World Health Organization

REGIONAL OFFICE FOR THE Eastern Mediterranean

Health and **well-being** profile of the **Eastern Mediterranean Region**

An overview of the health situation in the Region and its countries in 2019

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Foreword

The Millennium Development Goals and subsequent Sustainable Development Goals (SDGs) ushered in new opportunities to significantly improve health status and well-being globally. Many countries have increased their life expectancy despite complex and recurring challenges such as poverty, inequality, climate change and protracted humanitarian crises.

As noted in WHO's vision for the Region, *Vision 2023: health for all by all – a call for solidarity and action*, all countries of the Eastern Mediterranean Region have committed to universal health coverage and health for all to end poverty, protect the planet and ensure all people enjoy peace and prosperity. However, the triad of poverty, unhealthy lifestyles and environmental degradation remain key determinants of disease, disability and death. Population health outcomes are also affected by the functionality and performance of health systems.

In our Region, some countries still struggle to control infectious diseases, while others face a greater threat from chronic, lifestyle-related diseases such as cardiovascular diseases, diabetes, respiratory diseases and cancers. WHO continues to support countries to ensure functioning and accessible health care systems, and we remain focused on a Health in All Policies agenda. Nearly two thirds of countries in the Region are directly or indirectly affected by crises. The magnitude of conflict, natural disasters and political instability – resulting in widespread human suffering – places unique challenges on countries in our Region. Since early 2020, the Region has also been affected by the ongoing coronavirus disease (COVID-19) outbreak. The outbreak is testing health care systems and affecting population health outcomes. It also demonstrates that enhancing health system preparedness is not only an issue for emergency-prone countries; it is a necessity for all countries, even those with well-established and strong health care systems.

This regional health and well-being profile is guided by the strategic priorities of WHO's Thirteenth General Programme of Work (GPW 13): achieving universal health coverage, addressing health emergencies and promoting healthier populations across the life course. Within the context of GPW 13 and *Vision 2023*, the profile provides an opportunity to review where we stand as a Region and assess the opportunities and challenges that lie ahead. This profile also complements existing efforts to advance the use of evidence from data and research for decision-making.

I look forward to this regional health and well-being profile being updated in 2023 to show the progress made on our journey together – towards achieving the ambitious goals and agenda of *Vision 2023* and GPW 13.

Dr Ahmed Al-Mandhari
WHO Regional Director for the Eastern Mediterranean

Preface

This health and well-being profile for the Eastern Mediterranean Region of the World Health Organization (WHO) presents achievements, challenges and initiatives at the regional and country levels.

The profile is structured according to the strategic priorities and goals of WHO's Thirteenth General Programme of Work (GPW 13): achieving universal health coverage, addressing health emergencies and promoting healthier populations across the life course. For the first time, the health situation, progress and challenges at the regional level are comprehensively assessed using available data from January 2013 to October 2019. In particular, the profile highlights progress in reporting on the regional core indicators and health-related SDG indicators, focusing on three main domains: 1) monitoring health determinants and risks; 2) assessing health status, including morbidity and cause-specific mortality; and 3) assessing health system response.

The first half of the profile gives an overview of the current health situation in the Eastern Mediterranean Region. The topics covered include universal health coverage, health emergencies and promoting health across the life course, as well as other priority areas for the Region. The main challenges and drivers affecting health, and the health situation and trends during recent years, are presented. This is followed by detailed country profiles for each of the 22 countries. These profiles present the latest available data for a range of health indicators and the health-related SDGs, together with highlights of country progress in implementing the 2030 Agenda for Sustainable Development.

The regional health profile uses data drawn from multiple sources including figures provided by WHO Member States, the latest World Health Statistics publications, the WHO Global Health Observatory, and estimates developed by United Nations agencies including WHO. Most data are from 2013 to 2019; however, a few indicators rely on data from 2007 to 2015.

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The 22 country profiles on health and the SDGs were jointly developed by the Department of Science, Information and Dissemination, the Office of the Regional Director, and the Department of UHC/Health Systems at the WHO Regional Office for the Eastern Mediterranean.

Acronyms and abbreviations

AA-HA!	Accelerated action for the health of adolescents
AFP	acute flaccid paralysis
AHPSR	Alliance for Health Policy and Systems Research
ART	antiretroviral therapy
COPD	chronic obstructive pulmonary disease
CVD	cardiovascular disease
cVDPV	circulating vaccine-derived poliovirus
DALY	disability-adjusted life year
DTP	diphtheria-tetanus-pertussis
EWARN	Early Warning Alert and Response Network
GCC	Gulf Cooperation Council
GDP	gross domestic product
GLASS	Global Antimicrobial Resistance Surveillance System
GOARN	Global Outbreak Alert and Response Network
GPW 13	Thirteenth General Programme of Work 2019–2023
HBsAg	hepatitis B surface antigen
HiAP	Health in All Policies
ICD	International Classification of Diseases
IHR (2005)	International Health Regulations (2005)
IOM	International Organization for Migration
IPC	infection prevention and control
JEE	joint external evaluation
MCV	measles-containing vaccine
MMR	maternal mortality ratio
NCDs	noncommunicable diseases

NHWA	National Health Workforce Accounts
RPD-FM	Regional Professional Diploma in Family Medicine
SDG	Sustainable Development Goal
STEPS	WHO STEPwise approach to Surveillance
TB	tuberculosis
TDR	Special Programme for Research and Training in Tropical Diseases
UHC	universal health coverage
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
WASH	water, sanitation and hygiene
WHO	World Health Organization
WHO FCTC	World Health Organization Framework Convention on Tobacco Control

Executive summary

Health and the Sustainable Development Goals

Globally, countries have made major health gains; however, complex and interconnected threats remain such as poverty, inequalities, conflict and climate change. Based on the SDGs, the Thirteenth General Programme of Work (GPW 13) sets the strategic directions for the World Health Organization (WHO) for the period 2019–2023. GPW 13 also outlines how programmes will be implemented and provides a framework to measure progress. The core of GPW 13 is impact in countries, which is articulated in WHO's mission to promote health, keep the world safe and serve the vulnerable. The key interconnected strategic priorities for GPW 13 are ensuring healthy lives and well-being for all at all ages; achieving universal health coverage (UHC); addressing health emergencies; and promoting healthier populations. These priorities are linked to three bold targets: one billion more people benefiting from UHC; one billion more people better protected from health emergencies; and one billion more people enjoying better health and well-being.

The Eastern Mediterranean Region at a glance

The WHO Eastern Mediterranean Region comprises nearly 9% of the world's population. The Region is experiencing protracted humanitarian crises that have led to the forced displacement of millions of people, weakening of health system structures and the re-emergence of vaccine-preventable diseases. In five countries, more than 25% of the population are living below the international poverty line. Life expectancy and healthy life expectancy in the Region are lower than the global averages. In 2016, the average life expectancy and healthy life expectancy in the Region were estimated at 69.1 years and 59.7 years, respectively, compared to 72.0 years and 63.3 years at the global level.

Achieving UHC

WHO uses the UHC service coverage index to measure what proportion of a population has access to essential health services. According to the latest available figures, coverage in the Eastern Mediterranean Region falls well below the global average. Globally, the UHC index has a value of 64 (out of 100), whereas the weighted average for the Region is just 53. There are serious gaps in terms of governance: around half the countries in the Region still need to take the first steps in building governance capacity for UHC, while those countries with policies and strategies in place need to closely monitor their implementation and revise them as necessary. The Region is a low investor in health, accounting for less than 2% of global health expenditure for close to 9% of the world's population in 2015. Furthermore, public health expenditure accounts for a consistently low proportion of current health expenditure – around 50% in the period 2000–2015 –

meaning large numbers of people are pushed into high out-of-pocket health spending, often causing financial hardship.

Many countries are working to expand service coverage by developing UHC priority benefits packages and strengthening delivery of services through the primary health care system. However, 12 countries in the Region have less than 1 primary health care facility per 10 000 population, including four high-income countries. Similarly, efforts to enhance family practice, improve the quality and safety of health care, and harness the Region's large private sector towards achieving UHC are currently insufficient in most countries.

Seventy-five regional core health indicators are reported by countries to WHO annually. Reporting ranges from 76% to 95% in 17 countries, and from 62% to 75% in the remaining five countries. An average increase of 15% in reporting on indicators occurred at the regional level during 2014–2018. All countries except Somalia have death registration systems, with coverage reaching 90% or more in half the countries. Average data completeness for cause of death in the Region is 32%, compared to a global rate of 49%. All countries of the Region have birth registration systems: birth registration coverage is more than 90% in 14 countries, but less than 70% in low-income countries.

There are serious shortages of health workforce. More than half of countries in the Region do not meet the minimum threshold of 44.5 doctors, nurses and midwives per 10 000 population. Seven countries do not have the minimum density of 23 doctors, nurses and midwives per 10 000 population required for delivering basic health interventions. Problems are exacerbated by a high level of attacks on health workers and health facilities in some countries: in 2018, there were 725 attacks on health workers in the Region, resulting in 137 deaths.

Most low- and middle-income countries of the Region suffer shortages of essential medicines, both in public and private settings. Service delivery and regulatory mechanisms for assistive technology are inadequate or nonexistent in many countries, while access to medical devices is extremely limited in low- and middle-income countries and even some high-income countries.

Health-related research output has improved significantly in recent years, but is unevenly distributed and highly dependent on a few countries. The top research categories are public health research, followed by social/behavioural research and clinical/experimental research. Translating this knowledge into evidence-based policy is hampered by limited interaction between researchers and policy-makers.

Health emergencies

In 2018, 131.7 million people were in need of aid globally, of whom 70.2 million (53.3%) lived in the Region. By the end of 2018, out of 80 million people affected by conflict, war and natural disasters more than 37 million (46%) were from countries of the Region. Nineteen major outbreaks of emerging and epidemic-prone diseases occurred or continued in 12 countries of the Region in 2018, and there were nine graded health emergencies.

Countries can assess their capacities to prevent, detect and rapidly respond to public health risks through joint external evaluations (JEEs). Seventeen countries in the Region have conducted JEEs as of 2019, with the overall mean JEE score of 3 across the 19 technical areas, which means having "developed capacity".

Preparedness to respond to outbreaks has been enhanced by development of the Early Warning Alert and Response Network in seven countries facing protracted emergencies. The regional Emerging and Dangerous Pathogens Laboratory Network was established in 2017 to develop high-security laboratories for the timely detection, management and containment of outbreaks. To prevent epidemics in vulnerable countries, mass vaccination campaigns have been conducted for cholera, yellow fever and diphtheria in high-risk areas.

To ensure timely response to humanitarian emergencies, WHO continues to strengthen the Incident Management System and the regional Emergency Operations Centre. Operational partnerships active in the Region include the Global Health Cluster, the Global Outbreak Alert and Response Network, and the Emergency Medical Teams initiative. Provision of life-saving health services and medicines remains a top priority, and nearly 75% of all WHO health supplies procured globally in 2018 were delivered to the Region. Capacity-building for mental health and psychosocial support services are being enhanced to support the increasing numbers of people suffering from conflict-induced mental disorders. Rehabilitative services also need to be integrated in response planning, as disabilities can increase during emergencies due to injuries, poor basic medical care and dismantled health and support systems.

Countries in transition need to be prepared for a gradual decrease in donor contribution and should focus on community-based initiatives to provide accessible and affordable services. In 2018, the regional Health Systems in Emergencies Lab was launched to improve health system resilience by integrating health systems strengthening with emergency preparedness, response and recovery. In addition, WHO has developed guidance to provide technical support to countries during the recovery phase as they gradually step out of crisis.

Promoting health across the life course

Reproductive, maternal, newborn, child and adolescent health, and ageing

The Region has made progress towards the SDG targets for maternal and child health, although there is wide variation between countries. Total fertility rates range from 1.8 to 6.4 in countries, and the proportion of women who have their need for family planning satisfied ranges from 33.3% to 81%. The adolescent fertility rate for the Region is 44.5 per 1000 girls (aged 15–19 years), which is higher than the global average. Between 1990 and 2017, the maternal mortality ratio (MMR) declined by 50% in the Region to 166 deaths per 100 000 live births, as compared to a global ratio of 216. However, in some low-income countries the MMR is significantly higher or has even increased, and nine out of 22 countries are not on track to meet the global target for 2030.

In 2017, an estimated 800 000 children aged under 5 died in the Region, of whom more than 54% were newborns. The neonatal mortality rate is higher in the Region than globally, indicating low coverage of essential interventions such as skilled attendance at birth. Despite high rates in some countries, over 60% of countries in the Region have successfully reduced neonatal and under-5 mortality, as set in the SDG target for 2030.

The mortality rate in children aged 5–9 years decreased from 158 deaths per 100 000 children in 2000 to 96 deaths per 100 000 children in 2016 – the slowest decline in mortality for this age group among WHO regions. Available data on adolescent health status in the Region show worrying trends: the mortality rate for young adolescents (10–14 years) increased from 76 to 89 deaths per 100 000 population between 2000 and 2016, and the mortality rate among older adolescents (15–19 years) is the second highest globally at 134 deaths per 100 000 population for 2016.

Consistent with global trends, the population of older people (60 years and above) in the Region is increasing, reaching nearly 7% of the total population in 2017. Most older adults are cared for within home settings, putting considerable mental and economic strain on families, particularly as prevalence of dementia is rising and specialized care facilities are lacking in the Region.

Violence, injury and disability

The Region has the second highest prevalence (37%) of ever-partnered women who have experienced intimate partner violence at some point in their lives. The mortality rate due to homicide is 6.8 per 100 000 population in the Region, compared to a global average of 6.4. Estimated direct deaths from major conflicts is 24.1 per 100 000 population, which is about 10 times higher than the global rate (2.5) and significantly higher than other WHO regions.

