3	23.1	99	94	99	89
Japan	5	2	1	0.01	12		0.96	8.3	15.3	10.1	3.6	85	11.9	0.2	0.2	20.1	96	95	95	1
Kiribati	92	50	21		425		1.57	50.8	28.3	2.3	1.9	51	140.2	16.7	2.6	40.6	92	57	91	
Lao People's Democratic Republic	185	44	22	0.13	149	1.5	0.68	26.8	5.4	12.1	17.9	50	188.5	11.3	0.6	31.8	79	47	77	
Malaysia	29	9	5	0.19	92	0.0	0.06	18.4	5.7	0.9	22.5	76	47.4	0.4	0.7	22.5	98	84		84
Marshall Islands		31	14		483		0.35					62				28.5				17
Micronesia (Federated States of)	88	25	13		75		0.40	46.3	28.2	2.5	0.2	48	151.8	3.6	0.9		83	62	79	37
Mongolia	45	15	8	0.01	437		0.47	35.0	17.9	5.9	21.0	63	155.9	1.3	2.8	29.4	96	96	92	
Nauru		28	18		180		0.52			4.2		54				48.5	95	97		
New Zealand	9	5	3	0.02	8		0.77	10.3	11.0	10.7	9.6	86	7.2	0.1	0.2	13.7	92	91	92	67
Niue		25	13		48		0.37			9.9		55								
Palau		17	9		64		0.03					59				17.6	96	83	75	
Papua New Guinea	145	44	21	0.39	441	164.3	1.36	36.0	3.0	2.1	12.6	33	152.0	16.3	1.4	39.3	39	27	39	
Philippines	121	26	13	0.15	539	0.7	0.38	24.5	2.2	7.0	12.0	55	185.2	4.2	0.2	22.9	71	68	66	5
Republic of Korea	11	3	1		49	0.1	0.09	7.3	28.6	8.5	8.6	87	20.5	1.8	0.2	20.8				
Samoa	43	17	7		6		0.34	31.2	12.6	2.8	13.0	53	85.0	1.5	0.4	25.3	79	44		
Singapore	8	2	1	0.01	46		0.13	9.5	11.2	2.0	2.1	86	25.9	0.1	<0.1	16.5				
Solomon Islands	104	19	8		65	167.7	0.87	39.2	14.7	1.7	16.5	50	137.0	6.2	2.3	36.5	94	51	93	22
Tonga	52	11	5		10		0.89	24.8	3.8	0.4	33.0	56	73.3	1.4	1.1	31.0	99	99		
Tuvalu		22	10		296		0.24			1.3		52				35.6	95	85		
Vanuatu	72	25	11		38	3.0	2.25	39.7	18.0	2.1	14.9	52	135.6	10.4	0.7	17.8	78			
Viet Nam	43	21	10	0.06	176	<0.1	0.64	21.2	7.5	7.9	30.6	70	64.5	1.6	0.9	24.8	94	93		

^a Comparable estimates refer to country values of the same reference year, which may be adjusted or modelled to allow comparisons between countries and are produced for countries with underlying primary data and, in some cases, for those without. Refer to Annex 2 for the full set of SDG 3 indicators. Shading from blue to orange represents low to high for mortality, incidence and prevalence indicators; and from high to low for immunization coverage and service index indicators. Each indicator is graphed on an individual scale.

^b per 100 000 live births

^c per 100 000 population

^d per 1000 live births

^e per 1000 population at risk

^f per 1000 uninfected population

^g among children under 5 years (%)

^h between ages 30-69 (%)

ⁱ litres of pure alcohol per capita ≥15 years

^j age-standardized, per 100 000 population

^k age-standardized, among adults 18+ (%)

^l among 1-year-olds (%)

^m by the nationally recommended age (%)

ⁿ among 15 year-old girls (%)

References

1. World Health Statistics 2018: Monitoring health for the SDGs. Geneva: World Health Organization; 2018 (https://www.who.int/gho/publications/world_health_statistics/2018/en/, accessed 20 April 2021)
2. WHO, World Bank. Tracking universal health coverage: 2021 Global Monitoring Report. Conference edition. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/9789240040618>, accessed 6 May 2022).
3. Global monitoring report on financial protection in health 2021. Geneva: World Health Organization; 2021 (<https://www.who.int/publications-detail-redirect/9789240040953>, accessed 5 May 2022).
4. Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/rest/bitstreams/1297631/retrieve>, accessed 6 May 2022).
5. Second round of the national pulse survey on continuity of essential health services during the COVID-19 pandemic, January – March 2020. Geneva: World Health Organization; 2020
6. Third round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic: November–December 2021. Geneva: World Health Organization; 2022 (https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2022_1, accessed 6 May 2022).
7. KaKaramagi HC, Titi-Ofei R, Kipruto HK, Seydi ABW, Droti B, et al. On the resilience of health systems: A methodological exploration across countries in the WHO African Region. PLoS ONE. 2022;17(2): e0261904.
8. World health statistics 2016: monitoring health for the SDGs sustainable development goals. Geneva: World Health Organization; 2016.
9. Estimating excess mortality from COVID-19. Prevent Epidemics. 2022 (<https://preventepidemics.org/covid19/resources/excess-mortality/>, accessed 6 May 2022).
10. The European Health Report 2021: Taking stock of the health-related Sustainable Development Goals in the COVID-19 era with a focus on leaving no one behind. Copenhagen: WHO Regional Office for Europe; 2022 (<https://apps.who.int/iris/bitstream/handle/10665/352137/9789289057547-eng.pdf>, accessed 6 May 2022).
11. Impact of COVID-19 on SRMNCAH services, regional strategies, solutions and innovations: a comprehensive report. New Delhi: World Health Organization; 2020 Regional Office for South-East Asia; 2021 (<https://apps.who.int/iris/handle/10665/338482>, accessed 6 May 2022).
12. Analysing and using routine data to monitor the effects of COVID-19 on essential health services: practical guide for national and subnational decision-makers. Interim guidance. 14 January 2021. Geneva: World Health Organization (https://www.who.int/publications/i/item/who-2019-nCoV-essential-health-services-monitoring-2021_1, accessed 6 May 2022).
13. For the future: towards the healthiest and safest region. A vision for WHO work with Member States and partners in the Western Pacific. Manila: WHO Regional Office for the Western Pacific; 2020 (<https://iris.wpro.who.int/bitstream/handle/10665/14476/WPR-2020-RDO-001-eng.pdf>, accessed 6 May 2022).

Annex 2 - Country, WHO region and global health estimates

Explanatory notes

The statistics shown below represent official WHO statistics for selected health-related SDG indicators and selected Thirteenth General Programme of Work indicators, based on data available in early 2022. In addition, summary measures of health, such as (healthy) life expectancy and total population, are included. These statistics have been compiled primarily from publications and databases produced and maintained by WHO, United Nations groups of which WHO is a member, or other international organizations. In each instance, the source of the data series is provided.

The type of data used for each data series (comparable estimate or primary data) is also provided. Primary data are typically compiled from routine reporting or from publicly available sources such as Demographic and Health Surveys. Statistics are presented as they are reported or with minimal adjustment. Comparable estimates are achieved by adjusting or modelling country data to allow comparisons across countries and over time. Comparable estimates for the same reference years are produced for countries with underlying primary data and, in some cases, also for those without (1). Comparable estimates are subject to considerable uncertainty, especially for countries where the availability and quality of the underlying primary data are limited. Uncertainty intervals and other details on the indicators and statistics presented here can be found at the WHO Global Health Observatory (2).

Although every effort has been made to maximize the comparability of statistics across countries and over time, data series based on primary data may differ in terms of the definitions, data collection methods, population coverage and estimation methods used. For indicators with a reference period expressed as a range, country values refer to the latest available year in the range unless otherwise noted; the accompanying footnotes provide more details. In some cases, in the absence of

a recent set of data for a specific SDG or General Programme of Work indicator, a proxy indicator is presented in this annex; where this is the case, proxy indicators have been clearly indicated as such through accompanying footnotes.

Number rounding in this Annex uses the ISO/IEC/IEEE 60559 standard (3). This standard statistical rounding method uses the 'go to the even digit' approach which minimizes bias. The rounded value is the even integer (or even decimal place) nearest to the number. For example, 23.5 becomes 24, as does 24.5.

Unless otherwise stated, the WHO regional and global aggregates for rates and ratios are presented as weighted averages when relevant, whereas they are the sums for absolute numbers. Aggregates are shown only if data are available for at least 50% of the population (or other denominator) within an indicated group, unless otherwise noted. For indicators with a reference period expressed as a range, aggregates are for the reference period shown in the corresponding table column heading above the WHO regional values. Some WHO regional and global aggregates may include country estimates that are not individually reported.

Changes in the values shown for indicators reported in previous editions of the WHO world health statistics series should not be assumed to accurately reflect underlying trends. This applies to all data types (comparable estimates and primary data) and all reporting levels (country, regional and global). The data presented here may also differ from and should not be regarded as the official national statistics of individual WHO Member States.

The notation “–” indicates that data are not applicable or not available.

Notes

1. For more information, please see: World health statistics 2018: Monitoring health for the SDGs. Geneva: World Health Organization; 2018 (https://www.who.int/gho/publications/world_health_statistics/2018/en/, accessed 6 May 2022).
2. The Global Health Observatory (GHO) is a WHO online portal that provides access to data and analyses for monitoring the global health situation (<https://www.who.int/gho/en/>, accessed 13 May 2022).
3. For more information, please see: <https://www.iso.org> and 'IEEE 754' (https://en.wikipedia.org/wiki/IEEE_754, accessed 13 May 2022).

Table 1. Annex 2-1

Data type										3.1
	Total population ^a (000s)			Life expectancy at birth ^b (years)			Healthy life expectancy at birth ^b (years)			Maternal mortality ratio ^c (per 100 000 live births)
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Comparable estimates
Member State	2020			2019			2019			2017
Afghanistan	19 976	18 952	38 928	63.3	63.2	63.2	54.7	53.2	53.9	638
Albania	1 465	1 413	2 878	76.3	79.9	78.0	68.0	70.3	69.1	15
Algeria	22 154	21 697	43 851	76.2	78.1	77.1	66.7	66.1	66.4	112
Andorra	-	-	77	-	-	-	-	-	-	-
Angola	16 261	16 605	32 866	60.7	65.5	63.1	53.6	56.2	54.8	241
Antigua and Barbuda	47	51	98	74.9	78.0	76.5	66.2	67.7	67.0	42
Argentina	22 049	23 147	45 196	73.5	79.5	76.6	65.4	68.8	67.1	39
Armenia	1 394	1 569	2 963	72.5	79.2	76.0	64.9	69.1	67.1	26
Australia	12 699	12 801	25 500	81.3	84.8	83.0	70.2	71.7	70.9	6
Austria	4 440	4 567	9 006	79.4	83.8	81.6	69.9	71.9	70.9	5
Azerbaijan	5 065	5 075	10 139	68.8	74.1	71.4	62.1	65.2	63.6	26
Bahamas	191	202	393	69.9	76.6	73.2	62.3	66.5	64.4	70
Bahrain	1 100	601	1 702	75.0	77.0	75.8	66.0	65.5	65.9	14
Bangladesh	83 259	81 430	164 689	73.0	75.6	74.3	64.2	64.4	64.3	173
Barbados	139	148	287	74.3	77.7	76.0	66.2	67.7	67.0	27
Belarus	4 399	5 050	9 449	69.7	79.6	74.8	62.3	69.4	66.0	2
Belgium	5 744	5 845	11 590	79.3	83.5	81.4	69.8	71.3	70.6	5
Belize	198	200	398	71.4	77.8	74.4	63.5	67.3	65.3	36
Benin	6 054	6 069	12 123	61.2	65.7	63.4	54.5	56.6	55.5	397
Bhutan	410	362	772	72.0	74.4	73.1	63.2	63.5	63.4	183
Bolivia (Plurinational State of)	5 858	5 815	11 673	71.1	73.1	72.1	63.2	63.3	63.3	155
Bosnia and Herzegovina	1 607	1 674	3 281	74.4	79.1	76.8	65.7	68.7	67.2	10
Botswana	1 139	1 213	2 352	58.9	65.5	62.2	51.9	55.8	53.9	144
Brazil	104 436	108 124	212 559	72.4	79.4	75.9	63.4	67.4	65.4	60
Brunei Darussalam	227	210	437	73.4	75.4	74.3	65.2	66.1	65.6	31
Bulgaria	3 374	3 574	6 948	71.6	78.6	75.1	63.9	68.7	66.3	10
Burkina Faso	10 445	10 459	20 903	60.1	65.2	62.7	53.4	56.3	54.9	320
Burundi	5 900	5 991	11 891	61.5	66.1	63.8	54.0	57.2	55.6	548
Cabo Verde	279	277	556	69.9	77.9	74.0	62.2	67.2	64.8	58
Cambodia	8 162	8 557	16 719	67.2	72.7	70.1	59.8	63.0	61.5	160
Cameroon	13 277	13 269	26 546	60.3	64.5	62.4	53.5	55.6	54.5	529
Canada	18 732	19 010	37 742	80.4	84.1	82.2	70.5	72.0	71.3	10
Central African Republic	2 394	2 436	4 830	50.2	56.3	53.1	44.5	48.4	46.4	829
Chad	8 200	8 226	16 426	58.0	61.3	59.6	51.3	52.8	52.0	1140
Chile	9 426	9 691	19 116	78.1	83.2	80.7	69.0	71.1	70.0	13
China	741 999	705 471	1 447 470	74.7	80.5	77.4	67.2	70.0	68.5	29
Colombia	24 985	25 898	50 883	76.7	81.9	79.3	67.4	70.5	69.0	83
Comoros	439	431	870	65.9	68.9	67.4	58.3	59.6	58.9	273
Congo	2 757	2 761	5 518	63.8	65.6	64.7	56.4	56.1	56.2	378
Cook Islands	-	-	18	-	-	-	-	-	-	-
Costa Rica	2 545	2 549	5 094	78.3	83.4	80.8	68.6	71.3	70.0	27
Côte d'Ivoire	13 300	13 078	26 378	60.5	65.8	62.9	53.4	56.5	54.8	617
Croatia	1 979	2 126	4 105	75.5	81.6	78.6	66.7	70.5	68.6	8
Cuba	5 623	5 703	11 327	75.4	80.3	77.8	66.6	69.2	67.8	36
Cyprus	604	604	1 207	81.1	85.1	83.1	71.8	73.0	72.4	6
Czechia	5 273	5 436	10 709	76.3	81.9	79.1	67.0	70.6	68.8	3
Democratic People's Republic of Korea	12 608	13 170	25 779	69.3	75.7	72.6	63.3	66.6	65.0	89
Democratic Republic of the Congo	44 710	44 851	89 561	60.0	64.8	62.4	52.8	55.4	54.1	473
Denmark	2 879	2 913	5 792	79.6	83.0	81.3	70.7	71.4	71.0	4
Djibouti	519	469	988	64.1	67.8	65.8	57.2	58.9	58.0	248

3.1		3.2		3.3					
Proportion of births attended by skilled health personnel ^d (%)	Under-five mortality rate ^e (per 1000 live births)	Neonatal mortality rate ^e (per 1000 live births)	New HIV infections ^f (per 1000 uninfected population)	Tuberculosis incidence ^g (per 100 000 population)	Malaria incidence ^h (per 1000 population at risk)	Hepatitis B surface antigen (HBsAg) prevalence among children under 5 years ⁱ (%)	Reported number of people requiring interventions against NTDs ^j		
Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data		
2012-2021	2020	2020	2020	2020	2020	2020	2020	Member State	
62	58	35	0.04	193	8.4	0.39	14 367 281	Afghanistan	
100	10	8	0.03	15	-	0.29	6	Albania	
99	23	16	0.04	59	-	0.08	11 599	Algeria	
100 ^{ak}	3	1	-	3	-	0.02	0	Andorra	
50	71	27	0.69	350	251.6	4.57	7 698 802	Angola	
99 ^{ak}	6	3	-	2	-	0.19	1 207	Antigua and Barbuda	
99	9	5	0.13	31	-	0.01	161 306	Argentina	
100 ^{ak}	11	6	0.11	23	-	0.06	70	Armenia	
99 ^{al}	4	2	0.03	7	-	0.13	20 401	Australia	
98 ^{al}	4	2	-	5	-	0.16	22	Austria	
100 ^{ak}	19	10	0.04	58	-	0.06	686 000	Azerbaijan	
99 ^{ak}	12	7	0.28	9	-	0.16	3	Bahamas	
100 ^{al}	7	3	-	13	-	0.03	2	Bahrain	
59 ^{ak}	29	17	-	218	0.4	0.51	56 339 394	Bangladesh	
98 ^{ak}	12	8	-	2	-	0.18	301	Barbados	
100 ^{ak}	3	1	0.13	26	-	0.29	7	Belarus	
-	4	2	-	8	-	0.09	18	Belgium	
95 ^{ak}	12	8	0.53	23	0.0	0.60	2 785	Belize	
78	86	30	0.19	55	388.3	2.87	5 599 018	Benin	
96 ^{ak}	28	15	0.09	165	<0.1	0.14	229 837	Bhutan	
81 ^{ak}	25	13	0.08	105	3.1	0.14	189 597	Bolivia (Plurinational State of)	
100	6	4	-	26	-	0.63	0	Bosnia and Herzegovina	
100 ^{al}	45	22	4.39	236	1.1	0.18	1 461 240	Botswana	
99 ^{al}	15	9	0.23	45	3.9	0.03	9 629 923	Brazil	
100 ^{ak}	12	6	-	83	-	0.10	1	Brunei Darussalam	
100	6	3	-	19	-	0.09	96	Bulgaria	
80	85	26	0.10	46	389.9	1.66	5 815 599	Burkina Faso	
85	54	21	0.15	103	294.9	1.35	3 575 616	Burundi	
97 ^{ak}	14	9	-	39	0.0	0.26	150 015	Cabo Verde	
89 ^{ak}	26	13	0.07	274	5.8	0.19	5 194 507	Cambodia	
69 ^{ak}	72	26	0.60	174	260.0	1.75	11 348 320	Cameroon	
98 ^{al}	5	3	-	6	-	0.34	0	Canada	
40 ^{ak}	103	39	-	540	336.0	3.75	4 442 825	Central African Republic	
39 ^{ak}	110	33	0.22	144	206.3	10.79	6 562 501	Chad	
100 ^{ak}	7	4	0.26	15	-	0.03	16	Chile	
100 ^{ak}	7	3	-	59	-	0.22	621	China	
99	13	7	0.18	37	9.4	0.15	3 237 824	Colombia	
82	61	29	0.01	35	5.2	1.16	503 090	Comoros	
91	45	19	194	379	213.2	2.56	1 438 750	Congo	
-	7	4	-	13	-	0.10	0	Cook Islands	
99	8	6	0.34	10	<0.1	0.02	10 590	Costa Rica	
74	78	33	0.24	135	287.0	3.44	21 966 154	Côte d'Ivoire	
100	5	3	0.02	7	-	0.12	0	Croatia	
100	5	2	0.18	6	-	0.03	48 144	Cuba	
99 ^{al}	3	2	-	6	-	0.34	1	Cyprus	
100 ^{al}	3	2	-	4	-	0.13	3	Czechia	
100	16	9	-	523	0.2	0.20	5 337 343	Democratic People's Republic of Korea	
85	81	27	0.18	319	324.2	3.28	54 963 277	Democratic Republic of the Congo	
95 ^{al}	4	3	0.02	5	-	0.68	0	Denmark	
87 ^{ak}	56	30	0.13	224	97.6	0.26	110 561	Djibouti	