Almost 9% of global road traffic deaths occur in the Region, which has a rate of 18 road traffic deaths per 100 000 population for 2016. The victims of road traffic crashes are mostly men and 80% of deaths occur in middle-income countries. Stronger enforcement of road safety laws and improved data collection on road user behaviour are needed to address this major, yet preventable, public health problem.

The Region is home to an estimated 100 million people with disabilities, with reported prevalence in countries ranging from 0.4% to 4.9%. About 4.9 million people in the Region are blind, 18.6 million have low vision and 23.5 million are visually impaired, while at least 10.7 million people have disabling hearing loss. Sixteen countries have developed/revised five-year national action plans on eye health. A situation analysis on ear health has been conducted, and a few countries have developed national plans for ear and hearing care; however, support is needed to translate policies into programmatic action.

NCDs and mental health

NCDs are the main cause of death in all but one country in the Region, and were responsible for 2.6 million deaths in 2016. The probability of dying between exact ages 30 and 70 from the four main NCDs (cardiovascular disease (CVD), cancer, diabetes, chronic respiratory disease) is 22% in the Region – the second highest among WHO regions. The regional framework for action on NCDs provides a road map towards reducing

premature deaths due to NCDs; however, 60% of countries are reaching only one third of the progress indicators set in the framework.

The main risk factors for NCDs include tobacco use, physical inactivity and harmful use of alcohol. In the Region, age-standardized prevalence of tobacco use among adults (aged 15 years and older) is 19.3%, which is below the global average. All countries except Morocco and Somalia are Parties to the WHO Framework Convention on Tobacco Control, and six countries are Parties to the Protocol to Eliminate Illicit Trade in Tobacco Products. However, very few countries in the Region have fully implemented the key control measures needed to reduce tobacco use.

Prevalence of physical inactivity is 44.5% in the Region and as per the global pattern, is higher among women. Only 16% of adolescents meet the global recommendation of at least 60 minutes physical activity per day on five or more days of the week. Alcohol per capita consumption among the adult population is 0.6 litres per capita, just one tenth of the global rate; however, about 71% of alcohol consumption in the Region is unrecorded. Most countries lack specialized services for alcohol use disorders and dependence.

It is estimated that 54% of deaths from NCDs in the Region are due to CVDs. In 2015, more than 1.3 million people died of CVDs – around one third of all deaths in the Region. Around 43 million people live with diabetes and one in four adults suffer from hypertension. Addressing CVD risk factors and implementing WHO's Package of essential noncommunicable disease interventions (WHO PEN) for primary health care are essential to reduce mortality rates due to CVDs.

Cancer kills nearly 400 000 people annually in the Region. Breast cancer is the leading cause of cancer mortality (42 000 deaths), followed by lung cancer (29 000 deaths). Incidence of all types of cancer varies between countries, from 76 to 243 per 100 000 people. Cancer survival rates are relatively low in the Region, because patients usually present at a late stage of disease. Efforts need to be directed to improving early diagnosis and detection, increasing access to treatment, developing guidelines for cancer management and expanding palliative care services.

Data on asthma and chronic respiratory diseases are inadequate for the Region. However, estimates indicate that about 8% of the population suffers from asthma and prevalence is increasing, especially in high-income countries. Chronic obstructive pulmonary disease (COPD) seems to be more prevalent in low- and middle-income countries. To reduce and control COPD, risk factors such as indoor smoke exposure and tobacco use need to be addressed through political, social and public health initiatives.

In 2015 in the Region, 10.7 million disability-adjusted life years (DALYs) were lost due to mental disorders. Depressive illnesses and anxiety disorders are highly prevalent, especially in countries affected by emergencies. More than 90% of people with mental disorders in the Region are estimated to miss out on the treatment they need. The age-standardized suicide mortality rate was 4.3 per 100 000 population in 2016, which is lower than in other WHO regions. Similar to the global pattern, mortality rate due to suicide is about 2.5 times higher among men than women.

The Region is experiencing a double burden of malnutrition – the presence of undernutrition along with overweight and obesity, or diet-related NCDs. About 25% of children are stunted and 7.8% have wasting, rates that are higher than the global averages. Data show high prevalence of overweight and obesity among adolescents, and that in the majority of countries over half of adults are overweight regardless of country income level. In October 2019, the Regional Committee endorsed the *Strategy on nutrition for the Eastern Mediterranean Region, 2020–2030* providing a framework for efforts to reach SDG targets on nutrition and diet-related NCDs, and to guide implementation of the remainder of the United Nations Decade of Action on Nutrition (2016–2025) in the Region.

Elimination and eradication of high-impact communicable diseases

The Region has made progress in eliminating vaccine-preventable diseases, maintaining a vaccination coverage of 80%. Fourteen countries have achieved 90% coverage for the third dose of diphtheria-tetanus-pertussis (DTP3) vaccine; however, an estimated 3.2 million children aged under 1 missed DPT3 immunization in 2017. Maternal and neonatal tetanus elimination has been achieved in all except five countries. In 12 countries, coverage of first dose of measles-containing vaccine was 95% or above in 2018. Routine second dose of measles-containing vaccine was provided in 21 countries with 69% coverage, which is above the global rate. However, the incidence rate of measles is over 100 cases per million population in six countries of the Region. Several new vaccines have been introduced including *Haemophilus influenzae* type B and inactivated poliovirus vaccines in all countries, pneumococcal conjugate vaccine in 17 countries and rotavirus vaccine in 14 countries.

Wild poliovirus transmission is at its lowest ever levels in the Region and is limited to a few zones in Afghanistan and Pakistan. Surveillance for acute flaccid paralysis (AFP) reported nearly 23 000 cases in 2018 – a 43% increase compared to 2016. Twenty countries have met the key surveillance indicators for non-polio AFP rate (2 per 100 000 children under 15 years of age). Environmental surveillance is being implemented in nine countries to early detect circulating vaccine-derived polioviruses, especially in emergency-affected and hard-to-reach areas. Supplementary immunization activities are being implemented in the two endemic and six at-risk countries. Four countries (Afghanistan, Pakistan, Somalia and Sudan) are among the 16 countries identified globally as a priority for post-eradication transition planning, and four countries (Iraq, Libya, Syrian Arab Republic and Yemen) are regional priorities for development of a transition plan.

Substantial progress has been made towards malaria elimination, and 14 countries in the Region are now free of malaria. The population at risk of contracting malaria is 295 million, of whom about two thirds live in Pakistan. In 2018, the Region reported more than 5 million presumed and confirmed malaria cases, of which nearly 2.2 million were confirmed. The estimated number of malaria-related deaths was 8300 in 2017, of which 1627 were reported confirmed cases (an increase compared to 2015). Elimination efforts are hampered by outbreaks of other vector-borne diseases, insufficient investment in control programmes, changes in malaria eco-epidemiology and increasing levels of insecticide resistance. Major policy documents guiding malaria control include the Regional malaria action plan 2016–2020 and the Regional plan of action 2019–2023 for implementation of WHO's *Global vector control response 2017–2030*.

In 2017, the number of people in the Region requiring interventions against neglected tropical diseases was about 7.5 million. Five neglected tropical diseases are the focus for eradication or elimination in the Region: dracunculiasis, onchocerciasis, schistosomiasis, lymphatic filariasis and trachoma. Four countries are implementing the SAFE strategy (surgery, antibiotic therapy, facial cleanliness and environmental improvement) to control and eliminate trachoma. All countries in the Region except Sudan are certified for elimination of dracunculiasis and lymphatic filariasis as a public health problem. In 2018, the Region carried 70% of the global burden of cutaneous leishmaniasis as well as the highest burden of visceral leishmaniasis.

During 2018, the incidence of tuberculosis (TB) was 115 per 100 000 population in the Region, which is lower than the global rate of 132. Out of a total estimated 810 000 TB cases, 537 761 were notified in 2018, which corresponds with a treatment coverage rate of 65%. Five countries carry 91% of TB burden in the Region, with most of the burden being shouldered by Pakistan. In 2018, about 38 000 multidrug-resistant TB cases were estimated in the Region, of which only 4566 (12%) were put on treatment. However, treatment success rates of 92% and 62% were achieved among drug-sensitive and drug-resistant TB cases, respectively, the highest rates of any WHO region.

The prevalence of HIV in the Region is low, although the epidemic is growing faster than in other WHO regions. The number of people living with HIV is 400 000, with 41 000 new HIV infections and 15 000 deaths in 2018 (an increase of 32% and 63%, respectively, since 2010). More than 95% of new infections in the Region occur among key at-risk population groups. Only 32% of people living with HIV have been diagnosed, indicating limited access to HIV testing. Antiretroviral therapy coverage in the Region is low at 21%, and particularly low in the higher-burden countries. To improve access to treatment, the first and most important response is to expand coverage of targeted HIV testing services.

In 2016, the overall hepatitis B surface antigen prevalence was 3.3% in the Region, accounting for an estimated 21 million chronically infected people. Regional coverage of hepatitis B birth-dose vaccination increased from 27% in 2016 to 33% in 2018; however, this rate is still relatively low. The Region has the highest prevalence of hepatitis C virus in the world (2.3%), accounting for around 15 million chronically infected people. Incidence of hepatitis C is 62.5 per 100 000, which is almost three times higher than the global rate (23.7). Twelve countries in the Region have national plans for the prevention and control of viral hepatitis.

Antimicrobial resistance

Antimicrobial resistance is a major public health issue in the Region due to inadequate regulations, insufficient policy, low public awareness and lack of national surveillance systems. Most countries have now developed national action plans on antimicrobial resistance, in line with the global plan and incorporating a One Health approach. Eighteen countries are enrolled in the Global Antimicrobial Resistance Surveillance System platform and 15 reported data for the 2019 data call. WHO is supporting four countries to establish antimicrobial resistance surveillance systems, and onsite assessments of national reference laboratories have been conducted in seven countries. Data on the status of national infection prevention and control (IPC) programmes have been collected for 19 countries using WHO's IPC Assessment Framework tool.

Environment, climate change and health

Environmental risk factors such as air, water and soil pollution, lack of sanitation and hygiene, chemical exposures, climate change and radiation contribute to more than 100 diseases and injuries. The burden is particularly high among children: it is estimated that 26% of childhood deaths could be prevented through reduction of environmental risk factors. Over 98% of the urban population in the Region live in places with unsafe air to breathe, with regular exposure to pollutant loads up to 12 times higher than WHO-recommended safe levels. Projections suggest that the Eastern Mediterranean will be the second region most affected by climate change, including a shortage in renewable water supply which is estimated to reach a 50% gap by 2050. In 2017, the Regional Committee endorsed a framework for action on climate change and health in the Region (2017–2021); so far, eight countries have developed national action plans to implement the regional strategy.

Other priority areas for action in the Region

WHO is developing a regional framework for 2019–2023 to mainstream refugee and migrant health in all policies. Some countries in the Region have already taken legislative and high-level policy measures to promote the health and well-being of migrants and refugees, while others are enhancing their information systems to collect reliable data on health status and service provision for refugees. Efforts to provide equitable access to essential health services, medicines and vaccines for refugees and migrants, alongside financial protection, have been made in seven countries. Community-based initiatives are active in promoting continuity of care and addressing NCDs and mental health problems among migrant and refugee communities.

The Regional Healthy City Network was created in 2012 to address challenges in cities, such as inadequate water supply and sanitation, pollution, overcrowding, sedentary lifestyles, infectious diseases, NCDs, unemployment and violence. In the past few years, the healthy cities and villages programme has been revitalized, especially in Gulf Cooperation Council countries and the Islamic Republic of Iran.

The increased acceptability of civil society's role in the multicultural context of the Region can be used to convey tailored health promotion messages, especially gender-sensitive messages. Civil society organizations are active in addressing the health workforce gap and providing NCD prevention and care for displaced populations. Thirteen countries already have a form of community health workers programme, and WHO is working to enhance community-based interventions through evidence-based tools and guidelines, such as a training package on promoting health and development of newborns, infants and children at home for community health promoters.

There are examples of successful initiatives in the Region to embrace Health in All Policies (HiAP), and several countries have incorporated social determinants of health into their health agendas. To advance progress in this regard, WHO convened a regional Commission on Social Determinants of Health in 2019 to establish evidence-based, action-oriented recommendations for reducing health inequities. Addressing the social determinants of health through the HiAP approach will contribute to implementation of *Vision 2023* and accelerate progress towards achievement of the SDGs.

1. Health and the Sustainable Development Goals (SDGs)

1.1 The 2030 Agenda for Sustainable Development

Health is defined in WHO's Constitution as "a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity." Globally, there has been a significant improvement in health and well-being since 1990 in parallel with growing economic and social development and reduction in poverty and inequality. This progress is reflected in increased life expectancy in many countries worldwide. However, complex issues such as poverty, inequality (social, political, economic and gender), climate change, social and political conflicts and war still pose high threats to the health and safety of millions of people and their environment. Communicable diseases remain a major public health issue, especially with the emergence of antimicrobial resistance, while the burden of noncommunicable diseases (NCDs), including mental and substance use disorders, is increasing. Complications during pregnancy and childbirth still take a toll. Addressing all these issues has become more complicated due to the increasing numbers of migrants and displaced people.

The 2030 Agenda for Sustainable Development, adopted by all Member States of the United Nations in 2015, calls upon all countries to take urgent action to end poverty, to move towards global peace, to reduce inequality and to boost economic growth, while tackling climate change and other hazards threatening the environment. The 2030 Agenda encompasses 17 SDGs and 69 targets with the ultimate vision of peace, prosperity and well-being for everyone *(1)*. To monitor the progress made towards achieving the targets, 232 indicators have been defined in the global indicator framework for the SDGs and are subject to annual refinement by the United Nations Statistical Commission *(2)*.

Health and well-being are central concepts throughout the SDG Agenda. SDG 3 specifically focuses on health, with the aim to "Ensure healthy lives and promote well-being for all at all ages" based on the definition of health in the WHO Constitution. SDG 3 encompasses 13 targets and 26 indicators for monitoring the progress made (or the lack of progress) and to enable countries to enhance their endeavours or revisit their national plans when progress is halted. It is crucial for countries and regional entities to set their health strategies and targets in line with the SDGs, since isolated programmes will be counterproductive and a waste of resources.

SDG 3 has strong interconnections with other SDGs on poverty, hunger, education, gender equality, water and sanitation, economic growth, inequality, safe cities, climate change and partnerships. The bi-directional relationship between health and these other areas makes advancement of each one beneficial to the others. The SDGs define

cross-cutting issues – the most prominent one being universal health coverage (UHC) – and put emphasis on health governance and health in governance. Therefore, not only does the health sector need to strengthen its governing system, it also needs to pursue a proactive approach to advocate for the inclusion of health in all policy arenas, which is the Health in All Policies (HiAP) approach *(3, 4)*.

1.2 WHO's Thirteenth General Programme of Work

WHO's GPW 13 (2019–2023) is developed based on the 2030 Agenda for Sustainable Development, with commitment to SDG 3 and all other health-related SDGs *(5)*. GPW 13 is developed to support all countries – regardless of their level of development – to improve their health, to address health determinants and to respond to health challenges, noting that countries in different levels of development will need different kinds of support and involvement.

Within the context of the SDGs, GPW 13 sets its vision on Article 1 of WHO's Constitution: a world in which all people attain the highest possible level of health and well-being; and summarizes WHO's mission as: Promote health, Keep the world safe, Serve the vulnerable. In basing GPW 13 on the SDGs, WHO has made a commitment to leave no one behind. In this context, implementation of gender equality, equity and rights-based approaches to health that enhance participation, build resilience and empower communities underpins all WHO's actions. WHO will work to ensure the right to health for people with disabilities, marginalized or vulnerable groups (such as migrants, internally displaced persons and refugees), and anyone facing stigma and discrimination because of their ethnicity, religion or any other social status.

1.3 The triple billion targets

GPW 13 is structured around three interconnected strategic priorities (Fig. 1) to ensure healthy lives and well-being for all at all ages.

1. Advancing UHC – 1 billion more people benefiting from UHC. This priority is aligned with SDG target 3.8, which focuses on achieving UHC.
2. Addressing health emergencies – 1 billion more people better protected from health emergencies. This priority is based on SDG indicator 3.d.1 (International Health Regulations (IHR) capacity and health emergency preparedness).
3. Promoting healthier populations – 1 billion more people enjoying better health and well-being. This priority is based on a composite estimate derived from adding multiple SDG targets.

To implement these SDG-based strategies, WHO will be proactive in playing its leadership role as the global health authority, in collaboration with both State and non-State actors and international partners in the global health agenda. WHO is supporting a whole-of-government, whole-of-society and HiAP approach to achieve the goals of GPW 13 *(5)*.

Fig. 1. *GPW 13: a set of interconnected strategic priorities and goals to ensure healthy lives and promote well-being for all at all ages*

Source: WHO (2019) (5).

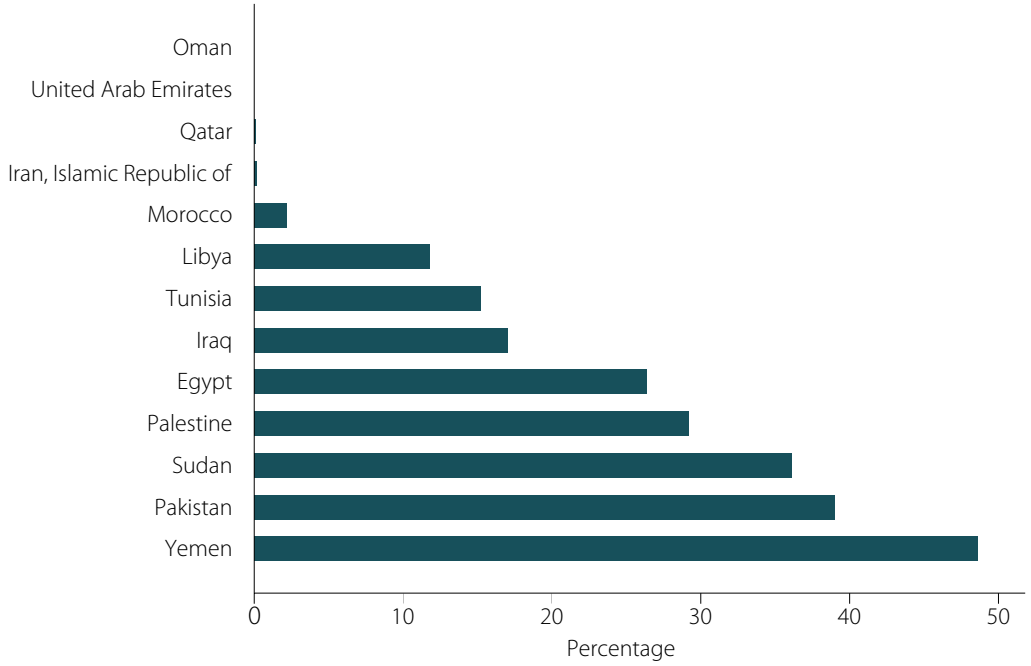
2. The Eastern Mediterranean Region at a glance

The WHO Eastern Mediterranean Region comprises 22 countries: Afghanistan, Bahrain, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen. The Eastern Mediterranean is the least populated region compared to other WHO regions, with an estimated population of 676 million representing almost 9% of the world's population. In 2018, the least populated country in the Region was Djibouti at less than 1 million people and the highest population was estimated at about 208 million people in Pakistan. For the same period, the population growth rate in the Region ranged from 1.1% in Morocco to 10.8% in Kuwait.

A prominent characteristic of the Region is its heterogeneity with respect to historical background, geopolitical and social context, ethnicity and languages spoken, gross domestic product (GDP), sociodemographic profiles, health indicators, and health system capacities and coverage. War, conflict and social or political unrest have led to the forced displacement and migration of millions of people and disrupted structures and functions of health systems in affected areas, which has eventually led to slowing of progress in health promotion and protection and even reverting progress in some areas *(6, 7)*. Additionally, the rapid influx of refugees into some countries has strained existing health systems and resources. For example, in 2018, 1 in 6 people in Lebanon (156 per 1000) and 1 in 14 people in Jordan (or 72 per 1000) were refugees *(8)*.

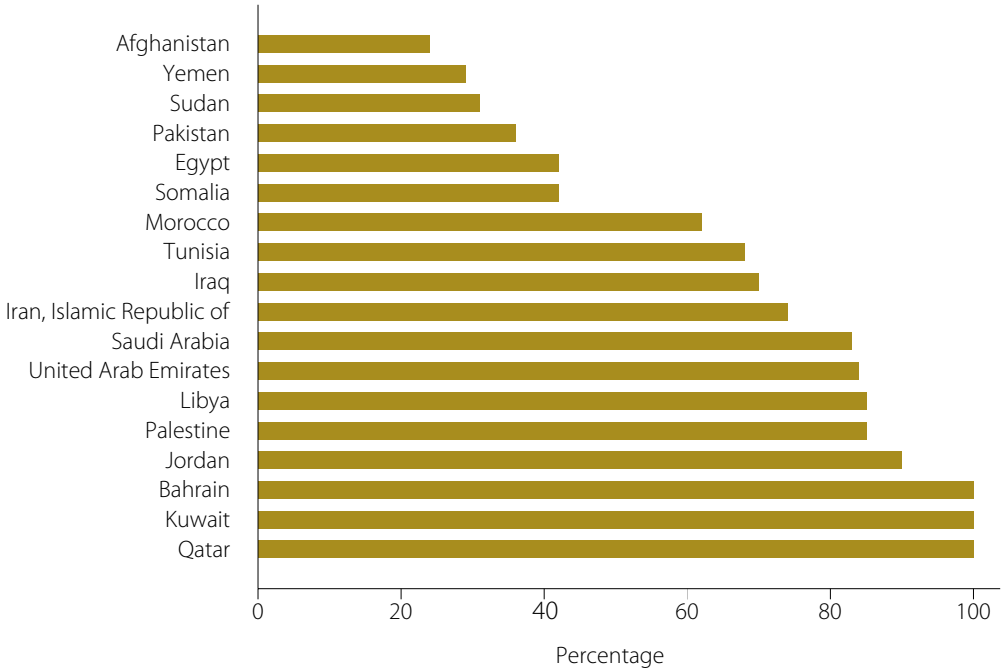
In the Region, the proportion of people living below the international poverty line (i.e. on less than US$ 1.90 per day) in reporting countries is above 25%; the highest level is in Yemen, where almost half the population live below the poverty line (Fig. 2). Residence in urban settlements is the dominant pattern in the Region, with about 7 out of 10 people living in cities (Fig. 3). The level of literacy also varies in the Region. Available data for 12 countries show that, on average, women are less literate than men (62.5% versus 82.5%) and in three countries more than 40% of the population are illiterate (Fig. 4). In 12 countries of the Region, 90–100% of children are enrolled in primary school; however, in five countries the enrolment rate is less than 60% and is lower among girls than boys (Fig. 5).

Fig. 2. *Proportion of population living below the international poverty line (%), 2014–2018*



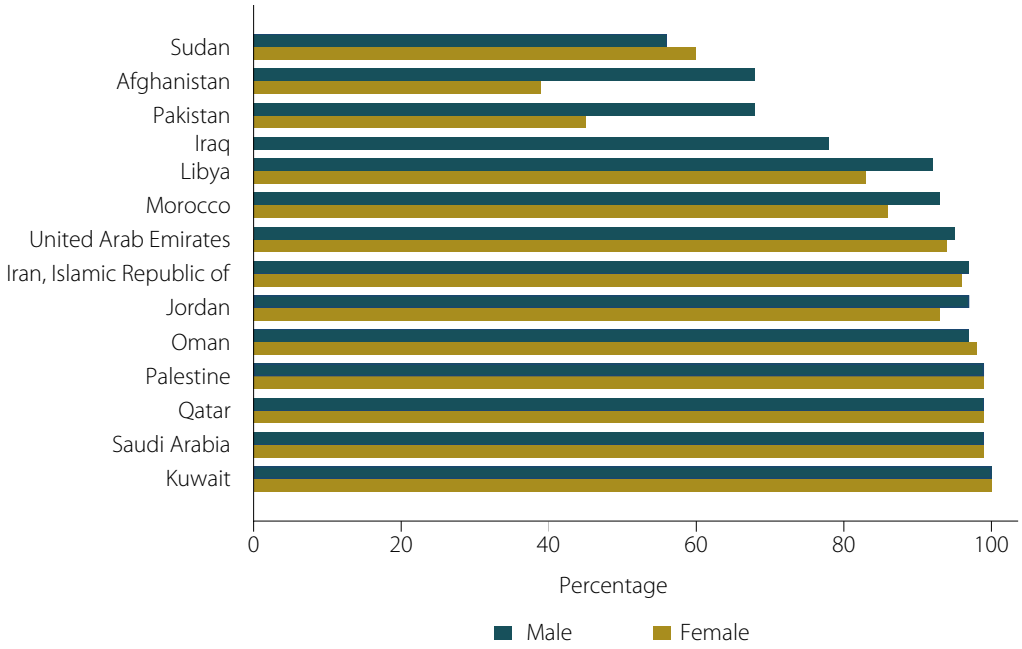
Source: WHO (2020) (9).

Fig. 3. *Population living in urban areas (%), 2014–2018*



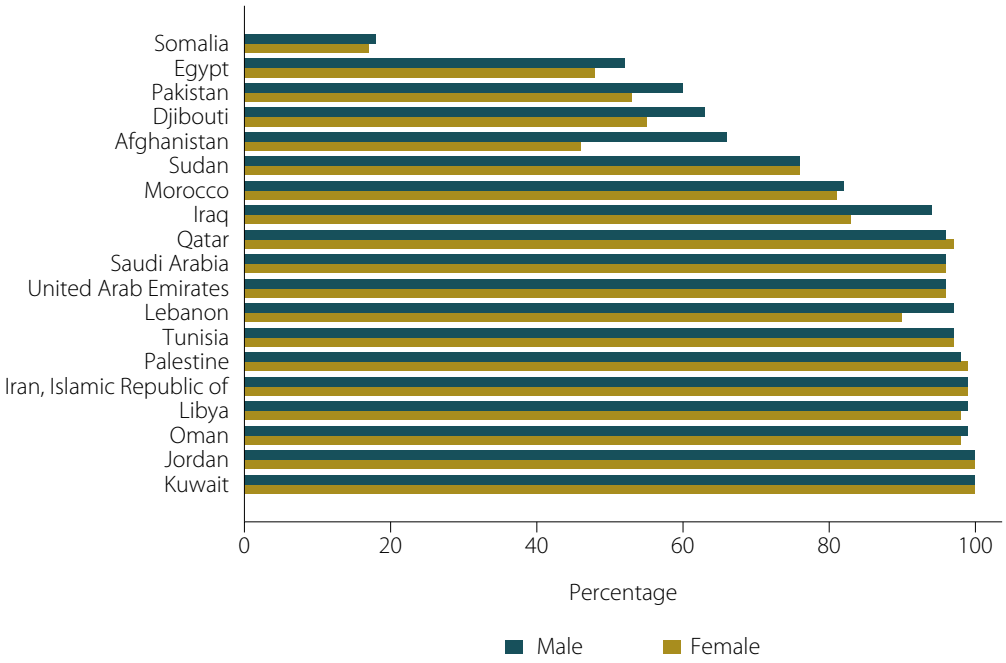
Source: WHO (2020) (9).