Data type										3.1
	Total population ^a (000s)			Life expectancy at birth ^b (years)			Healthy life expectancy at birth ^b (years)			Maternal mortality ratio ^c (per 100 000 live births)
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Comparable estimates
Member State	2020			2019			2019			2017
Dominica	-	-	72	-	-	-	-	-	-	-
Dominican Republic	5 418	5 430	10 848	69.8	76.2	72.8	62.1	66.1	64.0	95
Ecuador	8 824	8 819	17 643	76.4	80.5	78.4	67.7	69.3	68.5	59
Egypt	51 703	50 632	102 334	69.6	74.1	71.8	62.3	63.7	63.0	37
El Salvador	3 036	3 450	6 486	70.6	79.1	75.0	61.6	67.8	64.9	46
Equatorial Guinea	780	623	1 403	60.9	63.6	62.2	53.4	54.1	53.9	301
Eritrea	1 778	1 769	3 546	61.3	67.1	64.1	53.9	57.7	55.7	480
Estonia	628	698	1 327	74.7	82.6	78.9	66.4	71.7	69.2	9
Eswatini	570	590	1 160	53.4	63.2	57.7	47.1	53.8	50.1	437
Ethiopia	57 517	57 447	114 964	66.9	70.5	68.7	59.0	60.8	59.9	401
Fiji	454	442	896	65.9	70.3	68.0	58.5	60.7	59.6	34
Finland	2 732	2 808	5 541	79.2	84.0	81.6	69.9	72.0	71.0	3
France	31 589	33 684	65 274	79.8	85.1	82.5	71.1	73.1	72.1	8
Gabon	1 133	1 093	2 226	63.6	69.7	66.5	56.0	59.3	57.6	252
Gambia	1 199	1 218	2 417	63.4	67.7	65.5	56.4	57.7	57.0	597
Georgia	1 901	2 088	3 989	68.8	77.8	73.3	61.4	67.9	64.7	25
Germany	41 416	42 368	83 784	78.7	84.8	81.7	69.7	72.1	70.9	7
Ghana	15 750	15 323	31 073	63.7	69.2	66.3	56.5	59.6	58.0	308
Greece	5 116	5 307	10 423	78.6	83.6	81.1	69.9	71.9	70.9	3
Grenada	57	56	113	70.6	75.3	72.9	62.6	65.4	63.9	25
Guatemala	8 827	9 088	17 916	69.0	75.0	72.0	60.5	64.1	62.3	95
Guinea	6 353	6 780	13 133	59.5	62.3	61.0	52.9	53.7	53.3	576
Guinea-Bissau	963	1 005	1 968	57.4	63.0	60.2	51.1	54.1	52.6	667
Guyana	396	391	787	62.5	69.4	65.7	55.1	59.7	57.2	169
Haiti	5 626	5 776	11 403	63.3	64.8	64.1	55.9	55.8	55.8	480
Honduras	4 949	4 956	9 905	70.7	73.2	71.9	62.7	63.3	63.0	65
Hungary	4 598	5 062	9 660	73.1	79.6	76.4	65.0	69.3	67.2	12
Iceland	171	170	341	80.8	83.9	82.3	71.7	72.3	72.0	4
India	717 101	662 903	1 380 004	69.5	72.2	70.8	60.3	60.4	60.3	145
Indonesia	137 718	135 806	273 524	69.4	73.3	71.3	61.9	63.8	62.8	177
Iran (Islamic Republic of)	42 408	41 585	83 993	75.7	79.1	77.3	66.0	66.5	66.3	16
Iraq	20 358	19 865	40 223	69.9	75.0	72.4	61.6	63.7	62.7	79
Ireland	2 451	2 486	4 938	80.2	83.5	81.8	70.7	71.4	71.1	5
Israel	4 308	4 347	8 656	80.8	84.4	82.6	72.0	72.7	72.4	3
Italy	29 438	31 024	60 462	80.9	84.9	83.0	71.2	72.6	71.9	2
Jamaica	1 470	1 492	2 961	74.4	77.7	76.0	65.9	67.3	66.6	80
Japan	61 753	64 723	126 476	81.5	86.9	84.3	72.6	75.5	74.1	5
Jordan	5 166	5 037	10 203	77.0	78.8	77.9	68.1	67.2	67.6	46
Kazakhstan	9 113	9 664	18 777	70.0	77.6	74.0	62.4	67.4	65.0	10
Kenya	26 719	27 053	53 771	63.7	68.4	66.1	56.4	58.9	57.7	342
Kiribati	59	61	119	56.1	62.8	59.4	50.5	54.9	52.6	92
Kuwait	2 614	1 656	4 271	79.3	83.9	81.0	69.5	71.1	70.1	12
Kyrgyzstan	3 227	3 297	6 524	70.7	77.3	74.2	63.6	67.7	65.8	60
Lao People's Democratic Republic	3 652	3 624	7 276	66.2	70.9	68.5	59.2	61.9	60.5	185
Latvia	869	1 017	1 886	70.6	79.8	75.4	62.9	69.3	66.2	19
Lebanon	3 436	3 390	6 825	74.0	79.2	76.4	65.1	67.0	66.0	29
Lesotho	1 057	1 085	2 142	47.7	54.2	50.7	42.3	46.4	44.2	544
Liberia	2 543	2 515	5 058	63.2	65.0	64.1	54.9	55.0	54.9	661
Libya	3 469	3 403	6 871	74.2	77.3	75.8	64.9	65.5	65.2	72
Lithuania	1 260	1 462	2 722	71.2	80.4	76.0	63.4	69.7	66.7	8
Luxembourg	317	309	626	80.6	84.2	82.4	71.1	72.0	71.6	5
Madagascar	13 815	13 876	27 691	64.1	66.6	65.3	56.9	57.7	57.3	335

3.1	3.2		3.3					
	Proportion of births attended by skilled health personnel ^a (%)	Under-five mortality rate ^e (per 1000 live births)	Neonatal mortality rate ^e (per 1000 live births)	New HIV infections ^f (per 1000 uninfected population)	Tuberculosis incidence ^g (per 100 000 population)	Malaria incidence ^h (per 1000 population at risk)	Hepatitis B surface antigen (HBsAg) prevalence among children under 5 years ⁱ (%)	Reported number of people requiring interventions against NTDs ^j
Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data
2012-2021	2020	2020	2020	2020	2020	2020	2020	Member State
100 ^{ak}	35	30	-	47	-	0.20	399	Dominica
99 ^{ak}	34	23	0.32	41	0.2	0.10	2 612 634	Dominican Republic
97	13	7	0.12	48	3.8	0.09	17 609	Ecuador
92	19	10	0.03	11	-	0.20	2 932 815	Egypt
100	13	6	0.13	55	-	0.02	1416 732	El Salvador
-	78	29	-	280	240.8	6.07	429 326	Equatorial Guinea
-	39	18	0.07	81	44.8	1.02	296 052	Eritrea
100	2	<1	0.16	10	-	0.29	1	Estonia
88	47	20	5.28	319	0.7	0.83	406 184	Eswatini
50	49	27	0.12	132	54.1	1.59	75 731 040	Ethiopia
100 ^{ak}	27	12	0.16	66	-	0.13	921 225	Fiji
100 ^{ak}	2	1	-	4	-	0.81	3	Finland
98 ^{al}	4	3	-	8	-	0.15	120	France
89 ^{ak}	42	20	0.48	527	215.5	2.12	870 003	Gabon
84	49	26	0.93	157	87.3	1.60	168 211	Gambia
100 ^{ak}	9	5	0.17	70	-	0.06	81	Georgia
96 ^{al}	4	2	0.03	6	-	0.21	116	Germany
79	45	23	0.63	143	162.8	2.13	17 220 101	Ghana
100 ^{ak}	4	2	0.09	5	-	0.14	41	Greece
100 ^{ak}	16	11	-	3	-	0.12	253	Grenada
70 ^{ak}	24	11	0.05	27	<0.1	0.03	5 052 069	Guatemala
55 ^{ak}	96	30	0.42	179	319.5	6.07	8 180 533	Guinea
54	77	35	0.88	361	88.9	2.11	1 892 353	Guinea-Bissau
98 ^{ak}	28	17	0.43	79	28.2	0.40	685 741	Guyana
42	60	25	0.45	168	3.7	1.04	4 363 545	Haiti
94 ^{ak}	16	9	0.07	30	0.1	0.03	2 210 111	Honduras
100 ^{ak}	4	2	-	5	-	0.90	1	Hungary
97 ^{al}	2	<1	0.04	3	-	0.15	0	Iceland
89 ^{ak}	33	20	0.04	188	3.2	0.16	751 758 629	India
95	23	12	0.10	301	2.9	1.30	86 492 939	Indonesia
99 ^{ak}	13	8	0.03	13	0.0 ^{am}	0.05	5	Iran (Islamic Republic of)
96	25	14	-	27	-	0.29	2 170 486	Iraq
100 ^{al}	3	2	0.08	5	-	0.04	1	Ireland
-	4	2	-	2	-	0.05	88	Israel
100 ^{al}	3	2	0.04	7	-	0.33	35	Italy
100	13	9	0.53	2	-	0.55	824	Jamaica
100 ^{al}	2	<1	0.01	12	-	0.96	5	Japan
100	15	9	0.01	5	-	0.56	23	Jordan
100 ^{al}	10	5	0.19	69	-	0.15	664	Kazakhstan
70	42	20	0.72	259	50.9	0.40	8 596 922	Kenya
92 ^{ak}	50	21	-	425	-	1.57	124 250	Kiribati
100 ^{al}	9	5	-	19	-	0.03	16	Kuwait
100	18	12	0.11	105	-	0.15	2 169 854	Kyrgyzstan
64	44	22	0.13	149	1.5	0.68	2 052 528	Lao People's Democratic Republic
100 ^{al}	4	2	-	23	-	0.27	2	Latvia
-	7	4	0.03	13	-	0.07	0	Lebanon
87	90	44	4.91	650	-	1.22	387 421	Lesotho
84 ^{ak}	78	31	0.29	314	358.0	4.66	3 180 960	Liberia
100 ^{ak}	11	6	0.05	59	-	0.43	4 026	Libya
100 ^{ak}	3	2	-	29	-	0.05	0	Lithuania
-	3	2	-	6	-	0.06	3	Luxembourg
46 ^{ak}	50	20	0.22	238	133.5	2.13	21 390 404	Madagascar

Data type										3.1
	Total population ^a (000s)			Life expectancy at birth ^b (years)			Healthy life expectancy at birth ^b (years)			Maternal mortality ratio ^c (per 100 000 live births)
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	
Member State	2020			2019			2019			2017
Malawi	9 434	9 696	19 130	62.3	68.9	65.6	55.1	59.0	57.1	349
Malaysia	16 631	15 735	32 366	72.6	77.1	74.7	64.5	66.9	65.7	29
Maldives	343	198	541	78.6	80.8	79.6	69.7	70.0	70.0	53
Mali	10 145	10 106	20 251	62.2	63.4	62.8	54.8	54.5	54.6	562
Malta	221	220	442	79.9	83.8	81.9	70.9	71.9	71.5	6
Marshall Islands	-	-	59	-	-	-	-	-	-	-
Mauritania	2 335	2 315	4 650	68.1	68.7	68.4	60.2	59.4	59.8	766
Mauritius	627	644	1 272	71.0	77.3	74.1	62.0	65.9	63.9	61
Mexico	63 071	65 861	128 933	73.1	78.9	76.0	64.3	67.2	65.8	33
Micronesia (Federated States of)	58	57	115	60.3	66.0	63.0	54.4	57.8	56.0	88
Monaco	-	-	39	-	-	-	-	-	-	-
Mongolia	1 615	1 663	3 278	63.8	72.8	68.1	57.1	63.8	60.3	45
Montenegro	311	317	628	73.2	78.7	75.9	65.2	68.7	67.0	6
Morocco	18 317	18 594	36 911	71.7	74.3	73.0	63.7	63.7	63.7	70
Mozambique	15 188	16 067	31 255	54.5	61.7	58.1	47.9	52.8	50.4	289
Myanmar	26 220	28 190	54 410	65.9	72.2	69.1	58.8	62.8	60.9	250
Namibia	1 232	1 309	2 541	60.6	68.4	64.6	53.4	58.6	56.1	195
Nauru	-	-	11	-	-	-	-	-	-	-
Nepal	13 348	15 788	29 137	68.9	72.7	70.9	60.6	62.1	61.3	186
Netherlands	8 537	8 598	17 135	80.4	83.1	81.8	71.3	71.5	71.4	5
New Zealand	2 370	2 452	4 822	80.4	83.5	82.0	69.6	70.8	70.2	9
Nicaragua	3 265	3 360	6 625	72.1	77.9	75.0	63.7	67.2	65.5	98
Niger	12 170	12 036	24 207	62.1	64.6	63.3	55.3	55.8	55.5	509
Nigeria	104 470	101 670	206 140	61.2	64.1	62.6	53.9	54.9	54.4	917
Niue	-	-	2	-	-	-	-	-	-	-
North Macedonia	1 042	1 041	2 083	72.8	76.9	74.8	65.1	67.3	66.1	7
Norway	2 740	2 681	5 421	81.1	84.1	82.6	71.0	71.6	71.4	2
Oman	3 370	1 736	5 107	73.0	75.3	73.9	64.5	64.5	64.7	19
Pakistan	113 672	107 220	220 892	64.6	66.7	65.6	56.9	56.8	56.9	140
Palau	-	-	18	-	-	-	-	-	-	-
Panama	2 160	2 155	4 315	76.6	82.1	79.3	67.4	70.0	68.7	52
Papua New Guinea	4 568	4 379	8 947	63.4	67.4	65.3	56.2	58.1	57.1	145
Paraguay	3 624	3 508	7 133	73.1	78.8	75.8	64.5	67.3	65.8	84
Peru	16 379	16 593	32 972	78.5	81.3	79.9	69.2	69.8	69.5	88
Philippines	55 029	54 552	109 581	67.4	73.6	70.4	60.1	63.9	62.0	121
Poland	18 338	19 509	37 847	74.5	81.9	78.3	65.9	71.3	68.7	2
Portugal	4 824	5 373	10 197	78.6	84.4	81.6	69.6	72.2	71.0	8
Qatar	2 165	716	2 881	78.0	76.6	77.2	68.1	65.1	67.1	9
Republic of Korea	25 666	25 603	51 269	80.3	86.1	83.3	71.3	74.7	73.1	11
Republic of Moldova	1 932	2 102	4 034	69.3	77.1	73.3	61.9	67.1	64.5	19
Romania	9 354	9 884	19 238	72.0	79.3	75.6	64.3	69.4	66.8	19
Russian Federation	67 640	78 294	145 934	68.2	78.0	73.2	60.7	67.5	64.2	17
Rwanda	6 367	6 585	12 952	66.9	71.2	69.1	59.0	61.4	60.2	248
Saint Kitts and Nevis	-	-	53	-	-	-	-	-	-	-
Saint Lucia	90	93	184	71.3	77.7	74.3	63.0	66.6	64.7	117
Saint Vincent and the Grenadines	56	55	111	71.3	75.3	73.2	62.9	65.1	64.0	68
Samoa	103	96	198	69.2	71.8	70.5	61.8	62.5	62.1	43
San Marino	-	-	34	-	-	-	-	-	-	-
Sao Tome and Principe	110	109	219	68.8	72.0	70.4	60.9	62.2	61.6	130
Saudi Arabia	20 131	14 683	34 814	73.1	76.1	74.3	63.8	64.4	64.0	17
Senegal	8 171	8 573	16 744	66.8	70.1	68.6	58.8	59.9	59.4	315
Serbia	4 280	4 458	8 737	73.5	78.3	75.9	65.4	68.4	66.9	12

3.1	3.2		3.3					
	Proportion of births attended by skilled health personnel ^a (%)	Under-five mortality rate ^e (per 1000 live births)	Neonatal mortality rate ^e (per 1000 live births)	New HIV infections ^f (per 1000 uninfected population)	Tuberculosis incidence ^g (per 100 000 population)	Malaria incidence ^h (per 1000 population at risk)	Hepatitis B surface antigen (HBsAg) prevalence among children under 5 years ⁱ (%)	Reported number of people requiring interventions against NTDs ^j
Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data
2012-2021	2020	2020	2020	2020	2020	2020	2020	Member State
96	39	19	1.21	141	228.5	1.39	12 761 253	Malawi
100 ^{ak}	9	5	0.19	92	0.0 ^{an}	0.06	19 110	Malaysia
100	6	4	-	37	-	0.21	330	Maldives
67	91	32	0.27	52	357.5	4.62	7 946 641	Mali
100 ^{ak}	6	4	-	36	-	0.20	2	Malta
92	31	14	-	483	-	0.35	19 594	Marshall Islands
69	71	31	-	87	30.0	3.35	844 271	Mauritania
100	17	11	0.80	12	-	0.41	0	Mauritius
97	14	8	0.16	24	0.1	0.03	20 016 375	Mexico
-	25	13	-	75	-	0.40	70 736	Micronesia (Federated States of)
-	3	2	-	0	-	0.15	0	Monaco
99 ^{ak}	15	8	0.01	437	-	0.47	0	Mongolia
99	2	1	0.04	16	-	0.67	0	Montenegro
87	19	12	0.02	98	-	0.16	3 868	Morocco
73	71	28	3.50	368	320.2	0.59	22 969 482	Mozambique
60 ^{ak}	44	22	-	308	2.5	1.11	23 748 613	Myanmar
88	40	20	2.44	460	10.0	0.36	1 094 020	Namibia
-	28	18	-	180	-	0.52	10 774	Nauru
77 ^{ak}	28	17	0.03	235	<0.1	0.16	13 519 533	Nepal
-	4	3	0.02	4	-	0.08	4	Netherlands
96 ^{al}	5	3	0.02	8	-	0.77	3	New Zealand
94 ^{ak}	16	9	0.11	42	11.5	0.09	1 595 366	Nicaragua
44 ^{ak}	78	24	0.05	83	324.1	3.44	10 993 882	Niger
43 ^{ak}	114	35	0.42	219	313.8	2.94	136 378 141	Nigeria
-	25	13	-	48	-	0.37	0	Niue
100	6	4	-	12	-	0.08	0	North Macedonia
99 ^{al}	2	1	0.01	3	-	0.02	2	Norway
100	11	5	-	7	-	0.13	233	Oman
68 ^{ak}	65	40	0.12	259	2.5	0.91	25 234 450	Pakistan
97	17	9	-	64	-	0.03	0	Palau
95 ^{ak}	14	8	0.44	32	0.6	0.07	64 414	Panama
56 ^{ak}	44	21	0.39	441	164.3	1.36	6 982 087	Papua New Guinea
98 ^{al}	19	10	0.13	48	-	0.42	1 999 482	Paraguay
96	13	7	0.13	116	2.3	0.06	359 011	Peru
84	26	13	0.15	539	0.7	0.38	48 539 291	Philippines
100	4	3	-	10	-	0.01	14	Poland
99	3	2	0.07	16	-	0.02	1	Portugal
100	6	4	0.07	34	-	0.05	28	Qatar
100 ^{al}	3	1	-	49	<0.1	0.09	0	Republic of Korea
100 ^{al}	14	11	0.24	74	-	0.20	30	Republic of Moldova
93	7	3	0.04	64	-	0.29	0	Romania
100 ^{ak}	5	2	-	46	-	0.55	278	Russian Federation
94 ^{ak}	40	18	0.34	58	230.5	0.49	5 011 488	Rwanda
100 ^{ak}	15	10	-	4	-	0.06	20	Saint Kitts and Nevis
100 ^{ak}	24	13	-	2	-	0.22	1 318	Saint Lucia
99 ^{ak}	14	9	-	7	-	0.15	1 790	Saint Vincent and the Grenadines
89	17	7	-	6	-	0.34	191 219	Samoa
-	2	<1	-	0	-	0.13	0	San Marino
97	16	8	-	118	8.8	1.31	210 238	Sao Tome and Principe
99 ^{ak}	7	3	0.05	8	<0.1	0.00	1 051	Saudi Arabia
74	38	21	0.08	117	49.9	0.93	5 590 970	Senegal
100	6	4	0.02	13	-	0.04	0	Serbia

Data type										3.1
	Total population ^a (000s)			Life expectancy at birth ^b (years)			Healthy life expectancy at birth ^b (years)			Maternal mortality ratio ^c (per 100 000 live births)
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Comparable estimates
Member State	2020			2019			2019			2017
Seychelles	50	48	98	70.0	77.1	73.3	61.9	66.4	64.0	53
Sierra Leone	3 981	3 996	7 977	59.6	61.9	60.8	52.5	53.3	52.9	1120
Singapore	3 062	2 788	5 850	81.0	85.5	83.2	72.4	74.7	73.6	8
Slovakia	2 658	2 801	5 460	74.8	81.4	78.2	66.2	70.8	68.5	5
Slovenia	1 035	1 044	2 079	78.6	84.1	81.3	69.0	72.5	70.7	7
Solomon Islands	349	338	687	62.9	67.9	65.2	56.5	59.1	57.8	104
Somalia	7 924	7 969	15 893	54.0	59.2	56.5	48.3	51.3	49.7	829
South Africa	29 216	30 093	59 309	62.2	68.3	65.3	54.6	57.7	56.2	119
South Sudan	5 603	5 591	11 194	60.8	64.8	62.8	52.9	54.5	53.7	1150
Spain	22 978	23 776	46 755	80.7	85.7	83.2	71.3	72.9	72.1	4
Sri Lanka	10 267	11 146	21 413	73.8	79.8	76.9	65.1	69.0	67.0	36
Sudan	21 907	21 942	43 849	67.6	70.8	69.1	59.6	60.3	59.9	295
Suriname	295	292	587	68.5	74.6	71.5	60.7	64.2	62.4	120
Sweden	5 059	5 040	10 099	80.8	84.0	82.4	71.7	72.1	71.9	4
Switzerland	4 294	4 361	8 655	81.8	85.1	83.4	72.2	72.8	72.5	5
Syrian Arab Republic	8 760	8 741	17 501	71.2	74.3	72.7	62.5	63.3	62.9	31
Tajikistan	4 806	4 732	9 538	67.6	71.5	69.5	60.9	63.2	62.0	17
Thailand	33 966	35 834	69 800	74.4	81.0	77.7	65.9	70.6	68.3	37
Timor-Leste	666	652	1 318	67.9	71.4	69.6	59.8	62.0	60.9	142
Togo	4 119	4 159	8 279	61.5	67.2	64.3	54.7	57.8	56.2	396
Tonga	53	53	106	69.8	75.6	72.6	62.7	65.5	64.0	52
Trinidad and Tobago	691	709	1 399	72.5	79.9	76.1	64.0	68.6	66.2	67
Tunisia	5 861	5 958	11 819	74.9	79.2	77.0	66.1	67.7	66.9	43
Turkey	41 636	42 703	84 339	76.4	80.7	78.6	67.8	69.0	68.4	17
Turkmenistan	2 969	3 062	6 031	66.5	73.0	69.7	59.9	64.3	62.1	7
Tuvalu	-	-	12	-	-	-	-	-	-	-
Uganda	22 547	23 194	45 741	63.2	70.1	66.7	56.0	60.4	58.2	375
Ukraine	20 263	23 471	43 734	68.0	77.8	73.0	60.6	67.8	64.3	19
United Arab Emirates	6 836	3 054	9 890	75.1	78.4	76.1	65.8	66.2	66.0	3
United Kingdom	33 542	34 344	67 886	79.8	83.0	81.4	69.6	70.6	70.1	7
United Republic of Tanzania	29 851	29 883	59 734	65.4	69.3	67.3	57.6	59.3	58.5	524
United States of America	163 786	167 217	331 003	76.3	80.7	78.5	65.2	67.0	66.1	19
Uruguay	1 678	1 795	3 474	73.5	80.6	77.1	65.4	69.5	67.5	17
Uzbekistan	16 697	16 772	33 469	70.8	75.2	73.0	63.5	65.8	64.7	29
Vanuatu	156	151	307	62.7	68.3	65.3	56.4	59.4	57.8	72
Venezuela (Bolivarian Republic of)	13 985	14 451	28 436	69.9	78.2	73.9	61.9	67.1	64.4	125
Viet Nam	48 598	48 740	97 339	69.6	78.1	73.7	62.4	68.3	65.3	43
Yemen	15 025	14 801	29 826	64.4	68.9	66.6	56.9	58.2	57.5	164
Zambia	9 103	9 281	18 384	59.5	65.4	62.5	52.5	56.3	54.4	213
Zimbabwe	7 092	7 771	14 863	57.5	63.6	60.7	51.2	54.8	53.1	458
WHO region	2020			2019			2019			2017
African Region	559 296	560 865	1 120 161	62.4	66.6	64.5	55.0	57.1	56.0	525
Region of the Americas	501 975	516 146	1 018 121	74.5	79.8	77.2	64.8	67.5	66.2	57
South-East Asia Region	1 035 908	985 479	2 021 387	69.9	73.1	71.4	61.1	61.9	61.5	152
European Region	452 591	480 297	932 888	75.1	81.3	78.2	66.6	70.0	68.3	13
Eastern Mediterranean Region	374 719	351 002	725 721	68.3	71.3	69.7	60.2	60.7	60.4	164
Western Pacific Region	987 323	952 556	1 939 879	74.8	80.8	77.7	67.0	70.2	68.6	41
Global	3 911 812	3 846 346	7 758 157	70.8	75.9	73.3	62.5	64.9	63.7	211