Fig. 4. *Literacy rate among 15–24-year-olds (%) by sex, 2013–2018*



Source: WHO (2020) (9).

Fig. 5. *Net primary school enrolment ratio (%) by sex, 2013–2018*



Source: WHO (2020) (9).

Table 1 shows that life expectancy and healthy life expectancy at birth is lower in the Region than the global estimates, and the second lowest among the six WHO regions *(10)*. Women in all countries except Somalia live longer than men; the difference in the Syrian Arab Republic is almost 9 years. Among all countries of the Region, only Somalia has life expectancy under 60 years (55.4 years). However, healthy life expectancy is less than 60 years in eight countries of the Region, with the lowest estimated in Somalia (50 years). The difference between life expectancy and healthy life expectancy in most countries, even high-income countries, is 10 years or above implying that living longer is not necessarily accompanied by a desirable life quality.

Table 1. *Regional and global life expectancy and healthy life expectancy estimates, 2016*

	Total population	Life expectancy at birth (years)			Healthy life expectancy at birth (years)		
		Male	Female	Total	Male	Female	Total
	2016	2016			2016		
Regional	679 377	67.7	70.7	69.1	59.1	60.4	59.7
Global	7 430 261	69.8	74.2	72.0	62.0	64.8	63.3

Source: WHO (2020) (9) and WHO (2019) (10).

Many countries in the Region are facing serious challenges in maintaining efficient and well-functioning health systems and providing quality services to all people without financial burden. These challenges include: weak governance and leadership; insufficient health funding; shortage of health workforce and imbalances in their skills mix and geographic distribution; inadequate integration of services into primary health care; and suboptimal quality of health care. Protracted humanitarian crises in countries such as Afghanistan, the Syrian Arab Republic and Yemen have made the situation even more complicated. Safety and security for providing health services in conflict zones is also a major concern.

The Eastern Mediterranean Region aligned its 2020–2023 strategy with the SDGs and GPW 13, with a new vision for the Region, *Vision 2023*, which calls for coordinated action to reach "health for all by all". The strategy aims at changing the WHO Regional Office business model and to reorient health systems towards UHC according to the most demanding health burdens in countries of the Region. The strategy contains four shared health priorities that are adaptable by all countries, despite heterogeneity in their health profiles or social and economic development. These four priorities are: expanding UHC; addressing health emergencies; promoting healthier populations; and making transformative changes in WHO's business model *(11)*.

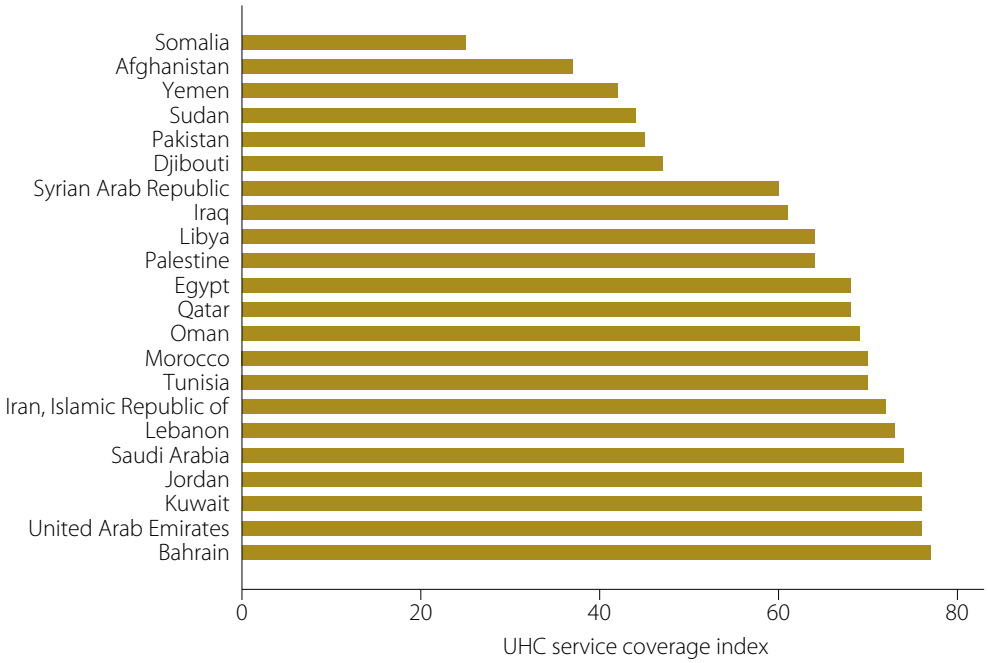
3. Achieving UHC

3.1 UHC service coverage index

UHC is the overarching platform for achieving the health-related SDGs and one of the key objectives of WHO's GPW 13 (2019–2023). The ministers of health of the Region signed the UHC2030 Global Compact collectively at the Ministerial Meeting on the Road to Universal Health Coverage in Salalah, Oman, in September 2018. The ministers confirmed their commitment to achieving UHC through a whole-of-government and whole-of-society approach, and endorsed the Salalah Declaration to "Recognise the key role of Universal Health Coverage in realizing the right to health care and the right to health of all people in the Eastern Mediterranean Region" *(12)*.

Sixteen tracer indicators that include reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases, and service capacity and access, have been selected to measure the breadth of essential health services for UHC (SDG target 3.8). The UHC service coverage index combines the 16 tracer indicators of service coverage into a single summary measure. According to the UHC index, essential health services are less widely available in the Eastern Mediterranean Region than in most regions of the world. In 2015, the UHC service coverage index had a global value of 64 (out of 100), based on data from the WHO/World Bank 2017 global monitoring report. Ten countries in the Region stand at 64 or less on the UHC service coverage index, as shown in Fig. 6. This translates to about 347 million people, or a weighted average of 53% of the Region's population, having access to basic UHC services. Therefore, almost half of the Region's population do not have access to 16 essential health services *(13, 14)*.

Fig. 6. *UHC service coverage index, 2015*



Source: WHO (2020) (9).

The 2019 global monitoring report shows that between 2000 and 2017, the UHC global index value increased from 45 to 66 (out of 100); however, the value remained at less than 60 for the Eastern Mediterranean Region *(15)*.

3.2 Governance

"Governance in the health sector refers to a wide range of steering and rule-making related functions carried out by governments/decisions makers as they seek to achieve national health policy objectives that are conducive to universal health coverage" *(16)*. A clear vision, strong governance structures and public health functions, and effective partnerships are all critical to enhance health systems performance and resilience, and also to support priority health programmes' response. The GPW 13 states that: "Effective governance is critical if countries are to move towards UHC. Governments' central role includes policy and planning, the organization of the health system, the regulation of services, financing, human resources and technologies." Ministries of health also have a role to play as the stewards of national health systems. In the Eastern Mediterranean Region, there is a need to strengthen health ministries' stewardship function. Regionally, health systems governance is facing the following challenges:

- health system transformation strategies are poorly crafted;
- essential public health functions are not well defined or assigned to health system actors;
- health systems' institutional set-ups and architecture are not "fit for purpose";
- legislation/regulations are not in line with transformation strategies for UHC;
- participatory approaches for health decision-making are not properly supported;
- coordination, integration and transparency in managing and sharing of health information are lacking.

Although several countries in the Region have developed a national vision, strategy or legislation for paving the way towards UHC, these efforts are facing operational challenges in implementation. The Islamic Republic of Iran, Oman and Saudi Arabia have prepared long-term visions for health system transformation towards UHC. Bahrain, Egypt and Sudan have enacted new laws to advance towards UHC. Jordan, Pakistan, Sudan and Tunisia have developed health sector-wide strategies for UHC, and Morocco and Sudan have issued royal and presidential declarations for UHC *(17)*. However, more than half of the countries in the Region need to take the first steps to initiate policies, strategies and operational plans to advance towards UHC. There is an increasing demand from Member States to strengthen their institutional and managerial capacities in support of operationalizing UHC policies, strategies and plans, along with health systems governance transformation strategies.

3.2.1 Multisectoral approaches and partnerships

The concept of multisectorality was raised at the time of the Alma-Ata Declaration of 1978, under "intersectoral coordination". It has grown to include HiAP and is reinforced by the fact that many health-related SDGs influence health and well-being. Some countries in the Eastern Mediterranean Region, including the Islamic Republic of Iran and Sudan, have

developed HiAP strategies and are currently in the process of developing health systems governance institutional transformation plans to support their operationalization and advance towards UHC.

The Framework of engagement with non-State actors was adopted by the Sixty-ninth World Health Assembly in 2016. It is the first overarching framework for WHO that governs all types of engagement with all kinds of non-State actors (nongovernmental organizations, private sector entities, philanthropic foundations and academic institutions). Its purpose is to provide a set of rules in order to strengthen and enhance WHO's engagement with non-State actors while reinforcing WHO's management of the potential risks related to these engagements. There is a need to strengthen health ministries' engagement with other health system actors (e.g, civil society, media, private sector) in national and subnational policy, planning and review processes to achieve UHC.

Through the GPW 13 and *Vision 2023*, which calls for solidarity and joint action on "health for all by all" and better engagement with health stakeholders to advance towards health and well-being, the Regional Office is working with parliamentarians, civil society including media and academia, and the private sector to strengthen their engagement in health sector decision-making and monitoring of progress both at regional and country levels. This commitment is materialized in the Regional Office's partnership with the Regional Parliamentary Forum for Health and Well-being, which was officially launched in June 2019 in Tunisia.

The H6 partnership pulls together six United Nations agencies, related organizations and programmes to improve the health and save lives of women, children and adolescents in response to the *Global Strategy for Women's, Children's and Adolescents' Health (2016–2030)*. The H6 partnership comprises WHO, the Joint United Nations Programme on HIV/AIDS (UNAIDS), the United Nations Population Fund (UNFPA), the United Nations Children's Fund (UNICEF), the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) and the World Bank.

The UHC Partnership aims to support countries in the development and implementation of health system strategies for UHC. Since its inception in 2011 with seven countries, the UHC Partnership has progressively expanded to include 66 countries by 2018 *(18)* and 115 or more, globally, by July 2019 *(19)*. It is funded by the European Commission, France, Ireland, Japan, Luxembourg and the United Kingdom of Great Britain and Northern Ireland. The UHC Partnership has supported several countries in the Region and over the next 3 years, will be supporting 14 countries (Afghanistan, Djibouti, Egypt, Jordan, Lebanon, Iran (Islamic Republic of), Iraq, Pakistan, Palestine, Somalia, Sudan, Morocco, Tunisia and Yemen).

3.2.2 Health diplomacy

Health diplomacy is critical for the implementation of many national and regional health programmes in the Eastern Mediterranean Region. Polio eradication, for example, cannot be achieved without the involvement of many international players in order to strengthen control programmes and create a safe and secure environment for vaccination campaigns. Health diplomacy is important for countries in the Region because they face many development issues that relate directly to health. In addition,

the Region is disproportionately affected by manmade and humanitarian health crises that can be addressed only through collaborative efforts *(20)*.

In recent years, the Regional Office has been working to enhance the capacity of countries in the area of health diplomacy. So far, WHO has convened five annual seminars with participation of key players from the ministries of health and foreign affairs, diplomats, parliamentarians and experts in order to strengthen the relationship between health and foreign policy. These seminars focus on issues of highest priority and relevance to the Region, and aim to raise awareness of the value of integrating concepts of health diplomacy into foreign policy. Countries have identified key points for building national capacity in health diplomacy including: establishing health diplomacy units in the ministry of health; appointing high-level focal points for health diplomacy; and enhancing their international presence and involvement in global health issues focusing on NCDs, emerging diseases and the health of refugees *(21)*. The Regional Office is also trying to promote the leadership role of parliamentarians in achieving UHC, within the framework of *Vision 2030*: health for all by all *(22)*.

In December 2017, the United Nations General Assembly adopted a resolution on global health and foreign policy, which ensures the health of the most vulnerable is protected for an inclusive society *(23)*. In September 2019, the high-level meeting on Universal Health Coverage: Moving Together to Build a Healthier World brought together heads of state, political and health leaders, policy-makers and UHC champions to advocate for health for all. Such international meetings are crucial because they help to protect the right to health through resolutions, while also improving health ministries' and the health sector's coordination with international partners. To this effect, and to facilitate fulfilment of these commitments, the Regional Office for the Eastern Mediterranean is engaging with ministries of foreign affairs and health, as well as other relevant actors, for effective operationalization and accountability of policies and plans for achieving UHC. Furthermore, this allows for better coordination among countries of the Region and to advocate for regional needs in WHO Executive Board and World Health Assembly meetings.

3.2.3 Strengthening health legislation, a tool for advancing health

Supportive legal frameworks and legislation are essential tools to operationalize identified national priority health policies and strategies, as well as to support governance set-ups and structures to improve health system responsiveness and accountability. There is an increasing demand in countries to strengthen health legislators' capacities in proposing, drafting and implementing health laws. Engaging parliamentarians in the health sector response is essential to coordinate between the legislative and executive arms of government and to achieve UHC. WHO has been working with the Regional Parliamentary Forum for Health and Well-being to better engage with parliamentarians and health legislators to enhance their capacities.

The effective use of law and regulations is key to successful implementation of national NCD programmes in particular. Addressing NCD risk factors will only be possible through law enforcement, because the commercial interests of food, alcohol and tobacco companies rarely allow voluntary implementation of related strategic health interventions. In this context, WHO partnered with the O'Neill Institute for National and Global Health Law at Georgetown University, Washington, United Sates of America,

to support legal reform for NCD management in the Region. The Regional Office/O'Neill Institute partnership led to development of a package comprising a detailed description of evidence-based cost-effective legal policies and regulatory interventions to reduce NCDs, together with implementation guidance tools and proposed capacity-building initiatives. This comprehensive package proposed legal interventions in three priority domains: 1) NCD governance; 2) tobacco control laws in compliance with the WHO Framework Convention on Tobacco Control (WHO FCTC); and 3) laws to promote healthier diets, such as reducing consumption of sodium and sugar. WHO is committed to support countries in the Region to enact and enforce population health improvements through these key interventions *(24)*.

3.3 Service delivery and quality

3.3.1 Priority benefits packages

All countries in the Eastern Mediterranean Region have explicit or implicit packages of essential health services. However, following the shift in the burden of diseases, there is increasing need to revise these packages to give greater focus to NCDs and mental disorders, which are now contributing over half of the disease burden in the Region. Nevertheless, addressing maternal, neonatal and child health and communicable diseases remains a priority for the Region.

Countries need to advance in at least three dimensions to make UHC operational: 1) expansion of services; 2) population coverage; and 3) financial protection *(25)*. The Regional Office's strategy for expansion of services is to develop and implement UHC priority benefits packages (UHC-PBPs) in countries *(26)*. A first necessary step was defining a desirable package that would lead to the realization of UHC and other health-related SDG goals. The definition of a UHC-PBP, as agreed through consultation, is a set of evidence-informed prioritized interventions including health services and programmes, intersectoral actions and fiscal policies, defined through a deliberative process that accounts for economic realities and social preferences. A UHC-PBP should be available for all, in good quality, at the appropriate service delivery level, through the relevant service delivery platform, using an integrated people-centered approach and covered by adequate financial protection arrangement(s).

The need for development and implementation of UHC-PBPs was endorsed in September 2018 by the Salalah Declaration on UHC, which called for health policy-makers to define a context-specific essential health services package *(12)*. Because of its potential impacts, the UHC-PBP is highlighted as one of 10 key initiatives of the regional *Vision 2023 (27)*. During 2019, WHO prepared a regional list of essential services for UHC-PBPs and operational guidance for the development of a package at the national level. Afghanistan, Jordan, Pakistan, Somalia and Sudan are collaborating with WHO to develop their national UHC-PBPs. At least 11 countries of the Region in the UHC Partnership are working on development and implementation of UHC-PBPs as of 2019. In addition, other countries including Lebanon, Syrian Arab Republic and Yemen have plans for developing benefits packages through other schemes.

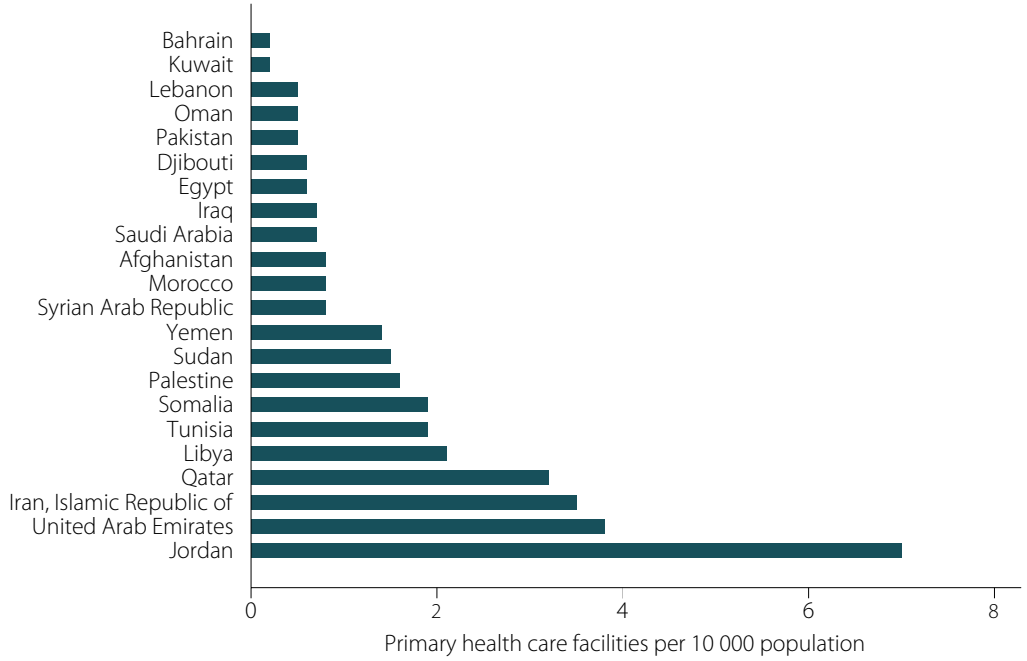
3.3.2 Primary health care and family practice

The Region has always been committed to the core principles and values of primary health care, as reaffirmed in the 2008 Qatar Declaration on Primary Health Care signed by ministers of health of all countries *(28)*. Resolution EM/RC60/R.2 on UHC, adopted by the 60th session of the Regional Committee for the Eastern Mediterranean in 2013, urged Member States to expand the provision of integrated health services based on primary health care *(29)*. In 2018, the Global Conference on Primary Health Care in Astana, Kazakhstan, prioritized strengthening delivery of health services through the primary health care system to achieve UHC.

Examples of best practices for strengthening and expanding primary health care in the Region include the *welayat* (district) health systems in Oman, and the *shabakey behdashti* (primary health care network) and *behvarz* (community health worker) initiatives in the Islamic Republic of Iran. Pakistan established a Lady Health Workers Programme in 1994, which has over 100 000 workers as of 2019; and Afghanistan has contracted out primary health care services to nongovernmental organizations with successful results. These success stories can guide the promotion of service delivery through primary health care in other countries of the Region and the world *(30)*.

Coverage of essential health services is under 70% in many countries of the Region, including in some high-income countries; therefore, investment in reorientation of health services towards primary health care will be required for achieving UHC. As shown in Fig. 7, provision of primary health care facilities is inadequate across the Region regardless of country income levels. Twelve countries in the Region have less than 1 primary health care facility per 10 000 population, including four high-income countries.

Fig. 7. *Density of primary health care facilities, 2013–2018*



Source: WHO (2020) (9).

Primary health care is facing several challenges in the Region including: rapid expansion of the private health sector, alongside its increasing partnership with governments; changing demography of the population and related ageing health issues; changes in health technology; ensuring the financial protection of households when accessing health services; and rising expectations of a more informed population. Additionally, protracted complex humanitarian emergencies and conflicts are affecting the Region causing forced displacement of more than 30 million people, many of which belong to vulnerable population groups including women and children *(30)*.

To transform the commitments of the 2018 Declaration of Astana into action, the Regional Director for the Eastern Mediterranean announced the Primary Health Care Measurement and Improvement initiative (PHCMI) during World Health Day on 7 April 2019. The PHCMI is built on global goods from: the Primary Health Care Performance Initiative; the primary health care operational framework; preexisting regional efforts on the family practice approach; the primary health care quality indicators; and the Regional Office's health system profiles. The approach will build national capacity for assessment-based improvement of primary health care, including the well-established family practice approach.

WHO's *Primary health care on the road to universal health coverage: 2019 monitoring report* reveals that almost half of the Region's population does not have access to 16 essential health services *(15)*. Contracting with private health sector providers to deliver essential health service packages using strategic purchasing options and financial protection arrangements will help countries to achieve UHC. In 2018, the Regional Committee adopted resolution EM/RC65/R.3 on private sector engagement for universal health coverage, which requested the Regional Director to "provide technical support to Member States to establish and strengthen effective engagement with the private sector for service delivery." In support of this, the Regional Office assisted Member States to conduct in-depth assessments of their private health sectors in 2018–2019 to identify the challenges facing each country. A collaboration between the WHO Regional Office for the Eastern Mediterranean, UNICEF's Middle East and North Africa Regional Office, and the United States Agency for International Development (USAID) Bureau for the Middle East is leading the operationalization of actions and interventions in selected countries (Egypt, the Islamic Republic of Iran, Iraq, Libya, Morocco, Pakistan, Tunisia and Yemen) during 2020.

The majority of primary health care facilities (93%) are managed by general practitioners who have neither vocational training nor experience in creating family practice-oriented health care teams. A technical paper on Scaling up family practice in the Eastern Mediterranean Region: progressing towards universal health coverage, presented to the 63rd session of the Regional Committee in 2016, was followed by adoption of resolution EM/RC63/R.2 requesting Member States to "establish bridging programmes for general physicians" *(31, 32)*.

Family practice can be defined as the health care services provided by a family physician and his/her multidisciplinary team that are characterized by comprehensive, continuous, coordinated, collaborative, personal, family and community-oriented services. WHO conducted an assessment of family practice in 22 countries of the Region in 2014–2016 which revealed that family practice is included in national health policies

in 16 countries. However, implementation of the policy is lagging in countries and the programme is almost non-existent in most low-income countries of the Region. One of the main barriers to scale-up of family practice is inadequate numbers of trained human resources, mainly due to a shortage of training programmes and lack of support from policy-makers for the specialty. To reach the target of 3 family physicians per 10 000 population by 2030, WHO in collaboration with UNICEF, Asia United Bank and the World Organization of Family Doctors (WONCA) developed the Regional Professional Diploma in Family Medicine (RPD-FM) as a bridging programme, which can be defined as a transitional period when a general practitioner will be introduced to family medicine and gain improved knowledge and skills in service delivery. The RPD-FM was presented to ministers of health at the Regional Committee in 2019. Member States welcomed the establishment of the RPD-FM as a bridging programme in family medicine, and as a way to overcome the severe shortage of family physicians.

In 2018, the WHO Regional Office for the Eastern Mediterranean and the World Organization of Family Doctors co-published *Family practice in the Eastern Mediterranean Region: universal health coverage and quality primary care*, which provides in-depth analysis of development and improvement of family practice and primary health care in countries of all income levels and in countries experiencing emergencies *(33)*.

3.3.3 Hospital care management

Hospitals are a huge consumer of health resources in most countries of the Region, accounting for 50–80% of government health expenditure and two thirds of the health workforce. Most countries of the Region have hospital-centric health systems, in which 80% of hospital beds belong to the public sector; however, the private sector is growing fast. Despite the central role of hospitals, health ministries (the primary stewards of hospital governance) are not executing their roles efficiently, which has adversely affected quality, accountability and patient safety in hospitals. In the majority of countries, hospitals are not well-aligned in the primary health care system and the referral networks between primary health care centres and hospitals are not well defined and properly functioning. There are referral guidelines in 15 countries, but these are implemented only in five countries *(34)*.

Hospitals are essential actors in efforts to achieve UHC and for implementing the vision for primary health care. However, many countries in the Region struggle to improve hospital planning, management and performance, at both the system (policy) level and facility (hospital) level. This is due to rapidly evolving hospital demands, the major impact of health sector shortcomings on the capacity of hospitals to systematically and efficiently deliver high-quality people-centred services, and internal hospital deficiencies. A renewed focus on hospital roles, functions and operations through an integrated and people-centred lens is critical *(34)*.

WHO has developed a regional framework for action for the hospital sector, which was endorsed by the 66th session of the Regional Committee in 2019 *(34)*. The framework will support Member States to develop a road map for hospital transformation, and provide guidance on setting priorities as well as formulating and implementing national and local strategic plans for the hospital sector (including both public and private sectors). The framework proposes two sets of interrelated interventions at the system (policy)

level and the facility (hospital) level, which Member States can draw on based on their national priorities, resources, capacities and specific context. It aims to support countries in reorientation of the position, role and function of hospitals within the health system, within the conceptual framework of primary health care and with the ultimate goal of achieving UHC. Sudan has already started developing a national strategic plan for the hospital sector using the regional framework. Other countries in the Region (for example, Egypt, the Islamic Republic of Iran and Pakistan) are planning to develop their national strategy for the hospital sector in 2020.

3.3.4 Health care quality and patient safety

In the SDG era, WHO advocates for quality and safety in health care as fundamentals to ensure the health and well-being of the world's population. Patient safety is recognized as a global health priority in pursuit of UHC, and was emphasized by the 2019 World Health Assembly in resolution WHA72.6 on Global action on patient safety *(35)*. At the regional level, patient safety was emphasized as an intrinsic element of quality of care in the Eastern Mediterranean's *Vision 2023*.

Despite such commitments, unsafe health care is still among the 10 leading causes of death and disability worldwide. Evidence shows that, globally, approximately two thirds of adverse events and years lost to disability and premature death are consequences of unsafe health care practices. Estimates show that up to 40% of patients are harmed in primary and ambulatory care settings. In low- and middle-income countries, it is reported that about 134 million adverse events are encountered annually, leading to nearly 2.6 million deaths *(36)*.

In the Eastern Mediterranean Region, lack of data on the quality and safety of health care remains a challenge. However, a regional study showed that 8–18% of hospital admissions might lead to adverse events, of which 80% are deemed preventable. This is consistent with other estimates that show less than 50% compliance with basic critical elements of patient safety practices across the Region. The prevalence of health care-associated infection as an indicator of patient safety and quality of care in hospitals varies from 12% to 18% in different countries of the Region *(34)*.

In response, WHO has been working to overcome challenges and to advocate for quality and safety to be at the heart of resilient health systems within the Region. The Patient Safety Friendly Hospital Initiative (PSFHI) was launched in the Region in 2007 to instigate and encourage safe health practices in hospitals. In addition, the programme aims to integrate all patient safety activities in health care facilities such that they run as horizontal programmes under the umbrella of the initiative. Implementation of the programme is a joint effort between participating health care facilities, WHO and the World Alliance for Patient Safety, which guides the process and certifies the facilities on meeting set standards of patient safety. PSFHI is now running in more than 160 health care facilities across the Region and the number is consistently growing.

Furthermore, a framework for quality improvement at the primary health care level has been developed and Member States are being supported on how to foster an indicator-based approach to identify and address quality gaps *(37)*. In addition, technical support is being offered to Member States on the development of national quality policy and

strategies to catalyse and better sustain system-wide efforts to support UHC and national health-related SDG agendas.