3.1		3.2		3.3					
Proportion of births attended by skilled health personnel ^a (%)	Under-five mortality rate ^e (per 1000 live births)	Neonatal mortality rate ^e (per 1000 live births)	New HIV infections ^f (per 1000 uninfected population)	Tuberculosis incidence ^g (per 100 000 population)	Malaria incidence ^h (per 1000 population at risk)	Hepatitis B surface antigen (HBsAg) prevalence among children under 5 years ⁱ (%)	Reported number of people requiring interventions against NTDs ^j		
Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	
2012-2021	2020	2020	2020	2020	2020	2020	2020	Member State	
100 ^{ak}	14	8	-	11	-	0.09	1	Seychelles	
87	108	31	0.70	298	328.2	1.98	7 617 601	Sierra Leone	
100	2	<1	0.01	46	-	0.13	35 315	Singapore	
98	6	3	-	3	-	0.31	3	Slovakia	
100 ^{al}	2	1	0.01	4	-	1.12	2	Slovenia	
86 ^{ak}	19	8	-	65	167.7	0.87	503 483	Solomon Islands	
32 ^{ak}	115	37	0.02	259	52.2	6.32	3 698 691	Somalia	
97	32	11	4.60	554	0.8	3.10	16 502 598	South Africa	
-	98	40	1.37	232	286.9	13.03	8 571 203	South Sudan	
100 ^{ak}	3	2	0.08	7	-	0.13	1	Spain	
100	7	4	0.01	64	-	0.34	34 498	Sri Lanka	
78 ^{ak}	57	27	0.09	63	73.4	1.66	12 458 017	Sudan	
98 ^{ak}	18	11	0.30	29	1.7	0.07	617	Suriname	
-	3	1	-	4	-	0.13	18	Sweden	
-	4	3	-	5	-	0.16	0	Switzerland	
-	22	11	0.01	19	-	0.69	2 440 286	Syrian Arab Republic	
95	32	14	0.09	84	-	0.18	3 375 143	Tajikistan	
99 ^{ak}	9	5	0.10	150	0.2	0.27	50 131	Thailand	
57 ^{ak}	42	19	0.10	508	<0.1	0.72	1 361 778	Timor-Leste	
69 ^{ak}	64	24	0.45	36	228.9	3.27	4 603 985	Togo	
98 ^{ak}	11	5	-	10	-	0.89	37 131	Tonga	
100 ^{ak}	17	11	0.07	18	-	0.19	59	Trinidad and Tobago	
100	17	12	0.03	36	-	0.12	4 902	Tunisia	
97 ^{al}	9	5	-	15	-	0.11	0	Turkey	
100 ^{ak}	42	24	-	47	-	0.07	395	Turkmenistan	
100 ^{ak}	22	10	-	296	-	0.24	11 500	Tuvalu	
74	43	19	0.95	196	283.8	0.96	23 171 373	Uganda	
100 ^{ak}	8	5	0.21	73	-	0.25	17	Ukraine	
99	7	4	0.13	1	-	0.02	78	United Arab Emirates	
-	4	3	-	7	-	0.41	0	United Kingdom	
64 ^{ak}	49	20	1.26	222	120.2	0.99	29 038 890	United Republic of Tanzania	
99 ^{al}	6	3	-	2	-	0.01	466	United States of America	
100 ^{ak}	6	4	0.19	32	-	0.15	10	Uruguay	
100	14	8	0.08	66	-	0.16	405 951	Uzbekistan	
89 ^{ak}	25	11	-	38	3.0	2.25	299 059	Vanuatu	
99 ^{ak}	24	15	0.08	47	16.3	0.15	8 062 740	Venezuela (Bolivarian Republic of)	
96 ^{ak}	21	10	0.06	176	<0.1	0.64	7 844 098	Viet Nam	
45 ^{ak}	60	28	0.04	49	40.6	1.76	11 632 682	Yemen	
80 ^{ak}	61	24	3.64	319	186.9	1.32	12 810 245	Zambia	
86	54	26	1.74	193	98.5	2.74	8 029 929	Zimbabwe	
2015-2021	2020	2020	2020	2020	2020	2020	2020	WHO region	
65	72	27	0.82	220	232.8	2.53	578 432 527	African Region	
96	13	7	0.15	29	4.6	0.07	61 743 281	Region of the Americas	
87	30	18	0.05	211	3.0	0.38	938 873 025	South-East Asia Region	
98	8	4	0.18	25	-	0.26	6 639 094	European Region	
75	45	25	0.06	112	11.2	0.84	75 059 501	Eastern Mediterranean Region	
98	11	5	0.06	93	2.2	0.30	72 876 938	Western Pacific Region	
84	37	17	0.19	127	59.0	0.94	1 733 624 366	Global	

Table 2. Annex 2-2

	3.4		3.5	3.6	3.7		
	Probability of dying from any of CVD, cancer, diabetes, CRD between age 30 and exact age 70 ^k (%)	Suicide mortality rate ^k (per 100 000 population)	Total alcohol per capita (\geq 15 years of age) consumption ^l (litres of pure alcohol)	Road traffic mortality rate ^k (per 100 000 population)	Proportion of women of reproductive age who have their need for family planning satisfied with modern methods ^m (%)	Adolescent birth rate ⁿ (per 1000 women aged 15–19 years)	Adolescent birth rate ⁿ (per 1000 women aged 10–14 years)
Data type	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Primary data	Primary data
Member State	2019	2019	2019	2019	2012–2020	2012–2020	2012–2020
Afghanistan	35.3	4.1	<0.1	15.9	42.2 ^{ao}	62.0	0.2
Albania	11.4	4.3	6.8	11.7	6.3	14.2	0.3
Algeria	13.9	2.5	0.6	20.9	77.2 ^{ao}	12.0	0.0
Andorra	-	-	12.3	-	-	2.7	0.0
Angola	22.2	6.1	7.8	26.1	29.8	163.0	10.7
Antigua and Barbuda	17.5	0.4	9.4	0.0	-	30.4	0.3
Argentina	15.7	8.4	9.5	14.1	-	40.9	1.1
Armenia	19.9	3.3	4.7	20.0	40.2 ^{ao}	18.9	0.0
Australia	8.6	12.5	10.4	4.9	-	8.7	0.1
Austria	10.4	14.6	11.9	4.9	-	5.2	0.0
Azerbaijan	27.2	4.1	1.0	6.7	-	42.2	0.0
Bahamas	19.9	3.5	4.8	7.7	-	29.0	0.3
Bahrain	16.1	8.9	1.1	5.2	-	12.5	0.0
Bangladesh	18.9	3.7	0.0	15.3	77.4 ^{ao}	74.0	0.9
Barbados	16.0	0.6	10.4	8.2	69.9 ^{ao}	-	-
Belarus	23.8	21.2	11.0	7.6	73.0 ^{ao}	11.7	0.0
Belgium	10.6	18.3	10.8	5.8	-	5.1	0.0
Belize	16.5	7.1	6.4	22.6	64.9	55.4	1.0
Benin	22.6	7.8	2.2	26.8	28.0	108.0	1.8
Bhutan	18.5	4.6	0.2	16.2	-	8.0	0.0
Bolivia (Plurinational State of)	17.9	6.2	3.9	21.1	50.3 ^{ao}	71.0	-
Bosnia and Herzegovina	18.7	10.9	7.8	13.5	21.9 ^{ao}	10.1	0.0
Botswana	27.0	16.1	6.6	26.4	-	53.3	0.3
Brazil	15.5	6.9	7.3	16.0	-	49.1	2.6
Brunei Darussalam	18.5	2.7	0.5	7.5	-	9.9	-
Bulgaria	24.2	9.7	12.5	9.2	-	39.3	1.5
Burkina Faso	23.9	7.5	11.0	31.0	52.6	123.7	2.6
Burundi	25.0	6.2	7.5	35.5	39.6	58.2	0.7
Cabo Verde	17.4	12.9	6.4	26.8	-	57.4	1.0
Cambodia	22.5	4.8	7.8	19.6	56.5	30.0	0.1
Cameroon	23.9	9.0	5.5	30.2	44.9	122.2	2.9
Canada	9.6	11.8	8.8	5.3	-	6.5	0.1
Central African Republic	36.0	12.3	1.7	37.7	27.6	184.4	8.0
Chad	22.7	6.4	1.3	32.4	17.5 ^{ao}	138.5	3.9
Chile	10.0	9.0	8.9	14.9	-	22.6	0.6
China	15.9	8.1	6.0	17.4	-	6.1	-
Colombia	9.7	3.9	5.5	15.4	86.6	52.6	2.2
Comoros	20.6	5.4	1.1	26.6	28.8	38.0	-
Congo	22.6	6.5	9.2	29.7	43.2	111.3	2.5
Cook Islands	-	-	10.9	-	-	41.9	0.3
Costa Rica	9.5	8.1	4.1	14.8	80.8	33.3	1.3
Côte d'Ivoire	21.7	8.9	3.0	24.1	43.5	118.8	5.0
Croatia	16.1	16.4	8.7	7.9	-	8.8	0.1
Cuba	16.6	14.5	6.3	8.9	86.9	51.1	1.3
Cyprus	8.2	3.6	10.8	5.8	-	6.7	0.0
Czechia	14.3	12.2	14.3	5.9	-	9.9	0.1
Democratic People's Republic of Korea	23.9	9.4	4.2	24.2	89.6 ^{ao}	10	-
Democratic Republic of the Congo	24.0	6.7	1.1	34.9	33.0	109.0	3.4
Denmark	10.8	10.7	10.1	3.7	-	1.6	0.0
Djibouti	22.0	9.6	0.4	23.5	-	-	-
Dominica	-	-	7.2	-	-	-	-

3.8			3.9			
UHC: Service coverage index ^a	Population with household expenditures on health > 10% of total household expenditure or income ^b (%)	Population with household expenditures on health > 25% of total household expenditure or income ^b (%)	Age-standardized mortality rate attributed to household and ambient air pollution ^a (per 100 000 population)	Mortality rate attributed to exposure to unsafe WASH services ^c (per 100 000 population)	Mortality rate from unintentional poisoning ^k (per 100 000 population)	
Comparable estimates	Primary data	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	
2019	2012-2020	2012-2020	2016	2016	2019	Member State
37	23.8	5.6	211.1	13.9	1.0	Afghanistan
62	16.7	5.0	68.0	0.2	0.3	Albania
75	-	-	49.7	1.9	0.7	Algeria
77	-	-	-	-	-	Andorra
39	35.5	12.5	118.5	48.8	2.0	Angola
72	-	-	29.9	0.1	0.7	Antigua and Barbuda
73	9.6	2.5	26.6	0.4	0.4	Argentina
69	21.0	7.1	54.8	0.2	0.7	Armenia
87	2.5	0.4	8.4	<0.1	0.1	Australia
82	-	-	15.3	0.1	0.2	Austria
65	-	-	63.9	1.1	0.9	Azerbaijan
70	-	-	19.9	<0.1	0.2	Bahamas
71	4.9	1.4	40.1	<0.1	0.3	Bahrain
51	24.4	8.4	149.0	11.9	0.3	Bangladesh
74	16.4	3.8	31.1	0.2	0.7	Barbados
74	13.5	0.6	60.7	<0.1	3.3	Belarus
85	-	-	15.7	0.3	0.4	Belgium
67	6.2	3.1	68.6	1.0	0.4	Belize
38	5.5	1.0	205.0	59.7	2.6	Benin
62	4.0	1.8	124.5	3.9	0.2	Bhutan
67	4.6	0.8	63.7	5.6	0.6	Bolivia (Plurinational State of)
65	8.2	1.4	79.8	<0.1	0.4	Bosnia and Herzegovina
54	-	-	101.3	11.8	1.8	Botswana
75	11.8	1.9	29.9	1.0	0.1	Brazil
77	-	-	13.3	<0.1	<0.1	Brunei Darussalam
70	21.3	3.1	61.8	0.1	0.5	Bulgaria
43	3.1	0.4	206.2	49.6	3.1	Burkina Faso
44	3.3	0.4	179.9	65.4	3.2	Burundi
69	-	-	99.5	4.1	0.4	Cabo Verde
61	17.9	4.9	149.8	6.5	0.5	Cambodia
44	10.7	1.8	208.1	45.2	2.6	Cameroon
89	3.5	0.8	7.0	0.4	0.3	Canada
32	-	-	211.9	82.1	2.8	Central African Republic
28	-	-	280.1	101.0	3.5	Chad
80	14.6	2.1	25.3	0.2	0.4	Chile
82	24.0	9.2	112.7	0.6	1.8	China
78	8.2	2.2	37.0	0.8	0.1	Colombia
44	8.8	1.6	172.4	50.7	2.4	Comoros
40	-	-	130.7	38.7	1.3	Congo
54	-	-	-	-	-	Cook Islands
78	7.4	1.1	23.3	0.9	0.1	Costa Rica
45	12.4	3.4	269.1	47.2	2.5	Côte d'Ivoire
73	-	-	35.5	0.1	0.4	Croatia
80	-	-	49.5	1.0	0.2	Cuba
79	14.7	1.6	20.1	0.3	0.3	Cyprus
78	-	-	29.6	0.2	0.4	Czechia
68	-	-	207.2	1.4	1.4	Democratic People's Republic of Korea
39	4.8	0.6	163.9	59.8	2.0	Democratic Republic of the Congo
85	-	-	13.2	0.3	<0.1	Denmark
48	1.5	0.3	159.0	31.3	2.5	Djibouti
67	-	-	-	-	-	Dominica

	3.4		3.5	3.6	3.7		
	Probability of dying from any of CVD, cancer, diabetes, CRD between age 30 and exact age 70 ^k (%)	Suicide mortality rate ^k (per 100 000 population)	Total alcohol per capita (≥ 15 years of age) consumption ^l (litres of pure alcohol)	Road traffic mortality rate ^k (per 100 000 population)	Proportion of women of reproductive age who have their need for family planning satisfied with modern methods ^m (%)	Adolescent birth rate ⁿ (per 1000 women aged 15–19 years)	Adolescent birth rate ⁿ (per 1000 women aged 10–14 years)
Data type	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Primary data	Primary data
Member State	2019	2019	2019	2019	2012–2020	2012–2020	2012–2020
Dominican Republic	19.1	4.9	6.7	64.6	81.7	51.0	0.8
Ecuador	11.0	7.6	3.3	20.1	79.4 ^{ao}	58.4	2.2
Egypt	28.0	3.0	0.1	10.1	80.0 ^{ao}	46.9	0.5
El Salvador	10.7	6.0	4.1	20.9	80.0	51.8	2.0
Equatorial Guinea	22.1	7.9	6.9	27.2	-	-	-
Eritrea	26.8	10.9	2.1	37.9	-	-	-
Estonia	14.9	14.9	10.8	4.5	-	8.5	0.1
Eswatini	35.2	29.4	8.8	33.5	82.9	87.1	1.2
Ethiopia	17.1	5.4	2.2	28.2	63.6	73.5	0.5
Fiji	37.7	9.0	3.7	13.5	-	23.1	0.1
Finland	9.6	15.3	10.7	3.9	-	4.1	0.0
France	10.6	13.8	12.2	5.1	-	7.5	0.1
Gabon	21.3	8.4	8.1	23.9	44.0	91.0	-
Gambia	21.1	4.8	3.4	29.6	39.7 ^{ao}	64.8	1.1
Georgia	24.9	9.2	9.5	12.4	50.5 ^{ao}	27.3	0.0
Germany	12.1	12.3	12.8	3.8	-	6.9	0.1
Ghana	22.5	6.6	2.8	25.7	40.4	78.0	0.7
Greece	12.5	5.1	10.5	8.3	-	8.7	0.4
Grenada	23.3	0.7	9.0	8.0	-	35.9	1.1
Guatemala	16.5	5.9	1.6	22.9	66.1	63.3	1.7
Guinea	24.9	7.0	1.1	29.7	37.7	120.0	4.4
Guinea-Bissau	24.9	7.0	5.5	32.2	60.0 ^{ao}	84.0	1.6
Guyana	29.2	40.3	5.3	22.3	51.5	64.9	1.3
Haiti	31.3	9.6	3.0	18.8	45.4	54.8	1.3
Honduras	18.7	2.1	3.9	16.1	76.0	97.1	2.5
Hungary	22.1	16.6	11.1	7.7	-	21.1	0.2
Iceland	8.7	11.9	9.2	2.0	-	4.4	0.0
India	21.9	12.7	5.6	15.6	72.8	12.2	0.2
Indonesia	24.8	2.4	0.2	11.3	77.0	36.0	0.3
Iran (Islamic Republic of)	14.8	5.2	1.0	21.5	-	27.6	0.5
Iraq	23.5	3.6	0.4	27.3	53.7 ^{ao}	70.0	1.6
Ireland	9.7	9.6	12.7	3.1	-	5.7	0.0
Israel	8.8	5.3	4.4	3.9	-	8.3	0.0
Italy	9.0	6.7	8.0	5.3	-	3.7	0.0
Jamaica	16.9	24	4.2	15.1	-	51.7	0.0
Japan	8.3	15.3	10.1	3.6	-	2.8	0.0
Jordan	15.3	1.6	0.5	17.0	56.7 ^{ao}	27.0	0.4
Kazakhstan	22.4	17.6	5.0	12.7	73.2 ^{ao}	24.6	0.0
Kenya	21.0	6.1	2.1	28.3	74.4	81.1	0.7
Kiribati	50.8	28.3	2.3	1.9	53.1 ^{ao}	50.6	1.8
Kuwait	11.9	2.9	0.0	15.4	-	6.2	0.0
Kyrgyzstan	20.3	7.4	4.9	12.7	64.6	34.0	0.0
Lao People's Democratic Republic	26.8	5.4	12.1	17.9	72.3	83.4	2.6
Latvia	21.6	20.1	13.2	8.1	-	10.8	0.0
Lebanon	19.9	2.8	1.5	16.4	-	11.7	-
Lesotho	42.7	72.4	5.1	31.9	82.8	90.8	0.1
Liberia	17.8	4.4	5.4	38.9	41.0 ^{ao}	128.0	3.8
Libya	18.6	4.5	<0.1	21.3	24.0 ^{ao}	10.9	-
Lithuania	19.3	26.1	12.8	8.1	-	10.1	0.1
Luxembourg	9.7	11.3	12.4	4.1	-	3.8	0.0
Madagascar	26.0	5.5	2.0	29.2	65.9	150.8	6.9
Malawi	22.6	5.4	4.1	33.4	73.9	101.8	2.8

3.8			3.9			
UHC: Service coverage index ^a	Population with household expenditures on health > 10% of total household expenditure or income ^b (%)	Population with household expenditures on health > 25% of total household expenditure or income ^b (%)	Age-standardized mortality rate attributed to household and ambient air pollution ^a (per 100 000 population)	Mortality rate attributed to exposure to unsafe WASH services ^c (per 100 000 population)	Mortality rate from unintentional poisoning ^k (per 100 000 population)	
Comparable estimates	Primary data	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	
2019	2012-2020	2012-2020	2016	2016	2019	Member State
66	8.2	0.9	43.0	2.2	0.4	Dominican Republic
80	10.3	24	24.5	0.6	0.3	Ecuador
70	31.1	6.1	108.9	2.0	0.2	Egypt
76	1.7	0.3	41.9	2.0	0.2	El Salvador
43	-	-	177.7	22.3	1.6	Equatorial Guinea
50	-	-	173.7	45.6	3.3	Eritrea
78	-	-	250	<0.1	0.6	Estonia
58	5.0	1.3	137.0	27.9	3.3	Eswatini
38	2.1	0.3	144.4	43.7	3.3	Ethiopia
61	-	-	99.0	2.9	0.3	Fiji
83	6.7	0.7	7.2	<0.1	0.4	Finland
84	-	-	9.7	0.3	0.3	France
49	3.8	0.7	76.0	20.6	1.3	Gabon
48	0.2	<0.1	237.0	29.7	1.8	Gambia
65	31.2	9.7	101.8	0.2	0.6	Georgia
86	-	-	16.0	0.6	0.3	Germany
45	1.3	0.1	203.8	18.8	1.7	Ghana
78	16.9	1.6	276	<0.1	0.2	Greece
70	-	-	45.3	0.3	<0.1	Grenada
57	11.4	3.8	73.8	6.3	1.6	Guatemala
37	7.0	1.2	243.3	44.6	2.3	Guinea
37	-	-	214.7	35.3	2.3	Guinea-Bissau
74	-	-	107.8	3.6	<0.1	Guyana
47	11.5	4.0	184.3	23.8	1.4	Haiti
63	-	-	60.7	3.6	0.5	Honduras
73	-	-	38.8	0.2	0.5	Hungary
87	-	-	8.7	0.1	1.0	Iceland
61	17.3	6.5	184.3	18.6	0.3	India
59	4.5	0.9	112.4	7.1	0.3	Indonesia
77	15.3	3.5	50.9	1.0	1.0	Iran (Islamic Republic of)
55	3.7	0.9	75.1	3.0	0.2	Iraq
83	-	-	11.9	<0.1	0.3	Ireland
84	10.7	1.8	15.4	0.2	<0.1	Israel
83	-	-	15.0	0.1	0.3	Italy
70	-	-	25.4	0.6	<0.1	Jamaica
85	10.5	1.9	11.9	0.2	0.2	Japan
60	-	-	51.2	0.6	0.5	Jordan
76	2.5	0.1	62.7	0.4	1.9	Kazakhstan
56	5.0	1.3	78.1	51.2	2.4	Kenya
51	-	-	140.2	16.7	2.6	Kiribati
70	-	-	103.8	<0.1	0.4	Kuwait
70	3.5	0.7	110.7	0.8	0.9	Kyrgyzstan
50	-	-	188.5	11.3	0.6	Lao People's Democratic Republic
72	21.4	5.7	41.3	<0.1	1.2	Latvia
72	26.6	6.3	51.4	0.8	0.6	Lebanon
48	-	-	177.6	44.4	5.2	Lesotho
42	6.8	1.1	170.2	41.5	1.7	Liberia
60	-	-	71.9	0.6	0.8	Libya
70	-	-	34.0	<0.1	1.7	Lithuania
86	3.5	0.3	11.6	<0.1	0.2	Luxembourg
35	2.9	0.6	159.6	30.2	2.1	Madagascar
48	4.4	1.0	115.0	28.3	1.7	Malawi

	3.4		3.5	3.6	3.7		
	Probability of dying from any of CVD, cancer, diabetes, CRD between age 30 and exact age 70 ^k (%)	Suicide mortality rate ^k (per 100 000 population)	Total alcohol per capita (\geq 15 years of age) consumption ^l (litres of pure alcohol)	Road traffic mortality rate ^k (per 100 000 population)	Proportion of women of reproductive age who have their need for family planning satisfied with modern methods ^m (%)	Adolescent birth rate ⁿ (per 1000 women aged 15–19 years)	Adolescent birth rate ⁿ (per 1000 women aged 10–14 years)
Data type	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Primary data	Primary data
Member State	2019	2019	2019	2019	2012-2020	2012-2020	2012-2020
Malaysia	18.4	5.7	0.9	22.5	-	8.6	0.1
Maldives	11.6	2.7	2.8	1.6	29.2	5.9	0.1
Mali	22.3	4.1	1.3	22.7	41.2	164.0	6.8
Malta	10.5	6.1	8.3	4.1	-	12.0	0.1
Marshall Islands	-	-	-	-	-	-	-
Mauritania	16.1	3.1	0.0	25.6	30.4 ^{ao}	84.0	8.4
Mauritius	23.2	9.5	4.8	12.2	40.8 ^{ao}	23.7	0.6
Mexico	15.6	5.3	5.0	12.8	79.8	70.5	0.8
Micronesia (Federated States of)	46.3	28.2	2.5	0.2	-	-	-
Monaco	-	-	-	-	-	-	-
Mongolia	35.0	17.9	5.9	21.0	63.6	26.9	0.1
Montenegro	22.3	21.0	12.2	7.6	32.9 ^{ao}	9.6	0.1
Morocco	24.1	7.2	0.5	17.0	72.0 ^{ao}	22.5	0.0
Mozambique	30.6	13.6	2.7	30.0	55.5	180.0	5.5
Myanmar	24.9	2.9	2.1	20.4	74.9	21.3	0.1
Namibia	22.6	9.7	3.1	34.8	80.4	63.9	4.0
Nauru	-	-	4.2	-	-	94.0	-
Nepal	21.5	9.0	0.6	16.3	61.9 ^{ao}	63.0	0.4
Netherlands	10.3	11.8	9.7	4.0	-	2.5	0.0
New Zealand	10.3	11.0	10.7	9.6	-	12.6	0.0
Nicaragua	15.3	4.3	5.1	16.9	89.8 ^{ao}	102.6	-
Niger	21.0	5.3	0.5	25.5	45.5 ^{ao}	154.0	4.0
Nigeria	16.9	3.5	6.2	20.7	35.6	106.0	2.0
Niue	-	-	9.9	-	-	-	-
North Macedonia	22.7	9.4	6.4	5.1	29.6 ^{ao}	15.6	0.3
Norway	8.7	11.8	7.1	2.1	-	2.3	0.0
Oman	21.5	4.8	0.9	10.6	39.6 ^{ao}	7.5	0.1
Pakistan	29.4	8.9	0.3	13.0	48.6 ^{ao}	54.0	0.4
Palau	-	-	-	-	-	33.8	0.0
Panama	10.7	2.9	7.8	13.9	65.2	67.8	2.6
Papua New Guinea	36.0	3.0	2.1	12.6	49.2	68.0	1.1
Paraguay	16.0	6.0	7.0	22.0	78.9	72.0	0.7
Peru	9.7	2.8	6.8	13.6	66.6 ^{ao}	49.7	0.8
Philippines	24.5	2.1	7.0	12.0	56.0	35.6	0.5
Poland	17.0	11.3	11.9	9.4	-	9.4	0.0
Portugal	11.0	11.5	12.1	8.2	-	7.6	0.1
Qatar	10.7	5.8	1.5	7.3	68.9 ^{ao}	7.2	0.0
Republic of Korea	7.3	28.6	8.5	8.6	-	0.9	0.0
Republic of Moldova	24.1	14.7	12.9	7.3	63.9	18.4	0.1
Romania	21.0	9.7	12.3	10.3	-	37.2	1.4
Russian Federation	24.2	25.1	10.5	12.0	-	16.2	0.1
Rwanda	20.2	5.6	8.0	29.4	62.9	31.8	0.3
Saint Kitts and Nevis	-	-	6.3	-	-	-	-
Saint Lucia	17.7	7.9	9.6	29.8	72.0 ^{ao}	25.3	0.9
Saint Vincent and the Grenadines	20.7	1.0	7.2	7.4	-	47.2	0.7
Samoa	31.2	12.6	2.8	13.0	39.4 ^{ao}	54.9	0.4
San Marino	-	-	-	-	-	-	0.0
Sao Tome and Principe	21.0	1.5	5.8	27.9	57.7	86.1	0.4
Saudi Arabia	20.9	6.0	0.0	35.9	-	-	-
Senegal	19.5	6.0	0.7	23.5	53.2	71.3	0.9
Serbia	22.0	11.4	8.9	7.5	38.4 ^{ao}	12.0	0.3
Seychelles	21.1	8.1	8.8	11.3	-	68.3	1.1

3.8			3.9			
UHC: Service coverage index ^a	Population with household expenditures on health > 10% of total household expenditure or income ^b (%)	Population with household expenditures on health > 25% of total household expenditure or income ^b (%)	Age-standardized mortality rate attributed to household and ambient air pollution ^a (per 100 000 population)	Mortality rate attributed to exposure to unsafe WASH services ^c (per 100 000 population)	Mortality rate from unintentional poisoning ^k (per 100 000 population)	
Comparable estimates	Primary data	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	
2019	2012-2020	2012-2020	2016	2016	2019	Member State
76	1.5	0.1	47.4	0.4	0.7	Malaysia
69	10.3	4.1	25.6	0.3	<0.1	Maldives
42	21	<0.1	209.1	70.7	2.9	Mali
81	15.9	2.8	20.2	<0.1	0.1	Malta
62	-	-	-	-	-	Marshall Islands
40	11.7	3.0	169.5	38.6	1.5	Mauritania
65	8.2	1.9	38.3	0.6	0.8	Mauritius
74	1.6	0.2	36.7	1.1	0.4	Mexico
48	-	-	151.8	3.6	0.9	Micronesia (Federated States of)
85	-	-	-	-	-	Monaco
63	7.2	1.3	155.9	1.3	2.8	Mongolia
67	10.3	0.8	78.6	<0.1	0.6	Montenegro
73	20.5	6.4	49.1	1.9	0.7	Morocco
47	1.6	0.4	110.0	27.6	3.7	Mozambique
61	12.7	3.5	156.4	12.6	1.3	Myanmar
62	1.5	0.3	145.0	18.3	1.9	Namibia
54	-	-	-	-	-	Nauru
53	10.7	2.1	193.8	19.8	1.7	Nepal
86	-	-	13.7	0.2	0.1	Netherlands
86	-	-	7.2	0.1	0.2	New Zealand
70	24.7	9.1	55.7	2.2	0.3	Nicaragua
37	6.5	0.9	251.8	70.8	3.3	Niger
44	15.8	4.1	307.4	68.6	3.3	Nigeria
55	-	-	-	-	-	Niue
68	-	-	82.2	<0.1	0.5	North Macedonia
86	-	-	8.6	0.2	0.3	Norway
69	-	-	53.9	<0.1	0.9	Oman
45	4.5	0.5	173.6	19.6	1.6	Pakistan
59	-	-	-	-	-	Palau
77	6.2	0.7	25.8	1.9	<0.1	Panama
33	-	-	152.0	16.3	1.4	Papua New Guinea
61	7.1	1.9	57.5	1.5	0.2	Paraguay
78	8.4	1.1	63.9	1.3	0.4	Peru
55	6.3	1.4	185.2	4.2	0.2	Philippines
74	14.1	1.3	37.9	<0.1	0.5	Poland
84	-	-	9.8	0.2	0.3	Portugal
74	-	-	47.4	<0.1	0.3	Qatar
87	12.0	2.9	20.5	1.8	0.2	Republic of Korea
67	18.7	3.6	78.3	<0.1	5.5	Republic of Moldova
71	13.4	2.2	59.3	0.4	1.9	Romania
75	7.7	0.9	49.4	0.1	3.8	Russian Federation
54	1.1	0.1	121.4	19.3	1.7	Rwanda
72	-	-	-	-	-	Saint Kitts and Nevis
72	6.6	1.9	30.0	0.6	0.1	Saint Lucia
73	-	-	47.6	1.3	<0.1	Saint Vincent and the Grenadines
53	-	-	85.0	1.5	0.4	Samoa
82	-	-	-	-	-	San Marino
60	4.8	1.1	162.4	11.4	0.7	Sao Tome and Principe
73	1.3	0.6	83.7	<0.1	0.8	Saudi Arabia
49	-	-	160.7	23.9	1.9	Senegal
71	8.1	0.5	62.5	0.7	0.3	Serbia
70	2.6	1.3	49.3	0.2	0.5	Seychelles

	3.4	3.5	3.6	3.7			
	Probability of dying from any of CVD, cancer, diabetes, CRD between age 30 and exact age 70 ^k (%)	Suicide mortality rate ^k (per 100 000 population)	Total alcohol per capita (≥ 15 years of age) consumption ^l (litres of pure alcohol)	Road traffic mortality rate ^k (per 100 000 population)	Proportion of women of reproductive age who have their need for family planning satisfied with modern methods ^m (%)	Adolescent birth rate ⁿ (per 1000 women aged 15–19 years)	Adolescent birth rate ⁿ (per 1000 women aged 10–14 years)
Data type	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Primary data	Primary data
Member State	2019	2019	2019	2019	2012-2020	2012-2020	2012-2020
Sierra Leone	23.5	6.7	5.3	33.0	53.0	102.0	3.9
Singapore	9.5	11.2	2.0	21	-	21	0.0
Slovakia	15.5	12.1	11.1	6.1	-	26.9	0.3
Slovenia	11.4	19.8	12.1	5.1	-	4.3	0.1
Solomon Islands	39.2	14.7	1.7	16.5	38.0 ^{ao}	78.0	-
Somalia	30.4	7.9	0.0	27.4	21 ^{ao}	118.0	12
South Africa	24.1	23.5	9.5	22.2	79.7	43.9	12
South Sudan	16.8	3.9	-	36.7	-	-	-
Spain	9.6	7.7	12.7	3.9	-	6.0	0.1
Sri Lanka	13.2	14.0	2.9	19.7	74.3 ^{ao}	21.0	0.0
Sudan	22.8	3.8	-	26.8	30.1 ^{ao}	86.8	2.3
Suriname	22.7	25.4	7.4	15.3	57.5	55.8	2.0
Sweden	8.4	14.7	9.0	3.1	86.7 ^{ao}	3.4	0.0
Switzerland	7.9	14.5	11.2	2.2	-	2.0	0.0
Syrian Arab Republic	22.1	2.0	0.2	14.9	-	-	-
Tajikistan	28.3	4.3	0.9	15.7	52.1 ^{ao}	45.6	0.0
Thailand	13.7	8.8	8.5	32.2	88.2	31.7	0.0
Timor-Leste	19.9	3.7	0.5	11.9	45.9	41.9	0.4
Togo	23.9	8.8	2.7	28.7	39.6	79.0	1.5
Tonga	24.8	3.8	0.4	33.0	49.9 ^{ao}	-	0.0
Trinidad and Tobago	17.1	8.7	6.5	9.3	-	-	-
Tunisia	15.7	3.3	2.0	16.5	62.7 ^{ao}	6.3	0.0
Turkey	15.6	2.4	1.8	6.7	60.1 ^{ao}	14.7	0.0
Turkmenistan	27.7	5.7	3.1	13.5	79.6 ^{ao}	22.4	0.0
Tuvalu	-	-	1.3	-	-	43.8	0.0
Uganda	21.2	4.6	12.5	29.4	55.1	127.9	1.1
Ukraine	25.5	21.6	8.3	10.2	68.0 ^{ao}	14.7	0.1
United Arab Emirates	18.5	6.4	3.8	8.9	-	3.7	0.0
United Kingdom	10.3	7.9	11.4	3.2	86.5 ^{ao,ap}	10.9	0.0
United Republic of Tanzania	17.4	4.3	12.0	31.1	55.1	138.9	15
United States of America	13.6	16.1	10.0	12.7	78.4 ^{ao}	16.7	0.3
Uruguay	16.5	21.2	6.9	14.8	-	32.6	0.7
Uzbekistan	25.3	8.0	2.6	11.7	-	18.9	0.0
Vanuatu	39.7	18.0	2.1	14.9	50.7 ^{ao}	81.0	-
Venezuela (Bolivarian Republic of)	14.8	2.0	3.6	39.0	-	83.8	3.2
Viet Nam	21.2	7.5	7.9	30.6	69.6	29.0	0.0
Yemen	27.6	5.8	<0.1	29.4	40.5 ^{ao}	67.2	1.0
Zambia	24.6	7.3	4.5	20.5	65.9	135.0	2.9
Zimbabwe	28.4	14.1	4.5	41.2	84.8	107.9	1.1
WHO region	2019	2019	2019	2019	2020	2015-2020	
African Region	20.8	6.9	4.8	27.2	56.3	1021	-
Region of the Americas	14.0	9.6	7.6	15.3	82.3	49.9	-
South-East Asia Region	21.6	10.1	4.3	15.8	75.1	26.1	-
European Region	16.3	12.8	9.5	7.4	76.6	17.1	-
Eastern Mediterranean Region	24.5	5.8	0.5	17.8	61.3	46.5	-
Western Pacific Region	15.6	8.7	6.5	16.4	87.2	14.4	-
Global	17.8	9.2	5.8	16.7	76.7	42.5	-

3.8			3.9			
UHC: Service coverage index ^a	Population with household expenditures on health > 10% of total household expenditure or income ^b (%)	Population with household expenditures on health > 25% of total household expenditure or income ^b (%)	Age-standardized mortality rate attributed to household and ambient air pollution ^a (per 100 000 population)	Mortality rate attributed to exposure to unsafe WASH services ^c (per 100 000 population)	Mortality rate from unintentional poisoning ^k (per 100 000 population)	
Comparable estimates	Primary data	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	
2019	2012-2020	2012-2020	2016	2016	2019	Member State
39	16.4	3.0	324.1	81.3	2.8	Sierra Leone
86	9.0	1.5	25.9	<0.1	<0.1	Singapore
77	2.6	<0.1	33.5	<0.1	0.5	Slovakia
80	3.7	0.3	22.6	<0.1	0.2	Slovenia
50	-	-	137.0	6.2	2.3	Solomon Islands
27	0.1	0.0	212.8	86.6	4.9	Somalia
67	1.0	0.1	86.7	13.7	1.7	South Africa
32	13.4	4.0	165.1	63.3	2.3	South Sudan
86	7.9	1.1	9.9	0.2	0.4	Spain
67	5.4	0.9	79.8	1.2	0.4	Sri Lanka
44	-	-	184.9	17.3	1.7	Sudan
67	4.9	1.4	56.7	2.0	0.3	Suriname
87	-	-	7.2	0.2	0.2	Sweden
87	-	-	10.1	0.1	0.2	Switzerland
56	-	-	75.2	3.7	0.6	Syrian Arab Republic
66	10.2	2.2	129.3	2.7	0.4	Tajikistan
83	1.9	0.3	61.5	3.5	0.2	Thailand
53	2.6	0.6	139.8	9.9	0.4	Timor-Leste
44	13.4	2.4	249.6	41.6	1.9	Togo
56	-	-	73.3	1.4	1.1	Tonga
73	3.9	1.9	38.6	0.1	0.1	Trinidad and Tobago
70	16.7	2.4	56.1	1.0	0.7	Tunisia
79	3.2	0.4	46.6	0.3	0.4	Turkey
73	-	-	79.3	4.0	0.6	Turkmenistan
52	-	-	-	-	-	Tuvalu
50	15.3	3.8	155.7	31.6	1.7	Uganda
73	8.3	1.1	70.7	0.3	2.5	Ukraine
78	0.4	-	54.7	<0.1	0.4	United Arab Emirates
88	2.3	0.4	13.8	0.2	0.3	United Kingdom
46	4.3	0.8	139.0	38.4	2.0	United Republic of Tanzania
83	4.3	0.8	13.3	0.2	0.5	United States of America
79	2.3	0.2	17.5	0.4	0.5	Uruguay
71	-	-	81.1	0.4	0.8	Uzbekistan
52	-	-	135.6	10.4	0.7	Vanuatu
70	-	-	34.6	1.4	0.2	Venezuela (Bolivarian Republic of)
70	8.5	1.7	64.5	1.6	0.9	Viet Nam
44	15.8	4.2	194.2	10.2	1.8	Yemen
55	-	-	127.2	34.9	2.6	Zambia
55	11.8	7.0	133.0	24.6	3.5	Zimbabwe
2019	2017	2017	2016	2016	2019	WHO region
46	8.4	2.0	180.9	45.8	2.5	African Region
77	7.1	1.3	29.7	1.1	0.4	Region of the Americas
61	15.2	5.4	165.8	15.4	0.3	South-East Asia Region
79	6.9	1.0	36.3	0.3	1.1	European Region
57	12.6	2.5	125.0	10.6	1.1	Eastern Mediterranean Region
80	20.2	6.4	102.8	1.0	1.4	Western Pacific Region
67	13.2	3.8	114.1	11.7	1.1	Global