A further challenge in the Region is the significant number of countries facing graded emergencies. For example, in 2018 there were graded emergencies in nine out of 22 countries, leading to health system fragility and lack of resilience. Action is urgently needed to make evidence readily accessible for improving health care quality in extreme adversity. As a response, the Regional Office has been leading work to develop an action framework for addressing quality and safety in extreme adversity settings, which will be of benefit for countries in the Region and beyond.

3.3.5 Private health sector roles and regulation

In many countries of the Eastern Mediterranean Region, the private health sector (formal, for-profit and/or not-for-profit health service providers) plays a considerable role in providing health services at different levels, from primary health care to ambulatory and hospital services. The private health sector also makes a major contribution in infrastructure development, production and supply of medicines and health technologies. The role of the private sector becomes particularly important in countries where government expenditure on health is low and in countries in emergencies.

In some low- and middle-income countries of the Region, the utilization rate for outpatient services provided by the private sector is as high as 76%. The range of services provided is variable, standards are questionable, regulation is insufficient and the level of financial burden to the users is unclear. Additionally, dual practice between the public and private sectors is a serious challenge in some countries. For example, a study in Egypt found 89% of physicians had multiple jobs; and in Pakistan, most public sector physicians work in the private sector in the afternoon. It is difficult to accurately monitor and report on health workforce statistics when dual practice is prevalent. In most countries of the Region, the government does not include the private sector in health system planning so there are limited reliable data on private health workforce composition, distribution, quality of services, salary structure or multiple job holding. Private care providers are also reluctant to invest in preventive care or in remote and deprived areas *(38)*.

Utilizing the strengths of the private health sector is a key strategy for achieving UHC, as is increasingly being acknowledged by WHO and Member States of the Region. Experience in Afghanistan, Iraq, Libya, Somalia, Syrian Arab Republic and Yemen has shown that the private health sector can play an important role in countries in emergencies. The private health sector can adopt a dynamic approach to address the evolving health needs of a population when public health systems are weakened or nonexistent. The private health sector can also be the primary source of health services for refugees. In Egypt, for example, 64% of Syrian refugees registered with the United Nations High Commissioner for Refugees (UNHCR) seek care in the private health sector; and in Jordan, a 2015 UNHCR survey found that private facilities are the primary source of care-seeking for 58% of Syrian refugees *(38)*.

Information on policies for public–private sector engagement and regulation of the private health sector is not available for most countries of the Region. In low-income

countries, such as Afghanistan, Somalia and Yemen, policies and regulatory mechanisms for the private health sector are weak or nonexistent. Countries that have longer experience of engaging with the private health sector, such as Lebanon, Islamic Republic of Iran and Tunisia, have better developed policies and procedures. Some countries have recently developed regulatory policies and have started contracting out delivery of health services to the private sector. Pakistan has established the Ministry of National Health Services, Regulations and Coordination, which focuses on improving regulatory capacity of services in the health sector. The Islamic Republic of Iran has established an urban primary health care programme that relies heavily on contracting out services to the private sector, including general practitioners. However, even when such regulatory mechanisms exist, the private sector can have low compliance due to a lack of enforceable legal authority, inadequate capacity and resources to enforce regulations and laws, and powerful lobbying by interest groups that undermines the regulatory framework *(30)*.

Data on the distribution of health resources between the public and private sectors are limited in the Eastern Mediterranean Region, especially for the private health sector. Available data show that availability of health resources varies across countries in the Region. Governments are the main provider of hospital services in all high-income countries, but the share of the private hospital sector is increasing fast. About 20% of the total number of hospital beds in the Region (estimated at 740 000) are in private hospitals. On average, more than 60% of pharmacies in the Region, particularly in middle-income countries, are in the private health sector. Surveys in low- and middle-income countries have shown insufficient supply of essential medicines in the public sector and patients buying medicines from private pharmacies. Little information exists about distribution of diagnostic and laboratory services in the private health sector in the Region. In the Islamic Republic of Iran, Pakistan, Saudi Arabia and Sudan more than 50% of diagnostic facilities are in the private health sector. Information on the distribution of the health workforce between the two sectors in the Region is also limited. For example, data from Gulf Cooperation Council (GCC) countries indicate a higher proportion of physicians work in the public sector (60–90%), while in Lebanon, the private hospital sector is the main employer of the health workforce; and in Jordan, close to half of physicians and nurses work in the private health sector *(38)*.

Medicine promotion, advertising and sale by the private health sector is barely regulated or controlled by governments in the Region, which has led to widespread consequences such as over-the-counter sale of prescription-only medicines including antibiotics, unethical drug promotion, and induced demand for medicines and costly health technologies. In addition to causing high out-of-pocket expenditure, these unacceptable practices contribute to increasing technical misuse and medical errors associated with health technologies and growing antimicrobial resistance in the Region. Other issues include ineffective treatment, adverse drug reactions, drug dependence and an economic burden on both patients and society *(38)*.

3.4 Health financing and financial protection

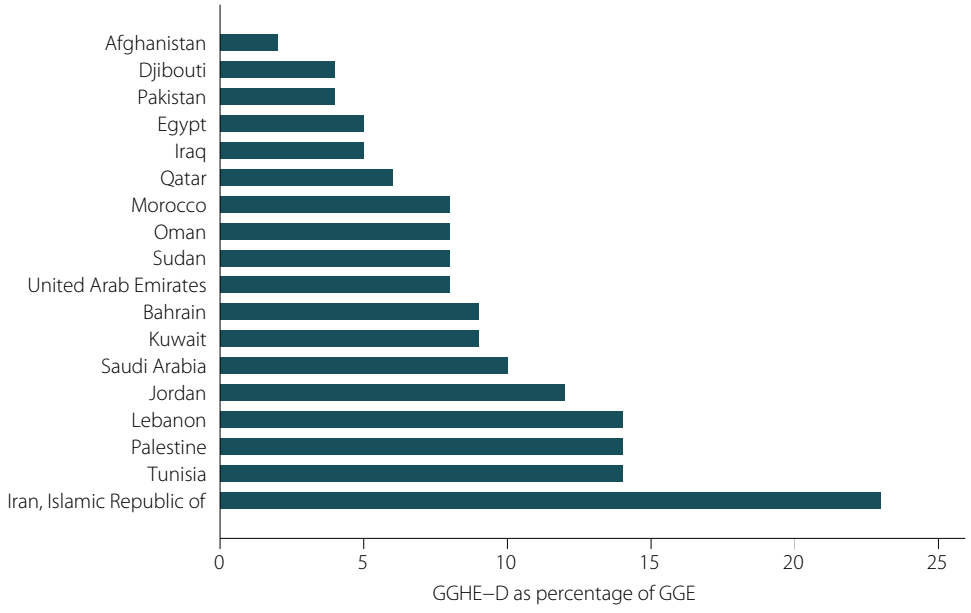
3.4.1 Health financing

Health financing is a core function of health systems that can accelerate achievement of UHC by improving effective service coverage and financial protection. Globally, millions of people do not access health services due to financial barriers. Many others receive poor quality of services even when they pay out-of-pocket. Carefully designed and implemented health financing policies can help to address these issues. For example, contracting and payment arrangements can incentivize care coordination and improve quality of care; and sufficient and timely disbursement of funds to providers can help to ensure adequate staffing and medicines to treat patients *(39)*.

The Eastern Mediterranean Region is a low investor in health, accounting for less than 2% of global health expenditure for close to 9% of the world's population in 2015. This low public spending on health in the Region – even in high-income countries – is primarily due to the low priority of health on national government agendas, highlighting again the crucial role of governance and the need for evidence-based strategic planning *(40)*.

The average share of health expenditure from total government expenditure was 8.7% for the Region in 2017, which was lower than the global average (10.6%) and the third lowest among the six WHO regions. There are huge disparities in public health spending between governments in the Region, ranging from 2.3% in Afghanistan to 22.9% in the Islamic Republic of Iran. As shown in Fig. 8, the share of health expenditure is not necessarily related to the income level of a country, as many high-income countries have lower shares of health expenditure compared to middle-income countries.

Fig. 8. *Domestic general government health expenditure (GGHE-D) as percentage of general government expenditure (GGE), 2018*



Source: WHO (2020) (9).

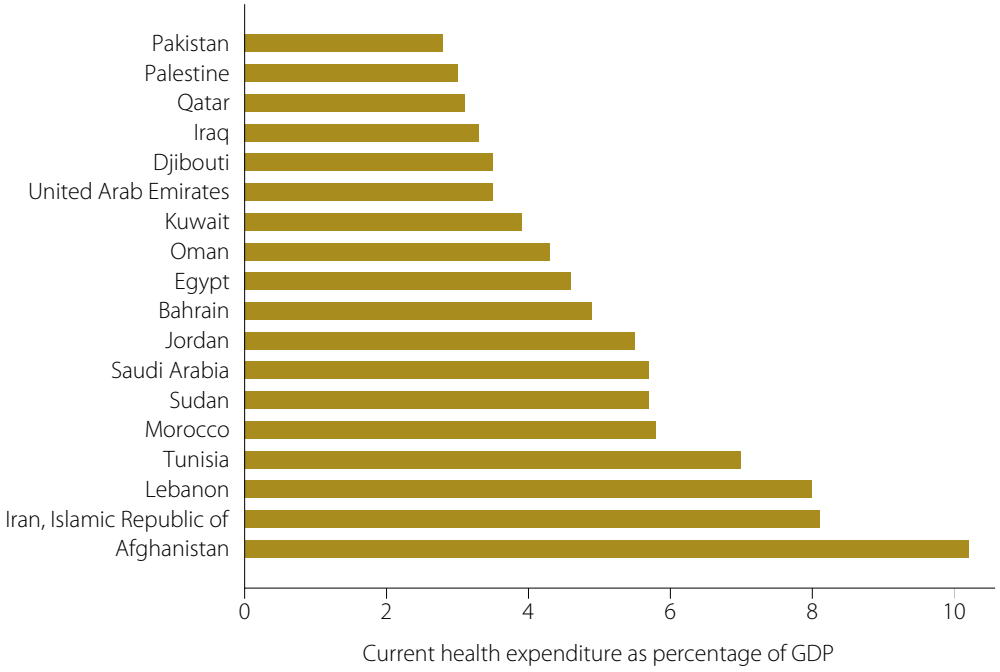
The average total expenditure on health per capita in the Region in 2016 was US$ 556, which was less than the global average (US$ 1001) and the third lowest among WHO regions. Current health expenditure as a percentage of gross domestic product (GDP) in the Region is less than the global rate and lower than in other WHO regions, except the South-East Asia Region (Table 2). Fig. 9 shows that several high-income countries have low current health expenditure as a percentage of gross domestic product GDP. The average per capita current health expenditure is less than US$ 100 in Afghanistan, Djibouti and Pakistan compared to more than US$ 1000 in most GCC countries (Fig. 10).

Table 2. *Regional and global average of government expenditure on health, 2015–2016*

	Current health expenditure per capita (US$)	Current health expenditure as percentage of GDP (%)	Domestic general government health expenditure as percentage of general government expenditure (%)
	2015	2016	2015
Regional	556	5.3	8.5
Global	1001	6.3	10.6

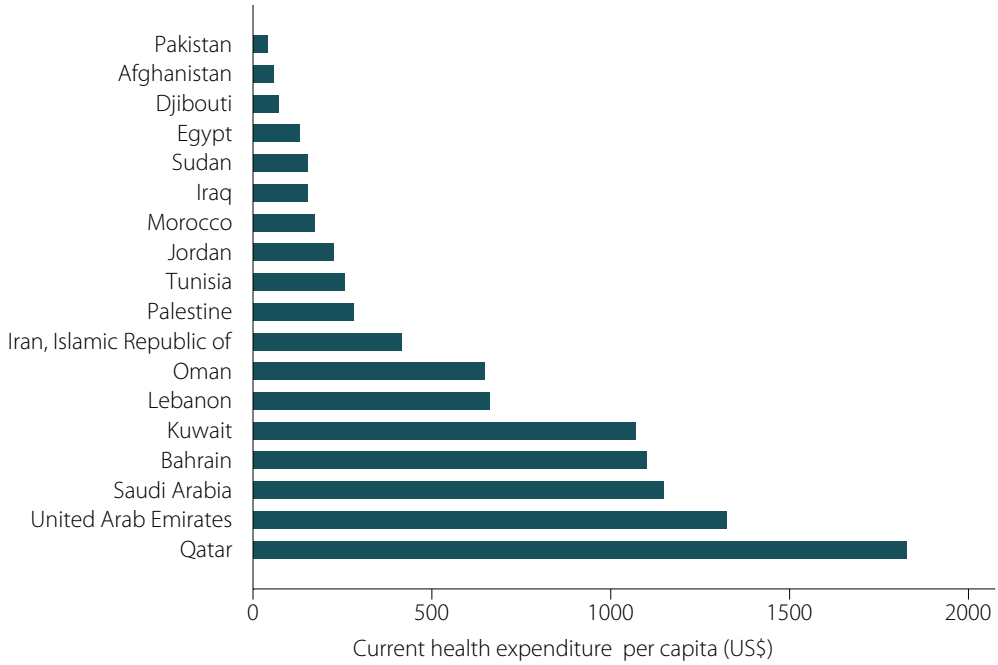
Source: WHO (2019) (10).

Fig. 9. *Current health expenditure as percentage of GDP, 2016*



Source: WHO (2019) (10).

Fig. 10. *Current health expenditure per capita, 2017*



Source: WHO (2019) (10).

3.4.2 Financial protection

UHC as defined in SDG 3 cannot be achieved without financial protection to prevent financial hardship for people who seek health services. Financial protection is closely related to public health expenditure. Financial hardship due to health spending rose around the world between 2000 and 2015, but the increase was higher in the Eastern Mediterranean than in any other WHO region. In 2015, 11.7% of the Region's population faced catastrophic health expenditure (defined as spending more than 10% of their income on health care) up from 8% in 2000 *(15)*. In the Region, the share of public health spending from current health expenditure was around 50% between 2000 and 2015. This low share of public health spending has led to a high share of private spending on health, for which out-of-pocket expenditure is a proxy indicator *(40)*. The average out-of-pocket expenditure on health as a percentage of current health expenditure has been around 40% in the Region since 2000. A closer look at health expenditure in 2017 shows that in low-income countries 36–80% of health expenditure was funded privately (mostly household out-of-pocket expenditure), while the rate in middle-income countries was 30–60% and in high-income countries 7–31%. Out-of-pocket payments need to be 20% or less to be considered at a good enough level to reduce the risk of catastrophic spending on health.

WHO and the World Bank have proposed two measures to track progress on financial risk protection as part of UHC: catastrophic health expenditure and impoverishing health expenditure. The proportion of the population spending over 10% of household total consumption or income on health is lower in the Region than the global estimate and lower than estimates for other WHO regions, except the European Region. The

proportion of the population spending over 25% of household expenditure or income on health is lower in the Region than the global estimate (Table 3) and lower than estimates for other WHO regions, except for European Region. It is estimated that high out-of-pocket payments for health services in 2015 caused financial hardship for an estimated 55.5 million people in the Region, and catastrophic payments pushed an estimated 7.7 million people into poverty. The incidence of catastrophic health expenditure in the Region reported in the World Health Statistics 2019 is lower than the global average. However, this needs to be interpreted carefully since some people may not seek health services because they are inaccessible or unaffordable, which is usually the case in many low- and middle-income countries in the Region *(41)*.

Table 3. *Regional and global average household expenditure on health as a percentage of household expenditure or income, 2007–2015*

	SDG target 3.8	
	Population with household expenditure on health > 10% of household expenditure or income (%)	Population with household expenditure on health > 25% of household expenditure or income (%)
	2007–2015	2007–2015
Regional	9.5	1.4
Global	11.7	2.6

Source: WHO (2019) (10).

Countries in the Region have followed several approaches to improve financial risk protection for their citizens, such as using public funds and developing prepayment mechanisms. The three different income groups in the Region use different schemes for raising and pooling funds for health. High-income countries rely on general government revenues generated primarily from natural resources (mainly oil) to provide free-of-charge services for all citizens. However, the large expatriate populations do not enjoy the same benefits as nationals: they are either covered by private health insurance or have access to a limited package against nominal payment, and in many cases are not covered. Most middle-income countries have obligatory health insurance contributions, which has expanded coverage to the poor. However, the share of out-of-pocket spending remains high in many of these countries due to a relatively small benefits package, substantial co-payments and lack of coverage of vulnerable population groups. In low-income countries, the level of health financing is inadequate; large segments of the population are facing hardships in paying for health services and the share of out-of-pocket spending is very high in some countries (60% and above). Among these countries, Sudan has managed to provide partial coverage for the poor and for those in the informal sector using government subsidies and *zakat* funds *(42)*.

3.5 Health data and health information systems

The role of health information systems, including civil registration and vital statistics systems, in generating health information data for programme and performance monitoring, quality of care, planning and policy-making is widely acknowledged. WHO's GPW 13 has put a clear emphasis on the essential role of data for health policy development and implementation to achieve the triple billion targets. Countries – and WHO – need stronger health information and research systems for collecting reliable data and generating valid evidence to monitor the GPW 13 impact framework, including progress towards achieving the SDGs. WHO and the World Bank have jointly produced a framework to facilitate monitoring UHC in line with the SDGs. This monitoring framework has two main components: 1) coverage of the population with quality, essential health services; 2) and population covered by financial protection *(15)*.

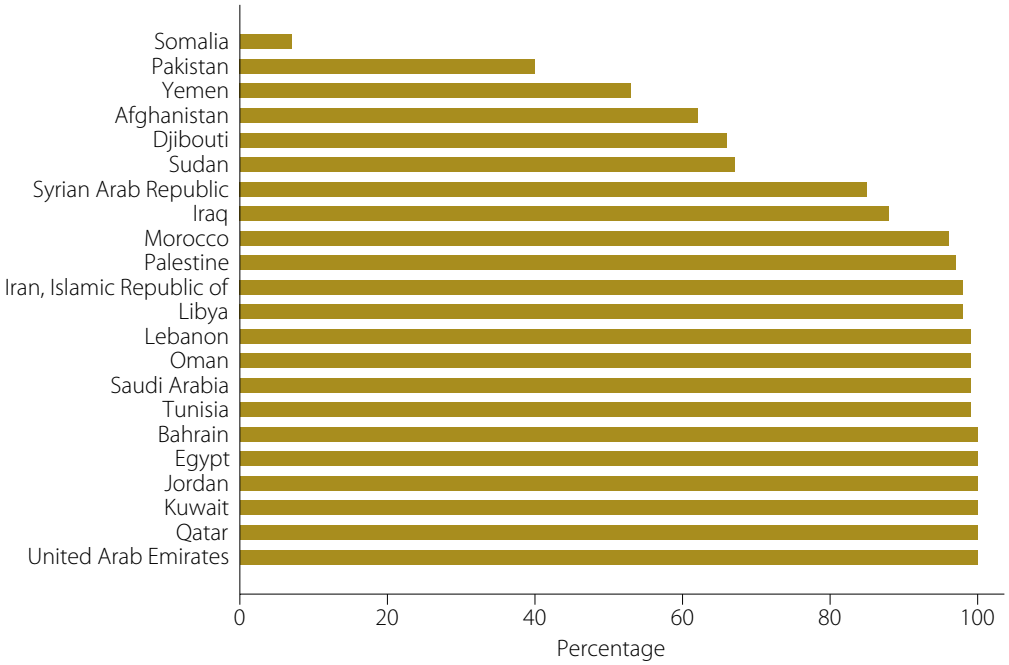
3.5.1. Improving civil registration and vital statistics

Within the context of the 2030 Agenda for Sustainable Development, countries are encouraged to generate reliable data to track progress and inform decision-making. The Regional Committee for the Eastern Mediterranean adopted resolution EM/RC59/R.3 in 2012 on health systems strengthening, which urged countries to strengthen national health information systems, including registration of births, deaths and causes of death, by improved monitoring of exposure to risk factors and social determinants of health, morbidity, mortality and performance of the health system and by institutionalizing population-based surveys *(43)*. Resolution EM/RC60/R.7, adopted by the Regional Committee in 2013, further urged Member States to give priority to the strengthening of civil registration and vital statistics *(44)*. These resolutions resulted in a set of concrete actions by WHO and Member States to improve national data for health. The efforts were focused on two fronts: improving birth and death data, and improving national health information systems and core indicators. As part of the civil registration and vital statistics agenda, a regional strategy was developed and implemented during 2014–2019 *(45, 46)*. Assessments of civil registration and vital statistics systems were conducted in all countries of the Region, and road maps and improvement plans were developed for all countries. These resulted in notable improvements in birth and death registration, and quality of reporting of causes of death. In 2013, birth registration completeness ranged from 0% to 100% in different countries of the Region, with a regional weighted average of 62%. Death registration also ranged from 0% to 100%, but with a weighted regional average of 23%. By 2018, the timely registration of births and deaths in the Region had reached 70% and 54%, respectively *(46)*.

One of the key steps towards strengthening health information systems in the Region is improving the capacity of countries in accurate registration of vital statistics, including civil registration and cause-specific mortality. All countries of the Region have birth registration systems, although the level of coverage varies. Coverage of birth registration is above 90% in 14 countries of the Region and under 70% in six low-income countries (Fig. 11). All countries of the Region except Somalia have death registration, with different levels of coverage. In half of the countries, the coverage of death registration is 90% or above (Fig. 12). During 2018, 14 countries reported mortality data disaggregated

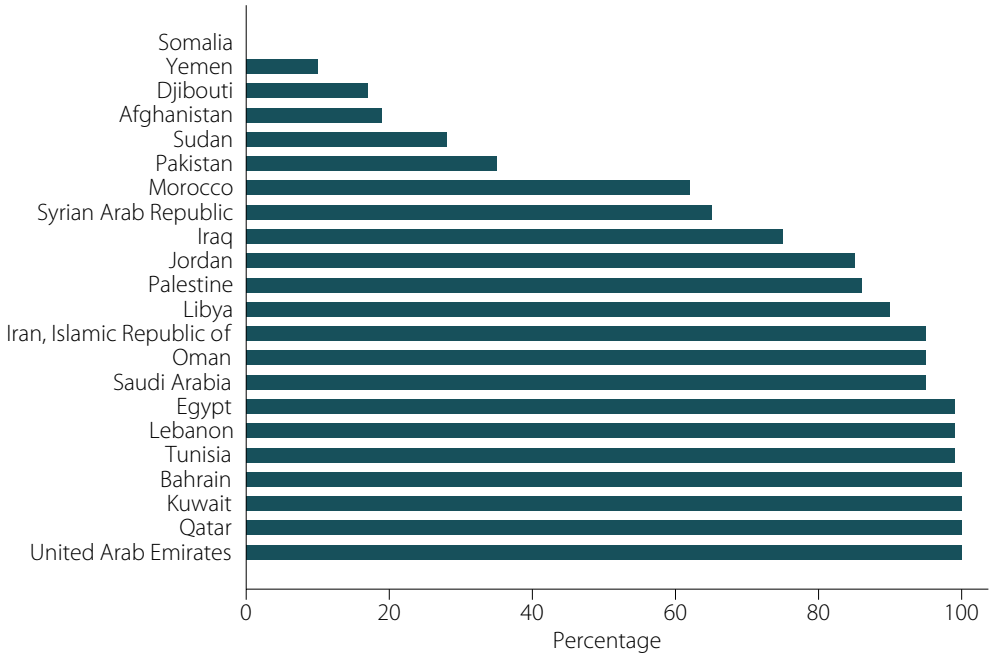
by cause of death based on ICD-10, with data completeness above 60% in six countries *(22)*. The average of data completeness for cause of death in the Region is 32%, which is lower than the global rate (49%) and only higher than the African and South-East Asian regions (Fig. 13).

Fig. 11. *Coverage of birth registration (%), 2015*



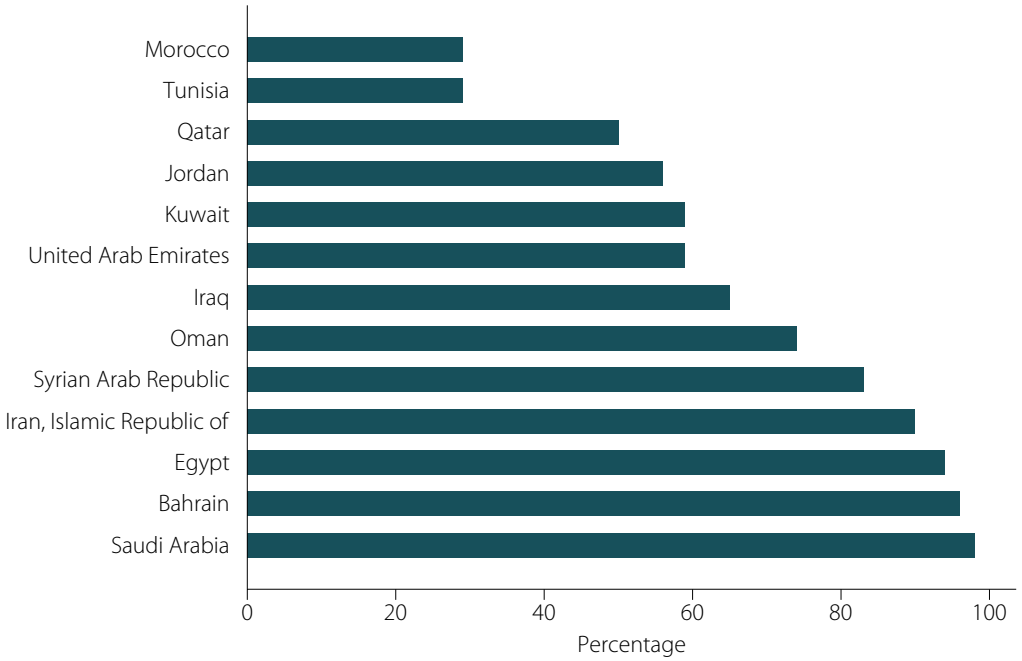
Source: WHO (2020) (9).

Fig. 12. *Coverage of death registration (%), 2015*



Source: WHO (2020) (9).

Fig. 13. *Completeness of cause-of-death registration (%), 2009–2017*



Source: WHO (2020) (9).