Table 3. Annex 2-3

	3.a	3.b					
	Age-standardized prevalence of tobacco use among persons 15 years and older ^s (%)	Diphtheria-tetanus-pertussis (DTP3) immunization coverage among 1-year-olds ^t (%)	Measles-containing-vaccine second-dose (MCV2) immunization coverage by the nationally recommended age ^t (%)	Pneumococcal conjugate 3rd dose (PCV3) immunization coverage among 1-year old ^t (%)	Human papillomavirus (HPV) immunization coverage estimates among 15-year-old girls ^t (%)	Total net official development assistance to medical research and basic health sectors per capita ^u (US\$), by recipient country	Proportion of health facilities with a core set of relevant essential medicines available and affordable on a sustainable basis ^v (%)
Data type	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Primary data
Member State	2020	2020	2020	2020	2020	2020	2012-2019
Afghanistan	23.3	70	43	68	-	6.15	-
Albania	22.4 ^{aq}	98	94	92	-	2.03	-
Algeria	21.0	-	-	-	-	1.26	-
Andorra	31.8 ^{aq}	99	93	96	77	-	-
Angola	-	51	41	47	-	1.06	-
Antigua and Barbuda	-	96	78	-	-	0.41	-
Argentina	24.5	74	71	75	46	0.04	-
Armenia	25.5	91	94	92	8	3.21	-
Australia	13.6 ^{aq}	95	94	97	66	-	-
Austria	26.4 ^{aq}	85	84	-	-	-	-
Azerbaijan	24.0	79	79	79	-	0.59	-
Bahamas	10.6	83	83	83	4	-	-
Bahrain	14.9 ^{aq}	98	99	99	-	-	-
Bangladesh	34.7	98	93	99	-	2.81	-
Barbados	8.5	85	78	86	7	-	-
Belarus	30.5 ^{aq}	97	98	-	-	0.38	-
Belgium	23.4	97	85	94	-	-	-
Belize	8.5 ^{aq}	79	87	-	11	3.71	-
Benin	6.9	72	-	68	-	5.80	-
Bhutan	-	95	92	90	81	21.11	-
Bolivia (Plurinational State of)	12.7	68	46	68	24	2.28	23.1 ^{ar}
Bosnia and Herzegovina	35.0 ^{aq}	-	-	-	-	4.46	-
Botswana	19.4	95	66	90	-	3.08	-
Brazil	12.8	77	44	79	72	0.17	-
Brunei Darussalam	16.2 ^{aq}	99	97	-	86	-	-
Bulgaria	39.0 ^{aq}	91	84	85	2	-	-
Burkina Faso	14.3	91	71	91	-	6.34	0.0 ^{ar}
Burundi	11.8	93	83	93	-	8.09	0.0 ^{ar}
Cabo Verde	11.4	93	86	-	-	9.76	-
Cambodia	21.1	92	80	90	-	10.71	-
Cameroon	7.3	69	28	69	-	3.73	-
Canada	13.0	91	83	84	87	-	-
Central African Republic	-	42	-	40	-	9.21	-
Chad	8.3	52	-	-	-	5.11	-
Chile	29.2 ^{aq}	93	83	89	74	-	36.4 ^{ar}
China	25.6 ^{aq}	99	99	-	-	0.06	-
Colombia	8.5	88	88	89	34	0.40	8.3 ^{ar}
Comoros	20.3	87	-	-	-	17.56	-
Congo	14.5	73	29	71	-	3.67	0.0 ^{ar}
Cook Islands	24.0 ^{aq}	-	-	-	-	-	-
Costa Rica	8.8	95	93	95	77	0.95	-
Côte d'Ivoire	9.4	80	-	79	13	6.51	-
Croatia	36.9 ^{aq}	94	91	-	-	-	-
Cuba	17.9	99	98	-	-	0.97	-
Cyprus	35.1 ^{aq}	-	-	-	-	-	-
Czechia	30.7 ^{aq}	97	90	-	-	-	-
Democratic People's Republic of Korea	17.4 ^{aq}	97	99	-	-	0.36	-
Democratic Republic of the Congo	12.8	57	-	58	-	6.70	-
Denmark	17.5 ^{aq}	97	90	96	70	-	-

3.c				3.d			1.a
Density of medical doctors ^w (per 10 000 population)	Density of nursing and midwifery personnel ^w (per 10 000 population)	Density of dentists ^w (per 10 000 population)	Density of pharmacists ^w (per 10 000 population)	Average of 13 International Health Regulations core capacity scores ^x	Proportion of bloodstream infections due to methicillin-resistant <i>Staphylococcus aureus</i> ^y (%)	Proportion of bloodstream infection due to <i>Escherichia coli</i> resistant to 3rd-generation cephalosporin ^y (%)	Domestic general government health expenditure (GGHE-D) as percentage of general government expenditure (GGE) ^z (%)
Primary data	Primary data	Primary data	Primary data	Primary data	Primary data	Primary data	Comparable estimates
2012-2020	2012-2020	2012-2020	2012-2020	2021	2020	2020	2019
2.5	4.5	0.7	0.3	41	-	-	3.9
18.8	60.5	10.3	10.8	-	-	-	-
172	15.5	3.7	4.5	77	-	-	10.7
333	401	8.2	10.1	-	-	-	16.5
2.1	4.1	0.5	0.7	40	-	-	5.4
27.7	90.8	0.4	-	52	-	-	11.3
40.6	26.0	15.3	-	65	38	21	15.5
44.0	49.5	5.6	0.5	84	-	-	5.7
41.3	131.4	6.2	9.0	88	18	13	16.2
52.9	105.6	5.7	7.2	71	5	9	15.7
31.7	64.3	2.7	2.0	-	-	-	3.9
19.4	45.7	2.6	-	55	-	-	15.3
9.3	24.9	1.0	1.6	80	34	59	7.2
6.7	4.9	0.7	1.8	61	0	71	3.0
24.9	30.6	3.1	-	-	-	-	10.6
454	110.0	6.2	3.6	94	-	-	11.0
60.8	200.8	11.0	19.8	-	7	10	15.7
10.8	23.4	1.4	6.8	46	-	-	12.2
0.6	3.0	<0.1	0.3	39	-	-	3.7
5.0	20.8	0.9	0.7	43	12	54	10.4
10.3	15.6	1.8	2.2	56	-	-	13.7
21.6	57.3	2.4	1.3	-	23	24	15.4
3.8	54.6	0.7	2.2	34	-	-	14.3
23.1	74.0	6.4	6.8	87	-	-	10.5
16.1	59.0	2.5	1.7	-	13	17	6.8
42.1	47.9	14.0	8.4	71	-	-	11.6
0.9	9.3	<0.1	0.2	54	100	64	9.6
0.7	6.5	<0.1	0.1	38	-	-	8.5
8.3	13.0	2.2	3.2	57	-	-	10.4
1.9	10.1	0.9	0.3	57	68	74	7.0
1.3	3.6	0.1	<0.1	41	-	-	0.6
24.4	110.7	6.6	11.1	97	-	-	18.6
0.7	2.6	<0.1	<0.1	31	-	-	4.8
0.6	2.0	<0.1	<0.1	40	-	-	5.2
28.4	43.5	14.0	6.1	72	-	-	18.1
22.3	30.8	4.5	3.2	94	-	-	8.8
23.3	14.6	10.5	1.8	69	-	-	16.9
2.6	14.8	0.4	0.7	41	-	-	4.1
1.0	9.7	<0.1	0.3	51	-	-	3.5
14.1	80.0	3.4	0.6	-	-	-	7.9
33.0	38.0	11.5	11.9	67	-	-	24.1
1.6	6.6	0.1	0.4	20	72	90	5.5
34.7	81.2	12.2	7.2	75	50	18	12.1
84.2	75.6	16.7	-	-	-	-	15.9
31.4	52.5	8.0	6.5	63	50	52	9.9
41.5	89.3	7.3	7.2	-	9	13	15.4
36.8	44.5	2.2	4.0	77	-	-	-
3.8	11.1	<0.1	0.2	43	-	-	4.4
42.2	1054	7.2	5.4	95	2	7	16.8
							Denmark

	3.a	3.b					
	Age-standardized prevalence of tobacco use among persons 15 years and older ^s (%)	Diphtheria-tetanus-pertussis (DTP3) immunization coverage among 1-year-olds ^t (%)	Measles-containing-vaccine second-dose (MCV2) immunization coverage by the nationally recommended age ^c (%)	Pneumococcal conjugate 3rd dose (PCV3) immunization coverage among 1-year old ^t (%)	Human papillomavirus (HPV) immunization coverage estimates among 15 year-old girls ^t (%)	Total net official development assistance to medical research and basic health sectors per capita ^a (US\$), by recipient country	Proportion of health facilities with a core set of relevant essential medicines available and affordable on a sustainable basis ^v (%)
Data type	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Primary data
Member State	2020	2020	2020	2020	2020	2020	2012-2019
Djibouti	-	70	60	70	-	14.02	-
Dominica	-	97	90	-	69	13.42	-
Dominican Republic	10.6	82	55	69	7	0.84	-
Ecuador	11.3	70	70	76	36	0.67	50.0 ^{ar}
Egypt	24.3	94	94	-	-	0.33	-
El Salvador	7.9 ^{aq}	72	56	78	-	2.00	-
Equatorial Guinea	-	53	-	-	-	0.59	-
Eritrea	7.5	95	85	95	-	6.18	-
Estonia	29.7	91	87	-	55	-	-
Eswatini	9.2	83	70	83	-	3.24	-
Ethiopia	51	71	46	67	76	3.17	-
Fiji	23.1 ^{aq}	99	94	99	89	13.73	-
Finland	21.6	91	93	89	-	-	-
France	33.4 ^{aq}	-	-	-	33	-	-
Gabon	-	63	-	-	-	3.13	-
Gambia	11.1	-	-	-	-	15.37	-
Georgia	31.7	88	77	82	22	1.99	-
Germany	22.0 ^{aq}	93	93	83	43	-	-
Ghana	3.5	94	79	95	-	4.09	12.5 ^{ar}
Greece	33.5	99	83	96	-	-	-
Grenada	-	72	79	-	32	9.26	-
Guatemala	10.9	83	79	86	20	1.45	-
Guinea	-	47	-	-	-	5.40	12.5 ^{ar}
Guinea-Bissau	9.0	74	-	74	-	15.44	-
Guyana	12.1	99	97	89	25	1.99	-
Haiti	7.7	51	41	51	-	6.25	-
Honduras	-	80	79	80	47	7.17	-
Hungary	31.8 ^{aq}	99	99	99	-	-	-
Iceland	12.0 ^{aq}	93	93	93	91	-	-
India	27.2	85	81	21	-	0.26	-
Indonesia	37.6	77	49	4	7	0.50	-
Iran (Islamic Republic of)	13.6	99	98	-	-	0.27	-
Iraq	18.5	74	93	0	-	198	-
Ireland	20.8 ^{aq}	94	-	86	77	-	-
Israel	21.2 ^{aq}	98	96	94	55	-	-
Italy	23.1 ^{aq}	94	86	91	27	-	-
Jamaica	9.4 ^{aq}	96	89	-	3	1.49	-
Japan	20.1 ^{aq}	96	95	95	1	-	-
Jordan	34.8 ^{aq}	77	90	-	-	11.29	-
Kazakhstan	23.2	88	91	89	-	0.39	-
Kenya	11.1	89	49	90	16	4.02	-
Kiribati	40.6 ^{aq}	92	57	91	-	58.92	-
Kuwait	17.9	-	-	-	-	-	-
Kyrgyzstan	25.4	87	93	90	-	3.77	0.0 ^{ar}
Lao People's Democratic Republic	31.8	79	47	77	-	8.61	25.3
Latvia	37.0	99	94	91	57	-	-
Lebanon	38.2	71	64	74	-	12.30	52.5
Lesotho	24.3	87	69	87	-	2.88	-
Liberia	8.2	65	30	65	18	10.02	-
Libya	-	73	72	73	-	4.77	-
Lithuania	32.0	91	91	83	68	-	-
Luxembourg	21.1 ^{aq}	99	90	96	-	-	-

3.c				3.d			1.a	
Density of medical doctors ^w (per 10 000 population)	Density of nursing and midwifery personnel ^w (per 10 000 population)	Density of dentists ^w (per 10 000 population)	Density of pharmacists ^w (per 10 000 population)	Average of 13 International Health Regulations core capacity scores ^x	Proportion of bloodstream infections due methicillin-resistant Staphylococcus aureus ^y (%)	Proportion of bloodstream infection due to Escherichia coli resistant to 3rd-generation cephalosporin ^y (%)	Domestic general government health expenditure (GGHE-D) as percentage of general government expenditure (GGE) ^z (%)	
Primary data	Primary data	Primary data	Primary data	Primary data	Primary data	Primary data	Comparable estimates	
2012-2020	2012-2020	2012-2020	2012-2020	2021	2020	2020	2019	Member State
2.2	7.3	0.2	2.3	41	0	0	4.3	Djibouti
11.0	61.0	1.1	-	63	-	-	7.6	Dominica
14.5	14.6	2.3	1.2	65	-	-	16.3	Dominican Republic
22.2	25.1	3.0	0.4	66	-	-	13.3	Ecuador
7.5	19.3	2.0	4.6	86	100	90	4.7	Egypt
28.7	18.3	8.7	6.5	94	-	-	16.9	El Salvador
4.0	3.1	-	<0.1	34	-	-	3.9	Equatorial Guinea
0.8	14.4	0.5	1.3	41	-	-	2.4	Eritrea
34.7	661	9.8	7.2	-	-	-	12.9	Estonia
1.4	251	0.2	0.4	41	2	-	10.0	Eswatini
11	7.8	<0.1	0.5	72	60	67	4.8	Ethiopia
8.6	39.6	1.2	1.1	54	-	-	8.3	Fiji
46.4	223.1	10.8	19.2	85	1	7	13.8	Finland
32.7	117.8	6.5	10.6	86	12	10	15.1	France
6.5	21.1	0.2	1.1	33	-	-	9.6	Gabon
0.8	9.5	<0.1	<0.1	44	-	-	4.4	Gambia
51.1	55.5	6.2	0.9	63	20	44	9.4	Georgia
44.3	141.9	8.5	6.6	85	6	10	20.1	Germany
1.7	36.2	0.2	0.4	46	-	64	6.5	Ghana
63.1	37.3	12.9	10.9	71	41	25	7.9	Greece
14.4	62.8	2.0	6.8	-	-	-	9.4	Grenada
12.4	22.4	2.5	1.2	45	-	-	17.6	Guatemala
2.2	5.8	<0.1	0.2	47	-	-	6.2	Guinea
2.0	7.9	<0.1	<0.1	46	-	-	2.8	Guinea-Bissau
14.2	35.3	0.7	0.6	93	-	-	10.3	Guyana
2.3	4.0	0.2	0.3	54	-	-	5.4	Haiti
5.0	7.3	0.3	-	58	-	-	11.1	Honduras
60.6	69.2	7.4	8.4	68	-	-	9.4	Hungary
41.4	167.8	8.5	6.1	76	-	-	16.4	Iceland
7.4	17.5	1.6	8.7	84	65	87	3.4	India
6.2	39.5	1.2	0.9	64	36	76	8.7	Indonesia
158	20.8	4.5	2.9	86	44	69	214	Iran (Islamic Republic of)
9.7	23.9	3.5	4.1	46	86	95	6.0	Iraq
34.9	179.8	6.7	13.7	66	14	11	20.3	Ireland
36.3	119.9	11.7	9.9	-	-	-	12.1	Israel
39.5	62.7	8.4	12.1	72	37	29	13.2	Italy
5.3	9.4	0.9	0.2	88	-	-	13.3	Jamaica
24.8	119.5	8.0	18.9	98	36	21	24.2	Japan
26.6	33.5	7.8	10.4	52	58	65	12.8	Jordan
40.7	72.9	2.9	8.1	88	-	-	8.2	Kazakhstan
1.6	11.7	0.2	0.2	57	25	0	8.3	Kenya
2.0	38.3	0.7	0.3	64	-	-	7.4	Kiribati
23.4	46.8	6.7	4.9	83	100	100	8.9	Kuwait
22.1	56.0	1.9	0.4	41	-	-	7.1	Kyrgyzstan
3.5	11.9	0.8	2.3	38	50	51	4.7	Lao People's Democratic Republic
34.0	44.3	7.1	8.7	69	14	33	10.4	Latvia
22.1	16.7	10.2	12.9	66	35	56	13.4	Lebanon
4.7	32.6	0.2	1.9	37	-	-	8.8	Lesotho
0.5	19.5	<0.1	2.2	54	13	40	4.0	Liberia
20.9	65.3	8.8	6.0	45	83	62	-	Libya
50.8	100.8	14.0	12.7	82	10	16	13.2	Lithuania
30.1	121.7	9.8	7.0	60	3	11	10.9	Luxembourg

	3.a	3.b					
	Age-standardized prevalence of tobacco use among persons 15 years and older ^s (%)	Diphtheria-tetanus-pertussis (DTP3) immunization coverage among 1-year-olds ^t (%)	Measles-containing-vaccine second-dose (MCV2) immunization coverage by the nationally recommended age ^c (%)	Pneumococcal conjugate 3rd dose (PCV3) immunization coverage among 1-year old ^t (%)	Human papillomavirus (HPV) immunization coverage estimates among 15 year-old girls ^t (%)	Total net official development assistance to medical research and basic health sectors per capita ^a (US\$), by recipient country	Proportion of health facilities with a core set of relevant essential medicines available and affordable on a sustainable basis ^v (%)
Data type	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Primary data
Member State	2020	2020	2020	2020	2020	2020	2012-2019
Madagascar	27.8	68	24	65	-	5.52	-
Malawi	10.8	94	75	93	77	8.26	-
Malaysia	22.5	98	84	-	84	0.17	-
Maldives	25.2	99	96	-	68	69.47	-
Mali	8.3	70	26	66	-	6.74	0.0 ^{ar}
Malta	24.0 ^{aq}	98	99	-	85	-	-
Marshall Islands	28.5	-	-	-	17	121.42	-
Mauritania	10.7	71	-	70	-	9.77	-
Mauritius	20.2 ^{aq}	93	87	86	74	1.08	-
Mexico	13.1	74	78	75	5	0.07	-
Micronesia (Federated States of)	-	83	62	79	37	62.23	-
Monaco	-	-	-	-	-	-	-
Mongolia	29.4	96	96	92	-	7.93	26.7
Montenegro	31.4	84	76	-	-	1.64	-
Morocco	14.5	-	-	-	-	3.76	-
Mozambique	14.3	79	62	65	-	8.09	-
Myanmar	44.1	84	90	86	-	4.46	-
Namibia	15.1	-	-	-	-	1.72	-
Nauru	48.5	95	97	-	-	21.69	-
Nepal	30.4	84	74	80	-	4.03	-
Netherlands	22.2 ^{aq}	94	89	93	63	-	-
New Zealand	13.7 ^{aq}	92	91	92	67	-	-
Nicaragua	-	92	98	92	-	4.83	-
Niger	7.4	81	60	81	-	5.43	-
Nigeria	3.7	57	12	57	-	2.62	-
Niue	-	-	-	-	-	346.13	-
North Macedonia	-	84	68	30	30	1.42	-
Norway	16.2 ^{aq}	97	95	96	90	-	-
Oman	8.0	99	99	99	-	-	-
Pakistan	20.2	77	74	80	-	2.56	-
Palau	17.6 ^{aq}	96	83	75	-	454.31	-
Panama	5.0	74	74	74	44	2.09	-
Papua New Guinea	39.3 ^{aq}	39	27	39	-	12.44	-
Paraguay	11.5 ^{aq}	79	72	82	37	8.62	-
Peru	8.1 ^{aq}	72	52	74	16	0.72	69.2 ^{ar}
Philippines	22.9 ^{aq}	71	68	66	5	1.87	-
Poland	24.0	90	95	62	-	-	-
Portugal	25.4 ^{aq}	99	95	98	78	-	-
Qatar	11.8	82	90	70	-	-	-
Republic of Korea	20.8 ^{aq}	-	-	-	-	-	-
Republic of Moldova	29.0	86	93	72	40	2.92	25.0
Romania	28.0	87	75	85	-	-	-
Russian Federation	26.8	97	96	87	-	-	-
Rwanda	13.7	91	91	91	68	10.28	-
Saint Kitts and Nevis	-	99	99	-	-	-	-
Saint Lucia	-	86	71	-	74	26.32	-
Saint Vincent and the Grenadines	-	97	99	-	12	10.65	-
Samoa	25.3	79	44	-	-	52.80	-
San Marino	-	89	79	82	50	-	-
Sao Tome and Principe	5.7	-	-	-	-	19.08	-
Saudi Arabia	14.3	95	96	95	-	-	-
Senegal	6.9	91	69	92	31	6.13	7.7 ^{ar}

3.c				3.d			1.a	
Density of medical doctors ^w (per 10 000 population)	Density of nursing and midwifery personnel ^w (per 10 000 population)	Density of dentists ^w (per 10 000 population)	Density of pharmacists ^w (per 10 000 population)	Average of 13 International Health Regulations core capacity scores ^x	Proportion of bloodstream infections due methicillin-resistant <i>Staphylococcus aureus</i> ^y (%)	Proportion of bloodstream infection due to <i>Escherichia coli</i> resistant to 3rd-generation cephalosporin ^y (%)	Domestic general government health expenditure (GGHE-D) as percentage of general government expenditure (GGE) ^z (%)	
Primary data	Primary data	Primary data	Primary data	Primary data	Primary data	Primary data	Comparable estimates	
2012-2020	2012-2020	2012-2020	2012-2020	2021	2020	2020	2019	Member State
2.0	3.0	0.2	0.1	46	-	-	8.0	Madagascar
0.5	7.1	<0.1	<0.1	50	61	57	8.7	Malawi
22.9	34.8	3.1	3.5	85	17	26	8.5	Malaysia
20.5	46.6	0.9	6.5	49	-	-	19.1	Maldives
1.3	4.4	<0.1	<0.1	44	80	61	5.7	Mali
28.6	94.8	4.8	12.9	73	20	12	14.1	Malta
4.2	33.4	1.2	0.7	-	-	-	10.5	Marshall Islands
1.9	9.3	0.5	0.2	34	-	-	7.0	Mauritania
27.1	39.3	2.8	5.9	51	40	50	10.2	Mauritius
24.3	28.2	1.3	-	84	-	-	10.3	Mexico
9.4	21.5	-	-	43	-	-	5.4	Micronesia (Federated States of)
75.1	2016	10.2	26.3	-	-	-	5.7	Monaco
38.5	42.1	4.1	6.8	79	-	-	6.8	Mongolia
27.4	53.7	0.5	2.3	53	-	-	11.3	Montenegro
7.3	13.9	1.4	2.6	73	-	-	7.1	Morocco
0.8	4.8	<0.1	0.1	41	25	32	5.6	Mozambique
7.4	10.8	0.7	0.8	57	51	81	3.6	Myanmar
5.9	19.5	0.7	2.4	58	-	-	10.7	Namibia
13.5	78.5	3.7	1.9	-	-	-	6.8	Nauru
8.5	33.4	1.3	1.7	44	79	73	4.0	Nepal
40.8	116.4	5.6	2.2	84	2	7	16.0	Netherlands
36.2	117.8	6.5	7.6	85	-	-	18.7	New Zealand
16.6	15.5	0.4	1.9	78	-	-	18.3	Nicaragua
0.3	2.2	<0.1	<0.1	46	-	-	9.4	Niger
3.8	15.0	0.2	1.2	63	75	81	3.8	Nigeria
-	125.0	-	-	-	-	-	4.8	Niue
28.7	37.9	8.8	-	66	100	86	13.6	North Macedonia
50.5	184.2	9.0	8.8	95	2	5	17.5	Norway
17.7	39.4	2.9	5.7	75	32	79	8.0	Oman
11.2	4.8	1.2	1.5	52	70	82	4.9	Pakistan
17.7	64.6	3.3	2.8	47	-	-	15.8	Palau
16.3	321	3.0	2.2	76	-	-	22.7	Panama
0.7	4.5	<0.1	0.1	-	-	-	6.4	Papua New Guinea
10.5	16.6	1.6	0.3	56	-	-	14.4	Paraguay
13.7	29.8	1.9	1.0	38	47	72	15.4	Peru
7.7	54.4	2.6	3.3	62	46	36	7.6	Philippines
37.7	68.7	10.3	9.7	69	15	18	11.0	Poland
54.8	74.1	10.6	9.4	85	-	-	13.7	Portugal
24.9	72.0	6.1	8.9	92	32	40	6.5	Qatar
24.8	81.8	5.2	7.6	95	48	38	14.3	Republic of Korea
31.0	46.8	4.1	3.0	60	56	89	12.1	Republic of Moldova
29.8	73.9	8.0	9.1	-	-	-	12.7	Romania
38.2	62.3	3.5	0.4	100	29	73	10.2	Russian Federation
1.2	9.5	0.2	0.7	67	-	-	8.9	Rwanda
27.7	42.2	2.3	-	63	-	-	6.6	Saint Kitts and Nevis
6.4	31.5	1.7	4.4	59	-	-	8.2	Saint Lucia
9.4	701	1.7	-	22	-	-	9.5	Saint Vincent and the Grenadines
6.0	327	1.0	0.3	-	-	-	14.0	Samoa
61.1	821	17.8	6.7	-	-	-	23.4	San Marino
4.9	21.5	0.3	1.7	35	-	-	10.8	Sao Tome and Principe
27.4	58.2	5.6	8.6	91	100	58	11.1	Saudi Arabia
0.9	5.4	0.1	0.1	60	-	-	4.3	Senegal

	3.a	3.b					
	Age-standardized prevalence of tobacco use among persons 15 years and older ^s (%)	Diphtheria-tetanus-pertussis (DTP3) immunization coverage among 1-year-olds ^t (%)	Measles-containing-vaccine second-dose (MCV2) immunization coverage by the nationally recommended age ^c (%)	Pneumococcal conjugate 3rd dose (PCV3) immunization coverage among 1-year old ^t (%)	Human papillomavirus (HPV) immunization coverage estimates among 15 year-old girls ^t (%)	Total net official development assistance to medical research and basic health sectors per capita ^a (US\$), by recipient country	Proportion of health facilities with a core set of relevant essential medicines available and affordable on a sustainable basis ^v (%)
Data type	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Primary data
Member State	2020	2020	2020	2020	2020	2020	2012-2019
Serbia	39.8 ^{aq}	92	84	87	-	1.37	-
Seychelles	20.2	97	99	94	24	-	-
Sierra Leone	13.5	91	67	91	-	8.53	-
Singapore	16.5 ^{aq}	-	-	-	-	-	-
Slovakia	31.5 ^{aq}	97	98	96	-	-	-
Slovenia	22.0 ^{aq}	95	91	70	59	-	-
Solomon Islands	36.5 ^{aq}	94	51	93	22	28.22	-
Somalia	-	42	-	-	-	5.41	-
South Africa	20.3 ^{aq}	84	76	83	-	0.81	-
South Sudan	-	49	-	-	-	11.72	-
Spain	27.7 ^{aq}	98	94	88	79	-	-
Sri Lanka	22.0	96	96	-	51	0.86	68.3 ^{as}
Sudan	-	90	68	90	-	2.66	41.0
Suriname	-	51	50	-	4	7.41	-
Sweden	24.0	97	95	97	82	-	-
Switzerland	25.5 ^{aq}	96	93	86	63	-	-
Syrian Arab Republic	-	49	53	-	-	4.04	-
Tajikistan	-	97	97	-	-	4.57	15.0
Thailand	22.1	97	87	-	-	0.24	-
Timor-Leste	39.2	86	78	-	-	29.44	-
Togo	6.8	82	46	82	-	4.67	-
Tonga	31.0 ^{aq}	99	99	-	-	62.37	-
Trinidad and Tobago	-	-	-	-	-	-	0.0 ^{ar}
Tunisia	24.6	92	92	82	-	2.65	-
Turkey	30.7	98	93	95	-	0.35	-
Turkmenistan	5.5	98	99	23	99	0.66	-
Tuvalu	35.6 ^{aq}	95	85	-	-	82.02	-
Uganda	8.4	89	-	89	30	5.21	-
Ukraine	25.8	81	82	-	-	0.83	19.8
United Arab Emirates	-	90	92	84	29	-	-
United Kingdom	15.4 ^{aq}	93	87	91	64	-	-
United Republic of Tanzania	8.7	86	67	80	58	5.56	0.0 ^{ar}
United States of America	23.0	93	95	82	49	-	-
Uruguay	21.5	92	91	94	25	-	-
Uzbekistan	17.6	95	99	93	100	3.03	-
Vanuatu	17.8 ^{aq}	78	-	-	-	33.94	-
Venezuela (Bolivarian Republic of)	-	54	28	0	-	0.68	-
Viet Nam	24.8	94	93	-	-	1.26	-
Yemen	20.3	72	46	72	-	5.55	-
Zambia	14.4	84	66	85	69	8.43	16.7 ^{ar}
Zimbabwe	11.7	86	74	86	-	10.96	-
WHO region	2020	2020	2020	2020	2020	2020	2020
African Region	10.3	72	36	68	17	4.65	-
Region of the Americas	16.3	81	72	76	40	0.77	-
South-East Asia Region	29.0	85	78	27	2	0.72	-
European Region	25.3	94	91	79	27	1.29	-
Eastern Mediterranean Region	18.6	81	76	52	<1	2.69	-
Western Pacific Region	24.6	95	94	16	4	0.52	-
Global	22.3	83	70	49	12	-	-

3.c				3.d			1.a	
Density of medical doctors ^w (per 10 000 population)	Density of nursing and midwifery personnel ^w (per 10 000 population)	Density of dentists ^w (per 10 000 population)	Density of pharmacists ^w (per 10 000 population)	Average of 13 International Health Regulations core capacity scores ^x	Proportion of bloodstream infections due methicillin-resistant Staphylococcus aureus ^y (%)	Proportion of bloodstream infection due to Escherichia coli resistant to 3rd-generation cephalosporin ^y (%)	Domestic general government health expenditure (GGHE-D) as percentage of general government expenditure (GGE) ^z (%)	
Primary data	Primary data	Primary data	Primary data	Primary data	Primary data	Primary data	Comparable estimates	
2012-2020	2012-2020	2012-2020	2012-2020	2021	2020	2020	2019	Member State
31.1	60.9	2.1	8.1	68	-	-	12.0	Serbia
22.5	229.5	4.3	12.8	48	-	-	10.2	Seychelles
0.7	7.5	<0.1	0.2	51	-	-	5.8	Sierra Leone
24.6	62.4	4.1	5.1	94	-	31	14.5	Singapore
35.6	60.5	5.2	8.2	64	-	-	12.8	Slovakia
32.8	104.6	7.3	7.3	78	-	-	14.2	Slovenia
1.9	216	0.7	1.2	51	-	-	10.4	Solomon Islands
0.2	11	-	-	33	47	-	-	Somalia
7.9	497	11	2.7	68	20	28	15.3	South Africa
0.4	34	<0.1	0.3	54	-	-	2.1	South Sudan
44.4	61.4	8.3	12.4	80	-	-	15.3	Spain
12.3	25.0	1.1	1.0	64	53	62	9.2	Sri Lanka
2.6	11.5	2.1	0.3	44	100	100	5.6	Sudan
8.2	39.3	0.6	0.4	45	-	-	15.7	Suriname
70.9	118.5	8.2	16.2	88	5	8	18.8	Sweden
43.8	182.6	4.1	6.7	92	25	11	11.1	Switzerland
12.9	15.4	7.2	10.7	58	25	0	-	Syrian Arab Republic
17.2	47.5	1.6	-	57	-	-	6.6	Tajikistan
9.5	31.5	2.7	6.3	88	11	39	13.9	Thailand
7.6	17.5	<0.1	2.1	60	21	62	4.8	Timor-Leste
0.8	51	<0.1	0.3	57	-	-	5.4	Togo
9.5	45.4	1.4	0.8	55	-	-	7.5	Tonga
44.8	40.7	3.2	6.6	-	-	26	10.2	Trinidad and Tobago
13.0	25.1	3.1	2.3	66	14	31	12.6	Tunisia
19.3	30.5	3.9	4.1	-	-	-	9.5	Turkey
22.2	44.3	1.2	1.7	81	-	-	8.7	Turkmenistan
11.9	34.7	0.8	1.7	61	-	-	13.8	Tuvalu
1.5	16.4	<0.1	0.4	68	75	88	3.1	Uganda
29.9	66.6	6.0	0.3	65	18	50	7.7	Ukraine
26.0	57.5	6.7	12.1	96	43	54	7.4	United Arab Emirates
30.0	88.5	54	8.4	93	4	10	19.7	United Kingdom
0.5	5.7	0.1	0.3	54	50	75	9.6	United Republic of Tanzania
26.1	156.8	61	-	91	-	-	22.4	United States of America
49.4	72.2	14.5	-	66	-	-	20.1	Uruguay
23.7	112.8	1.5	0.4	65	-	-	8.3	Uzbekistan
1.7	14.2	0.3	1.2	74	-	-	5.0	Vanuatu
17.3	20.7	1.4	-	75	-	-	11.6	Venezuela (Bolivarian Republic of)
8.3	14.5	-	3.4	64	-	-	10.1	Viet Nam
5.3	7.9	0.2	1.1	55	71	100	-	Yemen
1.2	10.2	0.3	1.0	56	100	100	7.0	Zambia
2.0	21.4	0.2	1.1	59	-	-	8.7	Zimbabwe
2020	2020	2020	2020	2021	2020	2020	2019	WHO region
2.9	12.9	0.3	0.8	48	-	-	6.9	African Region
24.5	81.6	5.8	5.1	66	-	-	14.0	Region of the Americas
7.7	20.4	1.5	6.6	63	-	-	8.0	South-East Asia Region
36.6	83.4	6.2	6.5	75	-	-	12.6	European Region
11.2	16.5	2.6	3.3	65	-	-	8.6	Eastern Mediterranean Region
21.0	39.9	4.6	4.4	69	-	-	10.1	Western Pacific Region
16.4	39.5	3.3	4.7	64	36	47	10.5	Global

Table 4. Annex 2-4

	2.2				5.2		6.1	6.2	
	Prevalence of stunting in children under 5 ^{aa} (%)	Prevalence of wasting in children under 5 ^{aa} (%)	Prevalence of overweight in children under 5 ^{aa} (%)	Prevalence of anaemia in women of reproductive age (15–49 years) ^{ab} (%)	Proportion of ever-partnered women and girls aged 15–49 years subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months ^{ac} (%)	Proportion of ever-partnered women and girls aged 15–49 years subjected to physical and/or sexual violence by a current or former intimate partner in their lifetime ^{ac} (%)	Proportion of population using safely-managed drinking-water services ^{ad} (%)	Proportion of population using safely-managed sanitation services ^{ad} (%)	Proportion of population using a hand-washing facility with soap and water ^{ad} (%)
Data type	Comparable estimates	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates
Member State	2020	2012–2020	2020	2019	2018	2018	2020	2020	2020
Afghanistan	35.1	51 ^{au, av}	3.9	42.6	35	46	28	-	38
Albania	9.6	16	14.6	24.8	6	13	71	48	-
Algeria	9.3	2.7	12.9	33.3	-	-	72	18	85
Andorra	-	-	-	12.1	-	-	91	100	-
Angola	37.7	4.9	3.5	44.5	25	38	-	-	27
Antigua and Barbuda	-	-	-	17.2	-	-	-	-	-
Argentina	7.8	1.6	12.9	11.9	5	27	-	-	-
Armenia	9.1	4.4	10.8	17.3	5	10	87	69	95
Australia	2.1	-	18.5	8.5	3	23	-	74	-
Austria	-	-	-	13.0	4	15	99	100	-
Azerbaijan	16.3	3.2 ^{av}	9.4	35.1	5	14	88	-	-
Bahamas	-	-	-	14.5	-	-	-	-	-
Bahrain	5.1 ^{at}	-	6.4 ^{at}	35.4	-	-	99	91	-
Bangladesh	30.2	9.8	2.1	36.7	23	50	59	39	58
Barbados	6.6	6.8	11.4	17.0	-	-	-	-	-
Belarus	3.9	-	6.8	20.6	6	21	95	74	-
Belgium	2.3	0.4 ^{av}	5.1	13.6	5	22	100	89	-
Belize	13.3	1.8	8.0	20.5	8	24	-	-	90
Benin	31.3	5.0	2.2	55.2	15	26	-	-	12
Bhutan	22.4	-	5.2	38.6	9	22	37	65	92
Bolivia (Plurinational State of)	12.7	2.0	8.8	24.4	18	42	-	53	27
Bosnia and Herzegovina	9.1	2.3	12.8	24.4	3	12	89	-	-
Botswana	22.8	-	11.0	32.5	17	34	-	-	-
Brazil	6.1	-	7.3	16.1	6	23	86	49	-
Brunei Darussalam	12.7	-	9.3	16.7	-	-	-	-	-
Bulgaria	6.4	6.3 ^{av}	5.7	23.6	6	19	98	72	-
Burkina Faso	25.5	8.1 ^{au}	2.6	52.5	11	19	-	-	9
Burundi	57.6	4.8 ^{au}	3.1	38.5	22	40	-	-	6
Cabo Verde	9.7 ^{at}	-	-	24.3	11	19	-	-	-
Cambodia	29.9	9.7	2.1	47.1	9	19	28	-	74
Cameroon	27.2	4.3	9.6	40.6	22	39	-	-	36
Canada	-	-	11.8	10.4	3	-	99	84	-
Central African Republic	40.1	5.3 ^{aw}	2.6	46.8	21	29	6	14	22
Chad	35.0	12.9 ^{aw}	3.4	45.4	16	29	6	10	25
Chile	1.6	0.3	9.8	8.7	6	21	99	79	-
China	4.7	1.9	8.3	15.5	8	19	-	70	-
Colombia	11.5	1.6 ^{au}	5.8	21.2	12	30	73	18	68
Comoros	22.6	11.2	9.6	33.8	8	16	-	-	-
Congo	18.0	8.2	5.1	48.8	-	-	46	-	-
Cook Islands	-	-	-	27.1	14	33	-	-	-
Costa Rica	8.6	1.8	8.1	13.7	7	27	81	30	86
Côte d'Ivoire	17.8	6.1	2.8	50.9	16	27	35	-	22
Croatia	-	-	-	21.0	4	13	-	68	-
Cuba	7.0	2.0	10.0	19.3	5	14	-	37	92
Cyprus	-	-	-	13.6	3	16	100	77	-
Czechia	2.5	-	6.6	21.1	4	22	98	85	-
Democratic People's Republic of Korea	18.2	2.5	1.9	33.9	-	-	66	-	-
Democratic Republic of the Congo	40.8	6.4	4.2	42.4	36	47	19	13	19
Denmark	-	-	-	12.2	3	23	97	92	-
Djibouti	34.0	21.5	7.2	32.3	-	-	-	37	-

6.3.1	6.a	7.1	11.6	16.1	GPW13			
Proportion of safely treated domestic wastewater flows ^{ee} (%)	Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan ^{ef} (constant 2020 US\$ millions)	Proportion of population with primary reliance on clean fuels and technology ^{ag} (%)	Annual mean concentrations of fine particulate matter (PM2.5) in urban areas ^{ag} ($\mu\text{g}/\text{m}^3$)	Mortality rate due to homicide ^k (per 100 000 population)	Number of cases of poliomyelitis caused by wild poliovirus (WPV) ^{ah}	Age-standardized prevalence of hypertension among adults aged 30-79 years ^{ai} (%)	Prevalence of obesity among children and adolescents (5-19 years) ^{aj} (%)	Age-standardized prevalence of obesity among adults (18+ years) ^{aj} (%)
Comparable estimate	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Comparable estimates	Comparable estimates	Comparable estimates
2020	2020	2020	2016	2019	2021	2019	2016	2016
								Member State
-	140.29	33	63.6	8.5	1	40.2	3.1	5.5
13	4853	81	19.3	3.6	0	418	7.6	217
76	3.01	100	34.1	17	0	36.2	13.5	274
100	-	100 ^{az}	9.5	-	-	310	12.8	25.6
-	4.61	50	40.3	9.2	0	38.7	2.4	8.2
-	<0.01	100 ^{az}	211	2.4	0	42.6	11.5	18.9
36	32.58	100	12.3	6.1	0	47.5	16.9	28.3
40	15.27	98	45.5	3.8	0	473	4.8	20.2
76	-	100 ^{az}	7.3	1.0	0	29.3	12.4	29.0
99	-	100 ^{az}	12.9	0.5	0	33.8	8.6	20.1
57	48.60	97	23.2	2.5	0	41.0	4.9	19.9
-	-	100 ^{az}	17.7	38.1	0	44.5	17.3	31.6
96	-	100 ^{az}	63.3	0.3	0	38.7	17.2	29.8
16	273.85	25	64.1	2.8	0	28.8	2.6	3.6
-	-	100 ^{az}	25.4	11.3	0	418	12.3	231
56	0.32	100	18.1	2.7	0	49.2	7.6	24.5
92	-	100 ^{az}	12.8	1.3	0	30.0	7.0	22.1
-	0.37	82	20.7	37.3	0	38.0	12.2	24.1
-	42.54	4	38.8	6.2	0	312	2.6	9.6
41	12.38	80	36.9	2.4	0	434	3.3	6.4
58	110.47	86	27.3	9.5	0	28.3	9.1	20.2
47	22.22	45	30.7	1.5	0	44.2	5.4	17.9
-	0.04	65	25.0	16.9	0	44.1	6.3	18.9
33	24.44	96	11.8	32.6	0	45.0	10.8	22.1
-	-	100 ^{az}	7.4	0.7	0	46.4	14.1	14.1
79	-	-	21.1	1.2	0	45.2	10.8	25.0
-	82.80	11	54.2	9.6	0	30.5	1.0	5.6
-	41.98	<1	37.2	6.6	0	34.2	1.9	5.4
-	5.88	81	62.0	13.4	0	44.1	3.1	11.8
-	197.73	37	27.2	2.1	0	25.7	3.2	3.9
-	82.22	22	64.3	6.4	0	36.8	2.8	11.4
77	-	100 ^{az}	6.7	1.6	0	22.1	12.3	29.4
<1	15.31	<1	42.9	21.3	0	41.3	2.2	7.5
2	30.00	7	66.8	9.0	0	37.9	1.5	6.1
91	-	100 ^{az}	26.3	3.9	0	36.1	15.2	28.0
65	103.62	79	48.8	0.8	0	27.3	11.7	6.2
21	23.88	93	19.0	38.3	0	31.0	7.0	22.3
-	0.34	8	15.5	7.4	0	33.2	2.8	7.8
-	33.86	35	44.4	10.0	0	39.8	2.0	9.6
-	-	76	-	-	-	42.6	32.2	55.9
23	3.87	96	18.6	12.6	0	37.8	12.3	25.7
-	15.04	32	58.5	11.5	0	37.3	3.4	10.3
60	-	100 ^{az}	17.8	1.1	0	48.4	10.9	24.4
24	15.94	94	22.7	5.1	0	39.9	11.4	24.6
67	-	100 ^{az}	15.6	1.3	0	30.8	12.2	21.8
90	-	100 ^{az}	15.8	0.6	0	41.6	9.7	26.0
-	0.16	12	39.7	4.2	0	26.5	8.5	6.8
12	71.51	4	43.4	12.8	0	34.3	2.2	6.7
96	-	100 ^{az}	10.1	1.1	0	35.9	7.2	19.7
11	26.43	10	38.2	6.6	0	34.2	5.3	13.5
Djibouti								

	2.2				5.2		6.1	6.2	
	Prevalence of stunting in children under 5 ^{aa} (%)	Prevalence of wasting in children under 5 ^{aa} (%)	Prevalence of overweight in children under 5 ^{aa} (%)	Prevalence of anaemia in women of reproductive age (15–49 years) ^{ab} (%)	Proportion of ever-partnered women and girls aged 15–49 years subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months ^{ac} (%)	Proportion of ever-partnered women and girls aged 15–49 years subjected to physical and/or sexual violence by a current or former intimate partner in their lifetime ^{ac} (%)	Proportion of population using safely-managed drinking-water services ^{ad} (%)	Proportion of population using safely-managed sanitation services ^{ad} (%)	Proportion of population using a hand-washing facility with soap and water ^{ad} (%)
Data type	Comparable estimates	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates
Member State	2020	2012–2020	2020	2019	2018	2018	2020	2020	2020
Dominica	-	-	-	20.8	-	-	-	-	-
Dominican Republic	5.9	2.4	7.6	26.4	10	19	-	-	47
Ecuador	23.1	3.7	9.8	17.2	8	33	67	42	87
Egypt	22.3	9.5	17.8	28.3	15	30	-	67	90
El Salvador	11.2	2.1	6.6	10.6	6	21	-	-	-
Equatorial Guinea	19.7	-	9.3	44.5	29	46	-	-	-
Eritrea	49.1	-	2.1	37.0	-	-	-	-	-
Estonia	1.2	1.5	5.7	21.7	4	21	96	93	-
Eswatini	22.6	2.0	9.7	30.7	18	-	-	-	24
Ethiopia	35.3	7.2	2.6	23.9	27	37	13	7	8
Fiji	7.5	-	5.2	32.0	23	52	-	-	-
Finland	-	-	-	10.9	8	23	100	84	-
France	-	-	-	10.6	5	22	99	79	-
Gabon	14.4	3.4	7.4	52.4	22	41	-	-	-
Gambia	16.1	5.1	2.3	49.5	10	25	45	29	18
Georgia	5.7	0.6	7.6	27.5	3	10	66	34	92
Germany	1.6	0.3 ^{av}	4.1	11.7	5	21	100	97	-
Ghana	14.2	6.8	2.9	35.4	10	24	41	13	42
Greece	2.2	-	13.9	15.1	5	18	100	92	-
Grenada	-	-	-	19.2	8	28	-	-	-
Guatemala	42.8	0.8	5.1	7.4	7	21	56	-	-
Guinea	29.4	9.2	5.7	48.0	21	37	-	-	20
Guinea-Bissau	28.0	6.4 ^{aw}	3.4	48.1	-	-	24	12	18
Guyana	9.0	6.4	6.6	31.7	10	31	-	-	-
Haiti	20.4	3.7	3.7	47.7	12	23	-	-	22
Honduras	19.9	1.4	5.7	18.0	7	17	-	50	-
Hungary	-	-	-	19.7	6	19	93	88	-
Iceland	-	-	-	10.3	3	21	100	84	-
India	30.9	17.3	1.9	53.0	18	35	-	46	68
Indonesia	31.8	10.2	11.1	31.2	9	22	-	-	94
Iran (Islamic Republic of)	6.3	-	9.4 ^{at}	24.1	18	31	94	-	-
Iraq	11.6	3.0	9.0	28.6	-	26	60	43	97
Ireland	-	-	-	12.1	3	16	97	83	-
Israel	-	-	-	12.9	6	-	99	95	-
Italy	-	-	-	13.6	4	16	96	96	-
Jamaica	8.5	3.3	6.8	19.9	7	24	-	-	-
Japan	5.5	-	2.4	19.0	4	20	99	81	-
Jordan	7.3	2.4	7.1	37.7	13	24	86	82	-
Kazakhstan	6.7	3.1	8.8	28.7	6	16	89	-	-
Kenya	19.4	4.2	4.5	28.7	23	38	-	-	27
Kiribati	14.9	3.5	2.4	32.6	25	53	15	27	56
Kuwait	6.0	2.5 ^{av}	7.1	23.7	-	-	100	100	-
Kyrgyzstan	11.4	2.0	5.8	35.8	13	23	70	92	100
Lao People's Democratic Republic	30.2	9.0	3.0	39.5	8	19	18	61	56
Latvia	-	-	-	21.6	6	25	96	83	-
Lebanon	10.4	-	19.7	28.3	-	-	48	16	-
Lesotho	32.1	2.1	7.2	27.9	16	40	29	48	6
Liberia	28.0	3.4	4.7	42.6	27	43	-	-	-
Libya	43.5	10.2	25.4	29.9	-	-	-	22	-
Lithuania	-	-	-	19.9	5	22	95	94	-
Luxembourg	-	-	-	10.2	4	20	99	97	-

6.3.1	6.a	7.1	11.6	16.1	GPW13			
Proportion of safely treated domestic wastewater flows ^{ee} (%)	Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan ^{af} (constant 2020 US\$ millions)	Proportion of population with primary reliance on clean fuels and technology ^{ag} (%)	Annual mean concentrations of fine particulate matter (PM2.5) in urban areas ^{ag} ($\mu\text{g}/\text{m}^3$)	Mortality rate due to homicide ^k (per 100 000 population)	Number of cases of poliomyelitis caused by wild poliovirus (WPV) ^{ah}	Age-standardized prevalence of hypertension among adults aged 30-79 years ^{ai} (%)	Prevalence of obesity among children and adolescents (5-19 years) ^{aj} (%)	Age-standardized prevalence of obesity among adults (18+ years) ^{aj} (%)
Comparable estimate	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Comparable estimates	Comparable estimates	Comparable estimates
2020	2020	2020	2016	2019	2021	2019	2016	2016
-	0.62	89	21.6	-	-	47.7	15.0	27.9
-	191.97	92	16.5	17.8	0	49.1	15.0	27.6
31	61.99	94	19.7	7.0	0	27.2	9.4	19.9
46	365.28	100	73.0	4.1	0	38.2	17.6	32.0
13	278.09	92	29.3	85.0	0	32.7	11.7	24.6
-	<0.01	24	45.0	3.3	0	38.1	2.3	8.0
-	1.93	9	35.4	11.0	0	23.7	2.1	5.0
91	-	100 ^{az}	6.7	2.1	0	40.2	6.3	21.2
18	10.12	55	19.8	18.5	0	42.5	6.0	16.5
-	155.09	8	31.1	7.2	0	27.4	1.1	4.5
-	2.61	51	11.1	2.2	0	38.6	11.5	30.2
92	-	100 ^{az}	6.5	1.2	0	35.9	9.1	22.2
93	-	100 ^{az}	12.2	0.8	0	29.1	8.1	21.6
-	0.80	88	41.5	8.5	0	37.4	4.2	15.0
11	1.83	2	58.4	8.3	0	37.6	2.8	10.3
46	35.27	89	27.0	2.3	0	44.5	6.8	21.7
99	-	100 ^{az}	11.8	0.9	0	29.7	8.9	22.3
12	69.51	22	55.6	6.1	0	33.9	2.1	10.9
93	-	100 ^{az}	15.0	1.0	0	31.3	13.8	24.9
-	5.23	89	23.1	6.6	0	46.6	10.7	21.3
-	8.59	50	30.9	25.1	0	32.2	9.9	21.2
-	10.66	2	53.8	8.8	0	40.9	1.7	7.7
21	2.21	1	55.0	9.0	0	38.0	2.4	9.5
-	2.45	81	26.8	24.7	0	40.0	10.0	20.2
-	30.18	4	19.5	20.7	0	42.9	10.9	22.7
-	64.60	48	25.4	66.9	0	33.9	9.6	21.4
90	-	100 ^{az}	16.7	14	0	48.3	11.1	26.4
73	-	100 ^{az}	5.8	12	0	27.5	9.9	21.9
27	305.48	68	78.2	3.8	0	31.1	2.0	3.9
-	185.28	84	20.7	4.3	0	40.3	6.1	6.9
22	1.09	96	33.7	3.1	0	26.2	9.8	25.8
37	69.87	99	56.4	14.4	0	48.1	14.4	30.4
83	-	100 ^{az}	8.5	0.8	0	32.3	9.8	25.3
93	-	100 ^{az}	18.6	1.2	0	29.1	11.9	26.1
95	-	100 ^{az}	15.3	0.7	0	33.8	12.5	19.9
-	0.38	83	15.4	50.3	0	46.3	13.0	24.7
98	-	100 ^{az}	13.7	0.2	0	31.4	3.3	4.3
82	366.71	100	32.8	2.7	0	37.7	12.9	35.5
36	0.64	93	25.6	5.1	0	41.9	6.5	21.0
-	196.23	20	24.1	5.6	0	33.2	2.3	7.1
31	5.01	10	11.6	4.8	0	42.3	23.0	46.0
85	-	100 ^{az}	65.0	1.8	0	40.5	22.9	37.9
19	24.43	77	28.2	4.6	0	40.9	3.9	16.6
10	73.98	8	21.8	6.6	0	28.5	4.7	5.3
93	-	100 ^{az}	14.4	5.0	0	43.9	7.0	23.6
-	120.77	-	30.7	4.2	0	38.1	13.9	32.0
-	9.94	40	25.8	43.5	0	40.1	5.0	16.6
-	24.50	<1	52.0	9.7	0	39.4	1.9	9.9
17	<0.01	-	46.4	2.1	0	42.7	14.6	32.5
93	-	100 ^{az}	11.7	4.8	0	48.0	6.8	26.3
96	-	100 ^{az}	10.2	0.5	0	30.5	8.3	22.6
Luxembourg								

	2.2				5.2		6.1	6.2	
	Prevalence of stunting in children under 5 ^{aa} (%)	Prevalence of wasting in children under 5 ^{aa} (%)	Prevalence of overweight in children under 5 ^{aa} (%)	Prevalence of anaemia in women of reproductive age (15–49 years) ^{ab} (%)	Proportion of ever-partnered women and girls aged 15–49 years subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months ^{ac} (%)	Proportion of ever-partnered women and girls aged 15–49 years subjected to physical and/or sexual violence by a current or former intimate partner in their lifetime ^{ac} (%)	Proportion of population using safely-managed drinking-water services ^{ad} (%)	Proportion of population using safely-managed sanitation services ^{ad} (%)	Proportion of population using a hand-washing facility with soap and water ^{ad} (%)
Data type	Comparable estimates	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates
Member State	2020	2012–2020	2020	2019	2018	2018	2020	2020	2020
Madagascar	40.2	6.4	1.5	37.8	-	-	21	10	27
Malawi	37.0	0.6 ^{au, av}	4.7	31.4	17	30	-	24	8
Malaysia	20.9	9.7	6.1	32.0	-	19	94	-	-
Maldives	14.2	9.1	4.6	52.2	6	19	-	-	96
Mali	25.7	9.3 ^{au, av}	2.1	59.0	18	29	-	20	17
Malta	-	-	-	13.7	4	17	100	92	-
Marshall Islands	32.2	3.5 ^{au, av}	4.2	30.6	19	38	-	-	85
Mauritania	24.2	11.5 ^{au, av}	2.7	43.3	-	-	-	-	-
Mauritius	8.7 ^{at}	-	7.6 ^{at}	23.5	-	-	-	-	-
Mexico	12.1	1.4 ^{av}	6.3	15.3	10	24	43	57	-
Micronesia (Federated States of)	-	-	-	25.0	21	35	-	-	-
Monaco	-	-	-	12.3	-	-	100	100	-
Mongolia	7.1	0.9	10.1	14.5	12	27	30	56	86
Montenegro	8.1	2.2	10.2	17.2	4	16	85	45	99
Morocco	12.9	2.6	11.3	29.9	10	-	80	39	-
Mozambique	37.8	4.4	6.0	47.9	16	30	-	-	-
Myanmar	25.2	6.7 ^{av}	1.5	42.1	11	19	59	61	75
Namibia	18.4	7.1	5.0	25.2	16	27	-	-	-
Nauru	15.0	-	3.7	29.6	20	43	-	-	-
Nepal	30.4	12.0	1.8	35.7	11	27	18	49	62
Netherlands	1.6	-	5.0	12.8	5	21	100	97	-
New Zealand	-	-	-	10.4	4	23	100	82	-
Nicaragua	14.1	2.2	7.5	15.7	6	23	56	-	-
Niger	46.7	9.8 ^{au}	1.9	49.5	13	-	-	16	23
Nigeria	35.3	6.5	2.7	55.1	13	24	22	31	33
Niue	-	-	-	27.3	-	-	94	-	-
North Macedonia	4.1	3.4	10.0	19.3	4	13	77	12	100
Norway	-	-	-	12.0	4	20	99	65	-
Oman	12.2	9.3 ^{ax}	4.8	29.1	-	-	91	-	97
Pakistan	36.7	7.1 ^{ax}	3.4	41.3	16	29	36	-	80
Palau	-	-	-	28.5	14	31	91	-	-
Panama	14.7	-	10.8	21.2	8	16	-	-	-
Papua New Guinea	48.4	-	8.9	34.4	31	51	-	-	30
Paraguay	4.6	10	12.0	23.0	6	18	64	60	80
Peru	10.8	0.4	8.0	20.6	11	38	51	53	-
Philippines	28.7	5.6	4.2	12.3	6	14	47	61	82
Poland	2.3	-	6.7	-	3	13	98	91	-
Portugal	3.3	0.6 ^{av}	8.5	13.2	4	18	95	85	-
Qatar	4.6 ^{at}	-	13.9 ^{at}	28.1	-	-	96	97	-
Republic of Korea	2.2	-	8.8	13.5	8	-	99	100	-
Republic of Moldova	4.9	1.9 ^{ax}	4.3	26.1	9	27	74	-	-
Romania	9.7	-	6.7	22.7	7	18	82	83	-
Russian Federation	-	-	-	21.1	-	-	76	61	-
Rwanda	32.6	1.1	5.2	17.2	23	38	12	-	5
Saint Kitts and Nevis	-	-	-	15.4	-	-	-	-	-
Saint Lucia	2.8	3.7	6.9	14.3	-	-	-	-	-
Saint Vincent and the Grenadines	-	-	-	17.0	-	-	-	-	-
Samoa	6.8	3.1	7.1	26.8	18	40	46	48	79
San Marino	-	-	-	12.5	-	-	100	70	-
Sao Tome and Principe	11.8	4.1	4.0	44.2	18	27	36	35	55
Saudi Arabia	3.9	-	7.6	27.5	-	-	-	59	-

6.3.1	6.a	7.1	11.6	16.1	GPW13				
Proportion of safely treated domestic wastewater flows ^{ee} (%)	Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan ^{af} (constant 2020 US\$ millions)	Proportion of population with primary reliance on clean fuels and technology ^{ag} (%)	Annual mean concentrations of fine particulate matter (PM2.5) in urban areas ^{ag} ($\mu\text{g}/\text{m}^3$)	Mortality rate due to homicide ^k (per 100 000 population)	Number of cases of poliomyelitis caused by wild poliovirus (WPV) ^{ah}	Age-standardized prevalence of hypertension among adults aged 30-79 years ^{ai} (%)	Prevalence of obesity among children and adolescents (5-19 years) ^{aj} (%)	Age-standardized prevalence of obesity among adults (18+ years) ^{aj} (%)	
Comparable estimate	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	
2020	2020	2020	2016	2019	2021	2019	2016	2016	Member State
9	51.14	1	17.9	6.5	0	36.9	1.8	5.3	Madagascar
6	90.47	1	24.6	2.2	1	29.5	2.0	5.8	Malawi
88	0.63	96	17.1	2.7	0	40.8	12.7	15.6	Malaysia
-	13.68	99	10.4	1.9	0	34.1	7.4	8.6	Maldives
-	117.24	<1	63.1	10.7	0	34.6	2.6	8.6	Mali
15	-	100 ^{az}	13.2	1.0	0	29.5	13.4	28.9	Malta
-	3.65	64	-	-	-	31.9	26.6	52.9	Marshall Islands
-	60.00	43	78.1	10.9	0	37.9	4.0	12.7	Mauritania
13	9.37	97	9.5	2.3	0	33.1	4.4	10.8	Mauritius
60	1.34	85	22.8	25.4	0	32.1	14.8	28.9	Mexico
-	1.66	13	10.8	4.6	0	32.9	20.7	45.8	Micronesia (Federated States of)
97	-	100 ^{az}	11.5	-	-	-	-	-	Monaco
10	32.81	52	60.0	6.1	0	42.8	4.3	20.6	Mongolia
45	14.67	62	19.4	2.8	0	45.1	7.6	23.3	Montenegro
36	282.48	98	28.6	17	0	35.3	10.2	26.1	Morocco
-	132.43	5	19.9	3.7	0	38.6	2.3	7.2	Mozambique
-	97.19	31	33.7	3.9	0	37.8	3.7	5.8	Myanmar
-	1.40	47	20.5	18.0	0	43.8	4.9	17.2	Namibia
-	-	100	8.2	-	-	41.8	33.2	61.0	Nauru
37	152.51	35	88.0	2.5	0	36.1	1.7	4.1	Nepal
100	-	100 ^{az}	12.0	0.6	0	30.5	7.0	20.4	Netherlands
85	-	100 ^{az}	6.7	1.2	0	30.9	16.3	30.8	New Zealand
-	157.35	56	22.6	9.4	0	35.8	10.8	23.7	Nicaragua
4	201.49	2	89.4	9.6	0	41.5	1.4	5.5	Niger
48	131.97	15	47.1	9.2	0	36.1	1.9	8.9	Nigeria
-	<0.01	98	-	-	-	39.5	29.5	50.0	Niue
9	14.77	78	33.6	15	0	45.1	9.3	22.4	North Macedonia
76	-	100 ^{az}	7.6	0.6	0	30.5	9.1	23.1	Norway
-	-	100 ^{az}	41.3	0.7	0	45.6	14.9	27.0	Oman
-	164.83	49	62.6	6.0	4	43.2	31	8.6	Pakistan
-	3.76	100 ^{az}	8.7	-	-	44.2	31.4	55.3	Palau
-	2.98	88	14.5	17.2	0	36.1	10.5	22.7	Panama
-	17.13	9	12.2	11.0	0	27.8	9.8	21.3	Papua New Guinea
-	21.57	69	12.0	8.0	0	56.4	10.5	20.3	Paraguay
-	16.86	85 ^{az}	33.3	9.3	0	20.7	7.8	19.7	Peru
43	27.06	48 ^{az}	23.7	13.7	0	33.8	4.3	6.4	Philippines
82	-	100 ^{az}	21.9	0.8	0	49.2	9.1	23.1	Poland
74	-	100 ^{az}	8.4	0.9	0	32.3	10.4	20.8	Portugal
100	-	100 ^{az}	81.6	0.5	0	40.9	19.5	35.1	Qatar
100	-	100 ^{az}	26.5	0.8	0	26.7	8.5	4.7	Republic of Korea
38	25.06	96	14.1	4.1	0	48.3	4.2	18.9	Republic of Moldova
48	-	88	15.7	1.3	0	48.4	8.1	22.5	Romania
13	-	86	11.2	7.8	0	44.3	7.1	23.1	Russian Federation
-	46.49	2	39.4	4.3	0	29.8	1.7	5.8	Rwanda
-	-	100 ^{az}	9.7	-	-	45.1	12.3	22.9	Saint Kitts and Nevis
-	0.36	94	22.9	20.2	0	39.8	8.8	19.7	Saint Lucia
-	1.80	94	23.1	29.4	0	39.3	12.4	23.7	Saint Vincent and the Grenadines
47	0.84	36	11.0	2.8	0	38.3	21.7	47.3	Samoa
90	-	100 ^{az}	10.1	-	-	-	-	-	San Marino
-	6.51	3	38.4	5.6	0	45.1	3.5	12.4	Sao Tome and Principe
80	-	100 ^{az}	64.0	1.9	0	34.0	17.4	35.4	Saudi Arabia

	2.2			5.2		6.1	6.2		
	Prevalence of stunting in children under 5 ^{aa} (%)	Prevalence of wasting in children under 5 ^{aa} (%)	Prevalence of overweight in children under 5 ^{aa} (%)	Prevalence of anaemia in women of reproductive age (15–49 years) ^{ab} (%)	Proportion of ever-partnered women and girls aged 15–49 years subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months ^{ac} (%)	Proportion of ever-partnered women and girls aged 15–49 years subjected to physical and/or sexual violence by a current or former intimate partner in their lifetime ^{ac} (%)	Proportion of population using safely-managed drinking-water services ^{ad} (%)	Proportion of population using safely-managed sanitation services ^{ad} (%)	Proportion of population using a hand-washing facility with soap and water ^{ad} (%)
Data type	Comparable estimates	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates	Comparable estimates
Member State	2020	2012–2020	2020	2019	2018	2018	2020	2020	2020
Senegal	17.2	8.1 ^{aw}	2.1	52.7	12	24	-	24	22
Serbia	5.3	2.6	10.8	22.8	4	17	75	18	-
Seychelles	7.4	4.3 ^{av}	9.8	25.1	-	-	-	-	-
Sierra Leone	26.8	5.4	4.7	48.4	20	36	11	14	21
Singapore	2.8	-	4.8	13.0	2	11	100	100	-
Slovakia	-	-	-	23.5	6	18	99	82	-
Slovenia	-	-	-	21.8	3	18	98	72	-
Solomon Islands	29.3	8.5	4.0	37.7	28	50	-	-	-
Somalia	27.4	-	2.9	43.1	-	-	-	32	25
South Africa	23.2	3.4 ^{av}	12.9	30.5	13	24	-	-	44
South Sudan	30.6	-	5.7	35.6	27	41	-	-	-
Spain	-	-	-	13.4	3	15	100	96	-
Sri Lanka	16.0	15.1	1.3	34.6	4	24	-	-	-
Sudan	33.7	16.3 ^{au}	2.7	36.5	17	-	-	-	13
Suriname	8.0	5.5	4.0	21.0	8	28	56	25	72
Sweden	-	-	-	13.6	6	21	100	95	-
Switzerland	-	-	-	11.3	2	12	94	100	-
Syrian Arab Republic	29.6	-	18.2	32.8	-	-	-	-	83
Tajikistan	15.3	5.6	3.5	35.2	14	24	55	-	73
Thailand	12.3	7.7	9.2	24.0	9	24	-	26	85
Timor-Leste	48.8	9.9 ^{au}	2.6	29.9	28	38	-	-	28
Togo	23.8	5.7	2.4	45.7	13	25	20	9	17
Tonga	2.6	1.1	12.6	28.5	17	37	30	34	70
Trinidad and Tobago	8.7	-	11.0	17.7	7	28	-	-	-
Tunisia	8.6	2.1	16.5	32.1	10	25	79	81	84
Turkey	-	1.7	-	-	12	32	-	78	-
Turkmenistan	7.6	4.1	3.8	26.6	-	-	95	-	100
Tuvalu	9.7	-	6.4	27.5	20	39	-	-	-
Uganda	27.9	3.5	4.0	32.8	26	45	17	-	23
Ukraine	15.9	-	17.0	17.7	9	18	89	72	-
United Arab Emirates	-	-	-	24.3	-	-	-	99	-
United Kingdom	-	-	-	11.1	4	24	100	98	-
United Republic of Tanzania	32.0	3.5 ^{ay}	5.5	38.9	24	38	-	26	48
United States of America	3.2	0.1	8.8	11.8	6	26	97	98	-
Uruguay	6.5	1.4	10.3	15.0	4	18	-	-	-
Uzbekistan	9.9	1.8 ^{au}	5.0	24.8	-	-	59	-	-
Vanuatu	28.7	4.7 ^{au}	4.9	28.5	29	47	-	-	-
Venezuela (Bolivarian Republic of)	10.6	-	6.7	24.2	8	19	-	23	-
Viet Nam	22.3	5.8	6.0	20.6	10	25	-	-	86
Yemen	37.2	16.4	2.7	61.5	-	-	-	19	-
Zambia	32.3	4.2	5.7	31.5	28	41	-	-	18
Zimbabwe	23.0	2.9	3.6	28.9	18	35	30	26	42
WHO region	2020	2020	2020	2019	2018	2018	2020	2020	2020
African Region	31.7	5.8	4.2	40.4	20	33	32	23	28
Region of the Americas	8.9	0.7	8.0	15.4	7	25	81	52	-
South-East Asia Region	30.1	14.5	3.3	46.6	17	33	-	46	71
European Region	5.7	-	7.9	18.8	6	21	92	70	-
Eastern Mediterranean Region	26.2	7.4	7.7	34.9	17	31	56	-	81
Western Pacific Region	9.3	2.1	7.5	16.4	8	20	-	65	-
Global	22.0	6.7	5.7	29.9	13	27	74	54	71

6.3.1	6.a	7.1	11.6	16.1	GPW13				
Proportion of safely treated domestic wastewater flows ^{ee} (%)	Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan ^{af} (constant 2020 US\$ millions)	Proportion of population with primary reliance on clean fuels and technology ^{ag} (%)	Annual mean concentrations of fine particulate matter (PM2.5) in urban areas ^{ag} ($\mu\text{g}/\text{m}^3$)	Mortality rate due to homicide ^k (per 100 000 population)	Number of cases of poliomyelitis caused by wild poliovirus (WPV) ^{ah}	Age-standardized prevalence of hypertension among adults aged 30-79 years ^{ai} (%)	Prevalence of obesity among children and adolescents (5-19 years) ^{aj} (%)	Age-standardized prevalence of obesity among adults (18+ years) ^{aj} (%)	
Comparable estimate	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	Primary data	Comparable estimates	Comparable estimates	Comparable estimates	
2020	2020	2020	2016	2019	2021	2019	2016	2016	Member State
14	128.86	24	59.8	7.6	0	40.5	1.8	8.8	Senegal
27	36.33	80	25.1	1.2	0	46.1	9.8	21.5	Serbia
-	-	100 ^{az}	13.7	14.8	0	44.3	10.8	14.0	Seychelles
8	32.71	<1	56.0	7.9	0	40.8	2.5	8.7	Sierra Leone
100	-	100 ^{az}	17.2	0.3	0	31.5	6.8	6.1	Singapore
80	-	100 ^{az}	18.3	1.1	0	42.7	8.1	20.5	Slovakia
67	-	100 ^{az}	16.8	0.9	0	45.3	9.2	20.2	Slovenia
-	21.05	9	11.8	3.9	0	29.8	4.3	22.5	Solomon Islands
-	22.28	3	27.7	5.4	0	36.1	3.0	8.3	Somalia
61	3.96	87	29.4	35.9	0	44.1	11.3	28.3	South Africa
-	25.75	0	34.6	14.3	0	34.2	-	-	South Sudan
86	-	100 ^{az}	9.5	0.6	0	27.2	10.8	23.8	Spain
-	132.02	32	16.8	2.3	0	35.6	4.8	5.2	Sri Lanka
-	32.59	55	43.0	5.8	0	40.8	-	-	Sudan
24	0.45	94	30.2	5.8	0	42.9	13.9	26.4	Suriname
95	-	100 ^{az}	6.0	1.1	0	30.2	6.7	20.6	Sweden
99	-	100 ^{az}	10.3	0.5	0	21.9	5.8	19.5	Switzerland
-	35.57	97	35.6	2.6	0	41.1	11.5	27.8	Syrian Arab Republic
-	93.68	82	46.5	1.8	0	46.8	3.0	14.2	Tajikistan
24	1.51	84	31.9	4.3	0	29.2	11.3	10.0	Thailand
-	3.90	14	17.7	4.7	0	35.3	4.2	3.8	Timor-Leste
15	9.97	10	46.1	8.9	0	36.0	2.0	8.4	Togo
29	0.56	84	11.1	3.4	0	43.3	26.7	48.2	Tonga
-	-	100 ^{az}	24.4	39.4	0	42.4	11.1	18.6	Trinidad and Tobago
60	292.57	100	32.5	3.5	0	34.7	8.5	26.9	Tunisia
63	66.21	95	36.9	4.8	0	32.8	11.5	32.1	Turkey
-	<0.01	100	33.3	2.8	0	39.0	4.7	18.6	Turkmenistan
2	3.27	71	-	-	-	50.4	27.2	51.6	Tuvalu
-	167.65	<1	45.7	13.9	0	32.5	1.7	5.3	Uganda
34	35.96	95	14.9	6.3	0	43.1	7.0	24.1	Ukraine
96	-	100 ^{az}	42.2	0.7	0	41.4	17.3	31.7	United Arab Emirates
99	-	100 ^{az}	10.4	13	0	26.4	10.2	27.8	United Kingdom
-	136.63	4	24.6	8.1	0	33.2	2.5	8.4	United Republic of Tanzania
91	-	100 ^{az}	7.7	5.8	0	31.6	21.4	36.2	United States of America
-	-	100 ^{az}	10.0	8.5	0	42.4	13.8	27.9	Uruguay
32	126.58	84	33.9	1.5	0	45.7	4.0	16.6	Uzbekistan
-	6.45	8	11.1	2.3	0	39.5	8.3	25.2	Vanuatu
-	1.02	97	20.1	63.6	0	39.4	14.1	25.6	Venezuela (Bolivarian Republic of)
-	428.07	65	23.8	1.9	0	29.7	2.6	2.1	Viet Nam
34	51.97	62	40.3	9.7	0	29.3	7.0	17.1	Yemen
-	68.86	10	29.4	6.5	0	32.3	2.9	8.1	Zambia
23	18.05	30	24.6	13.1	0	42.3	4.0	15.5	Zimbabwe
2020	2020	2020	2016	2019	2021	2019	2016	2016	WHO region
31	2352.91	20	38.8	10.0	1	35.5	2.8	10.6	African Region
58	1059.39	92	10.8	19.2	0	35.4	14.4	28.6	Region of the Americas
29	1177.96	64	61.1	3.8	0	32.4	3.0	4.7	South-East Asia Region
72	608.54	94	13.0	2.9	0	36.9	8.6	23.3	European Region
50	2048.38	74	55.7	5.3	5	37.8	8.2	20.8	Eastern Mediterranean Region
69	929.90	78	39.4	16	0	28.3	9.8	6.4	Western Pacific Region
56	8695.58	69	31.2	6.2	6	33.1	6.8	13.1	Global

Footnotes

- a World population prospects: 2019 revision. New York: United Nations, Department of Economic and Social Affairs, Population Division; 2019 (<https://population.un.org/wpp/>, accessed 2 May 2022). For Member States with a total population less than 90 000, the male, female values are not shown but are included in the regional and global sums. Male and female may not sum to both sexes due to rounding.
- b Global health estimates 2019: Life expectancy, 2000–2019. Geneva: World Health Organization; 2020 (<https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/>, accessed 2 May 2022). WHO Member States with a population of less than 90 000 in 2019 were not included in the analysis.
- c Trends in maternal mortality: 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva: World Health Organization; 2019. <https://apps.who.int/iris/handle/10665/327596>, accessed 2 May 2022). WHO Member States with populations less than 100 000 in 2019 were not included in the analysis.
- d UNICEF/WHO joint database on births attended by skilled health personnel, 2022 (<https://data.unicef.org/topic/maternal-health/delivery-care/>, accessed 2 May 2022); Global Health Observatory (GHO) data (<https://www.who.int/data/gho/data-indicators/indicator-details/GHO/births-attended-by-skilled-health-personnel->), accessed 2 May 2022)
- e Levels and trends in child mortality. Report 2021. Estimates developed by the UN Inter-agency Group for Child Mortality Estimation. United Nations Children's Fund, World Health Organization, World Bank Group and United Nations Population Division. New York: United Nations Children's Fund; 2021 (<https://data.unicef.org/resources/levels-and-trends-in-child-mortality/>, accessed 2 May 2022).
- f AIDSinfo [online database]. Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS) (<http://aidsinfo.unaids.org/>, accessed 2 May 2022); and HIV/AIDS [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization ([https://www.who.int/data/gho/data-indicators/indicator-details/GHO/new-hiv-infections-\(per-1000-uninfected-population\)](https://www.who.int/data/gho/data-indicators/indicator-details/GHO/new-hiv-infections-(per-1000-uninfected-population))), accessed 2 May 2022).
- g Global tuberculosis report 2021. Geneva: World Health Organization; 2021 (<https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2021>, accessed 2 May 2022).
- h World malaria report 2021. Geneva: World Health Organization; 2021 (<https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021>, accessed 2 May 2022). “-” indicates countries or regions that are malaria free.
- i Global and country estimates of immunization coverage and chronic HBV infection. Geneva: World Health Organization (<http://situatedlaboratories.net/who-hepb-dashboard/src/#global-strategies>, accessed 2 May 2022).
- j Neglected tropical diseases [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization (<https://www.who.int/data/gho/data-themes/topics/topic-details/GHO/neglected-tropical-diseases>, accessed 2 May 2022). Global and regional aggregates include imputation of incomplete reports.
- k Global health estimates 2019: deaths by cause, age, sex, by country and by region, 2000–2019. Geneva: World Health Organization; 2020 (<https://www.who.int/data/gho/data-themes/mortality-and-global-health-estimates/>, accessed 2 May 2022). WHO Member States with a population of less than 90 000 in 2019 were not included in the analysis.
- l WHO Global Information System on Alcohol and Health (GISAH) [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization (<https://www.who.int/data/gho/data-themes/topics/topic-details/GHO/levels-of-consumption/>, accessed 2 May 2022).
- m World Contraceptive Use 2021. New York: United Nations, Department of Economic and Social Affairs, Population Division; 2021 (<https://www.un.org/development/desa/pd/data/world-contraceptive-use>, accessed 13 May 2022). Global and regional aggregates are from the Estimates and Projections of Family Planning Indicators 2021. New York: United Nations, Department of Economic and Social Affairs, Population Division; 2021 (<https://www.un.org/development/desa/pd/node/3288>, accessed 13 May 2022).
- n Most recent updates provided by the United Nations, Department of Economic and Social Affairs, Population Division, 2022. Global and regional aggregates are from the World population prospects: the 2019 revision. New York: United Nations, Department of Economic and Social Affairs, Population Division; 2019 (<https://population.un.org/wpp/Download/SpecialAggregates/UNrelated/>, accessed 2 May 2022).
- o WHO, World Bank. Tracking universal health coverage: 2021 Global Monitoring Report. Conference edition. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/9789240040618>, accessed 2 May 2022).

- p WHO, World Bank. Global monitoring report on financial protection in health 2021. Geneva: World Health Organization; 2021 (<https://www.who.int/publications-detail-redirect/9789240040953>, accessed 2 May 2022). All country data in this table are based on total household expenditure. Global and regional aggregates include country data not shown in the table.
- q Public health and environment [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization (<https://www.who.int/data/gho/data/themes/public-health-and-environment/GHO/public-health-and-environment>, accessed x May 2022). WHO Member States with a population of less than 90 000 in 2016 were not included in the analysis.
- r Public health and environment [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization (<https://www.who.int/data/gho/data/themes/public-health-and-environment/GHO/public-health-and-environment>, accessed 2 May 2022). WHO Member States with a population of less than 90 000 in 2016 were not included in the analysis.
- s WHO global report on trends in prevalence of tobacco use 2000–2025, fourth edition. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/9789240039322>, accessed 2 May 2022).
- t WHO/UNICEF Joint Estimates of National Immunization Coverage (WUENIC), 2020 revision. (<https://immunizationdata.who.int/listing.html?topic=coverage&location=>, accessed 2 May 2022).
- u Official development assistance for the health sectors, 2020. Creditor reporting system (CRS) of the Organization for Economic Co-operation and Development (OECD) (<https://stats.oecd.org/Index.aspx?DataSetCode=crs1>, accessed 4 May 2022). Per capita figures were calculated by WHO using population estimates from the World population prospects: 2019 revision, United Nations, Department of Economic and Social Affairs, Population Division. Includes CRS purpose codes for medical research (12182) and basic health (122:I.2.b).
- v Data collected with the WHO Essential Medicines and Health Products Price and Availability Monitoring Mobile Application (WHO EMP MedMon): (<https://www.who.int/medicines/areas/policy/monitoring/empmedmon/en/>, accessed 2 May 2022) and Health Action International Medicine Prices, Availability, Affordability & Price Components Database (HAI/WHO): (<https://haiweb.org/what-we-do/price-availability-affordability/price-availability-data/>, accessed 2 May 2022).
- w WHO Global Health Workforce Statistics [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization (<https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/health-workforce>, accessed 2 May 2022). Country comparisons are affected by differences in the occupations included. Please refer to the source for country-specific definitions and other descriptive metadata. Global and regional aggregates were calculated using country data between 2014 and 2020.
- x International Health Regulations (2005) - States Parties Annual Self-Assessment Reports - Monitoring Framework [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization (<https://extranet.who.int/e-spar/>). Responses received for SPAR 2021 annual report as of 13th May 2022. Regional and global averages include two IHR State Parties not shown in the table (Liechtenstein and Holy See). For full list of IHR States Parties please see https://www.who.int/ihr/legal_issues/states_parties/en/.
- y Global Antimicrobial Resistance Surveillance System (GLASS). Geneva: World Health Organization; 2022. Global values are median of country figures and are not population weighted averages.
- z Global Health Expenditure Database. Geneva: World Health Organization (<https://apps.who.int/nha/database>, accessed 2 May 2022). The WHO regional and global averages are unweighted. This indicator is presented here because it could constitute the health-related portion of the SDG Indicator 1.a.2.
- aa Levels and trends in child malnutrition. UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates. New York, Geneva and Washington (DC): United Nations Children's Fund, World Health Organization and the World Bank Group; 2021. (<https://apps.who.int/iris/handle/10665/341135>, accessed 2 May 2022)
- ab Global anaemia estimates, 2021 Edition. Geneva: World Health Organization, 2021 (https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children, accessed 2 May 2022).
- ac Violence against women prevalence estimates, 2018. Global, regional and national prevalence estimates for intimate partner violence against women and global and regional prevalence estimates for non-partner sexual violence against women. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/violence-against-women-prevalence-estimates>, accessed 2 May 2022). Given the lack of consensus on the definition and standardized measurement of psychological intimate partner violence, the current estimates only include physical and/or sexual partner violence. As majority of the available

survey data on intimate partner violence are for women aged 15-49, with sparse data for women aged 15 years and older, the estimates are presented for the 15-49 age group.

- ad** Progress on household drinking water, sanitation and hygiene 2000-2020: five years into the SDGs. Geneva: World Health Organization and the United Nations Children's Fund, 2021(https://washdata.org/sites/default/files/2022-01/jmp-2021-wash-households_3.pdf, accessed 2 May 2022). Comparable estimates are only shown for countries with recent primary data. Global and regional aggregates are calculated include country data not shown in the table.
- ae** UN-Habitat, WHO. Progress on wastewater treatment: Global status and acceleration needs for SDG indicator 6.3.1, 2021. Geneva: WHO; 2021(https://unhabitat.org/sites/default/files/2021/08/sdg6_indicator_report_631_progress_on_wastewater_treatment_2021_english_pages.pdf, accessed 2 May 2022).
- af** Official development assistance for the water sector (water supply and sanitation, agricultural water resources, and hydro-electric power plants), 2020. Creditor reporting system (CRS) of the Organization for Economic Co-operation and Development (OECD) (<https://stats.oecd.org/Index.aspx?DataSetCode=crs1>, accessed 2 May 2022). Includes CRS purpose codes for water supply and sanitation (CRS 140XX), agricultural water resources (CRS 31140), and hydro-electric power plants (CRS 23220). Global aggregate includes country and regional data not shown in the table.
- ag** Public health and environment [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization (<https://www.who.int/data/gho/data/themes/public-health-and-environment/GHO/public-health-and-environment>, accessed 2 May 2022)
- ah** Data from Global Polio Eradication Initiative as of 12 April 2022 (<https://immunizationdata.who.int/pages/incidence/polio.html>).
- ai** Risk factors in noncommunicable diseases [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization (<https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/noncommunicable-diseases--risk-factors>, accessed 2 May 2022). This indicator is presented here as a proxy for the GPW13 indicator “age-standardized prevalence of raised blood pressure among persons aged 18+ years”, as the estimates are more recent.
- aj** Risk factors in noncommunicable diseases [online database], Global Health Observatory (GHO) data. Geneva: World Health Organization (<https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/noncommunicable-diseases--risk-factors>, accessed 2 May 2022).
- ak** Non-standard definition. For more details see: UNICEF/WHO joint database on births attended by skilled health personnel (footnote “d”)
- al** Proportion of institutional births (%) used as proxy for the SDG indicator.
- am** Eliminated malaria 2020
- an** There is considerable transmission of *P. knowlesi* cases
- ao** Non-standard definition. For more details see: World Contraceptive Use 2021 (footnote “m”)
- ap** Excluding Northern Ireland
- aq** Estimate refers to smoking only, but expected to be similar to all tobacco use.
- ar** Data for capital city only
- as** Data from private sector only
- at** Most recent input data is before 2000, interpret with caution
- au** Oedema data was not considered in the analysis;
- av** Non-standard definition. For more details see respective survey(s) comments available at: [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-jme-country-children-aged-5-years-wasted-br\(-weight-for-height-2-sd\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-jme-country-children-aged-5-years-wasted-br(-weight-for-height-2-sd))
- aw** Value is the average of two survey estimates in same year. For more details see respective survey(s) comments available at: [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-jme-country-children-aged-5-years-wasted-br\(-weight-for-height-2-sd\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-jme-country-children-aged-5-years-wasted-br(-weight-for-height-2-sd))
- ax** Data collection excluded some regions or populations. For more details see respective survey(s) comments available at: [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-jme-country-children-aged-5-years-wasted-br\(-weight-for-height-2-sd\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-jme-country-children-aged-5-years-wasted-br(-weight-for-height-2-sd))
- ay** Oedema data was considered in the analysis
- az** For high-income countries with no information on clean fuel use, usage is assumed to be 100%

• Annex 3 - Regional groupings

WHO African Region

Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

WHO Region of the Americas

Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia (Plurinational State of), Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, United States of America, Uruguay, Venezuela (Bolivarian Republic of).

WHO South-East Asia Region

Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, Timor-Leste.

WHO European Region

Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom of Great Britain and Northern Ireland, Uzbekistan.

WHO Eastern Mediterranean Region

Afghanistan, Bahrain, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen.

WHO Western Pacific Region

Australia, Brunei Darussalam, Cambodia, China, Cook Islands, Fiji, Japan, Kiribati, Lao People's Democratic Republic, Malaysia, Marshall Islands, Micronesia (Federated States of), Mongolia, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Philippines, Republic of Korea, Samoa, Singapore, Solomon Islands, Tonga, Tuvalu, Vanuatu, Viet Nam



**World Health
Organization**

9789240051140

A standard linear barcode representing the ISBN 9789240051140.

9 789240 051140