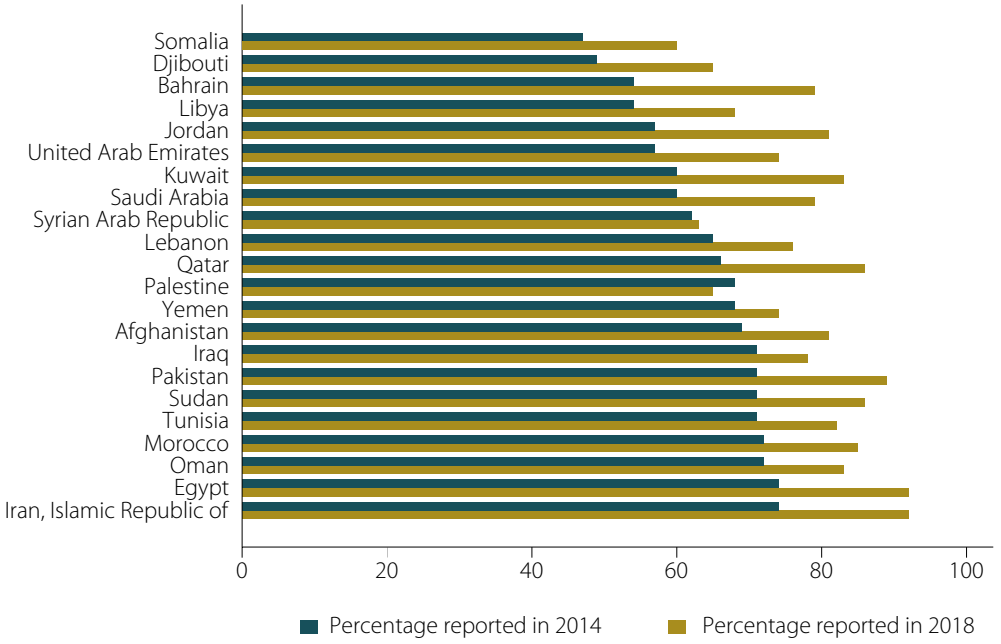
3.5.2. Core health indicators and SDG indicators

To strengthen health information systems in the Region, a list of regional core indicators was endorsed by the Regional Committee in 2014 (resolution EM/RC61/R.1). The core indicators focus on three main components: 1) monitoring health determinants and risks; 2) assessing health status, including morbidity and cause-specific mortality; and 3) assessing health system response *(47)*. In 2016, the core indicator list was expanded in consultation with countries to add a set of health-related SDG indicators, bringing the total number of core indicators to 75; and it is expected to be expanded further in line with the GPW 13 impact framework. The list of core indicators will be updated based on future regional and global health developments.

There has been remarkable improvement in reporting on core indicators throughout the Region, with an average increase of 15% in reporting at the regional level for 2014–2018 (Fig. 14). Available data indicate that reporting on core indicators ranges from 76% to 95% in 17 countries, and from 62% to 75% in the remaining five countries *(22)*. The core indicators programme demonstrated limitations in national information systems in different countries, and hence it was augmented with supporting agendas to enhance routine health information systems as well as surveys and census data. Since 2016, seven countries (Afghanistan, Iraq, Jordan, Libya, Lebanon, Oman and Pakistan) have completed comprehensive assessment of their health information systems, and three countries are undergoing the process as of 2019. These assessments have resulted in development of national strategies for action. While a number of countries are making progress, assessments reveal both internal shortcomings within health information systems and challenges in the broader contexts within which the systems function. These challenges relate to: data management and standards; legal frameworks; health information infrastructure and capacity; governance, coordination and organization

of health information systems including civil registration and vital statistics systems; quality assurance; certification of death and coding practices; and dissemination and data use. Such challenges and existing initiatives require implementation of a new strategic framework, which goes beyond previous frameworks endorsed by the Regional Committee, to reflect new regional and global initiatives. A new regional strategic plan (2020–2024) to guide countries in addressing these challenges will be finalized in 2020. WHO is also working closely with countries to develop national household survey plans, streamline processes and ensure that key information is available to countries in a timely manner. Such survey plans have been produced in the Islamic Republic of Iran, Qatar and Sudan.

Fig. 14. *Reporting on regional core indicators and SDG indicators, 2014–2018*



Source: WHO (2020) (9).

3.5.3. Improving routine surveillance and facility information systems

There are ongoing initiatives in the Region that focus on improving the privacy and accuracy of data collection and data processing, including implementing electronic information systems in countries. Since 2015, Jordan has been implementing an innovative national programme called the Interactive Electronic Reporting System with support from WHO. The programme includes modules on communicable diseases, NCDs, mental health, pandemic influenza preparedness and event-based surveillance. The system also covers refugees residing in Jordan and has a specific module on foreigner screening to monitor the status of tuberculosis (TB), HIV and hepatitis B among refugees. In Lebanon, since 2017, WHO has supported the development and scale-up of an information technology platform (DHIS2) *(48)*. The goal of the platform is to support existing surveillance sites at all primary health care centres within the Ministry of Public Health network, as well as in laboratories, hospitals, private clinics and schools, and to support establishing new surveillance sites *(49)*.

In 2018, the 65th session of the Regional Committee adopted resolutions EM/RC65/R.2 and EM/RC65/R.3 which urged Member States to strengthen health information systems, encompassing the private as well as the public sector *(50, 51)*. In 2019, resolution EM/RC66/R.5 urged countries to ensure systematic approaches to enhance use of data as part of evidence-informed decision-making for health *(52)*. Recently, the health information system agenda has been expanded to include the Primary Health Care Measurement Initiative and to develop a similar approach to support hospital information systems. Following the release of the 11th revision of the International Classification of Diseases (ICD-11), work has been undertaken to support its adoption in countries as the basic standard for data reporting on mortality and morbidity. This work is being expanded to encompass the International Classification of Health Interventions, due to be released in 2020. Technical support is being provided to ensure that all health-related data systems are based on these global approaches and WHO-sanctioned standards for health data *(53)*.

WHO will continue its efforts to support countries of the Region in strengthening national health information systems. This includes comprehensive health information system assessments, developing national health information system strategies, improving national capacity in death certification and analysis, ICD coding, enhancing the reporting of routine data at hospital and primary care levels, and strengthening disease surveillance. WHO has also expanded its efforts to improve facility information systems at primary health care level, as well as hospital information systems *(54)*. Such programmes are key to ensure countries have access to the needed information for decision-making at local and national levels.

3.6 Health workforce

Availability and accessibility of a balanced mix of qualified health workforce that are equitably distributed is a key element for enabling progress towards UHC *(55)*. A minimum density threshold of 44.5 doctors, nurses and midwives per 10 000 population is required to advance UHC; however, currently more than half of countries in the Eastern Mediterranean Region do not meet this threshold *(56)*. Additionally, seven countries (Afghanistan, Djibouti, Morocco, Pakistan, Somalia, Sudan and Yemen) do not meet the minimum density threshold of 23 doctors, nurses and midwives per 10 000 population required for delivering basic health interventions. The density of medical doctors per 10 000 population in the Region is less than the global average and the third lowest among WHO regions. The density of nursing and midwifery personnel (per 10 000 population) in the Region is less than the global average and the second lowest among all WHO regions (Table 4). There is also huge variation in the density of health workforce between countries in the Region, as reflected in Fig. 15 and 16.

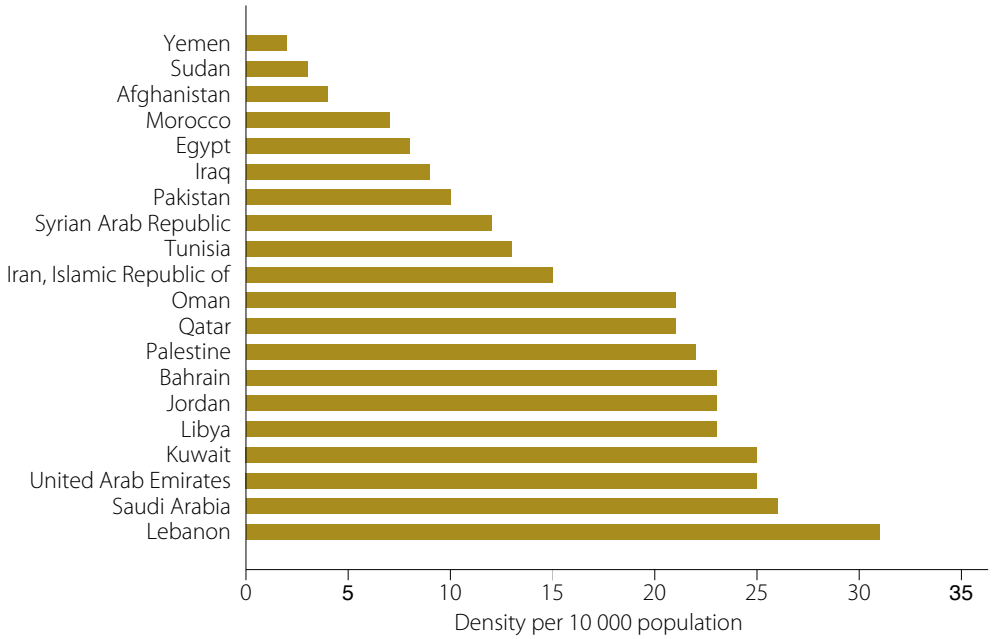
Table 4. *Regional and global density of physicians, nurses and midwives, 2009–2018**

	Density (per 10 000 population)	
	Medical doctors	Nursing and midwifery
Regional	9.9	15.2
Global	15.1	34.8

*Multiple years used to compute the regional average.

Source: WHO (2020) (9) and WHO (2019) (10).

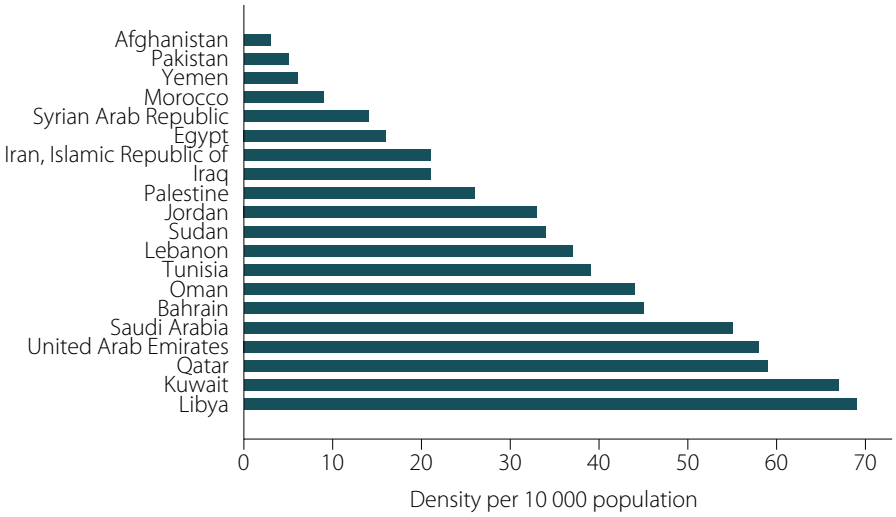
Fig. 15. *Density of physicians, 2009–2018**



*Multiple years used to compute the regional average.

Source: WHO (2020) (9).

Fig. 16. *Density of nurses and midwives, 2009–2018**



*Multiple years used to compute the regional average.

Source: WHO (2020) (9).

The workforce shortage in the Region is most prominent in the density of nurses and midwives, who constitute more than 50% of human resources for health. In the Region, contrary to the global trend, the shortage of nurses and midwives is expected to increase by 2030 if effective interventions are not in place. During 2007–2017, there was no increase in the density of nurses and midwives in most countries of the Region; and 11 countries even witnessed a decline in their density. The ratio of midwives and nurses to physicians, which can be considered a proxy indicator of skill mix, has also declined between 2007 and 2017 in nine countries of the Region. Available data indicate that medical graduates outnumbered nursing and midwifery graduates in some countries of the Region in 2016 *(56)*.

In addition to the general shortage of health workforce production and availability, which is most prominent in low-income countries, the Region faces other challenges including:

- imbalances in geographic distribution, skill mix and gender of the health workforce (mostly in middle-income countries);
- overreliance on expatriate health workforce (prominent in GCC countries) or depletion of health workforce due to increased mobility within and out of the Region;
- high workloads in the public sector due to health workforce shortage, dual practice or engagement in the private health sector;
- low quality, relevance and productivity of health workers;
- protracted emergencies and conflicts that lead to outflow of health workforce and compromise the safety and security of health personnel;
- high preference of health workforce to work in large urban settings with better job prospects rather than in primary health care and rural settings *(56, 57)*.

3.6.1 Policy and regulatory frameworks on health workforce

The High-Level Commission on Health Employment and Economic Growth has projected a shortfall of 18 million health workers by 2030. In 2016, the World Health Assembly adopted the *Global Strategy on Human Resources for Health: Workforce 2030*, which emphasizes the necessity of increasing investment to build a sustainable skill mix of health workforce to respond to population needs and to achieve SDG 3 and UHC *(58)*. The 2018 Astana Declaration on Primary Health Care has also created momentum for Member States to advance their primary care systems with a focus on family practice and building multidisciplinary teams of health workers. In the Eastern Mediterranean Region, prominent examples of interdisciplinary teams include Lebanon where nurses are utilized to manage chronic diseases and mental health, and the community health nursing programme in Oman *(56)*.

Policies and strategies for health workforce development are generally inadequate among countries of the Eastern Mediterranean Region. Only seven countries (Afghanistan, Islamic Republic of Iran, Jordan, Pakistan, Somalia, Sudan and Yemen)

have developed comprehensive strategic plans for human resources for health. Health workforce governance capacities are also limited by the weak status of departments/directorates in ministries of health, lack of skilled health workforce managers and suboptimal multisectoral collaboration *(59)*. To respond to challenges in supply and quality of health workforce, the Regional Committee in 2017 endorsed the *Framework for action on health workforce development in the Eastern Mediterranean Region 2017–2030*. The Framework calls for countries to develop comprehensive evidence-informed health workforce strategic plans, strengthen governance and regulatory capacities, and improve health workforce information and evidence. It suggests that the first step is to utilize the existing workforce more effectively through continuous development and retraining, together with redistribution and redeployment of available health workers. Other regional commitments to health workforce development include the regional framework for action to strengthen nursing and midwifery (2016–2025), which was followed by a call for action to accelerate strengthening the nursing and midwifery workforce by the Regional Committee in October 2019, and the regional framework for action for reforming medical education, endorsed by the Regional Committee in 2015.

3.6.2 Health workforce information

Reliable and updated information and evidence are crucial for health workforce planning, recruitment, deployment and retention. There is a serious gap in health workforce information in the Eastern Mediterranean Region – especially in low- and middle-income countries – which can affect management of human resources *(60)*.

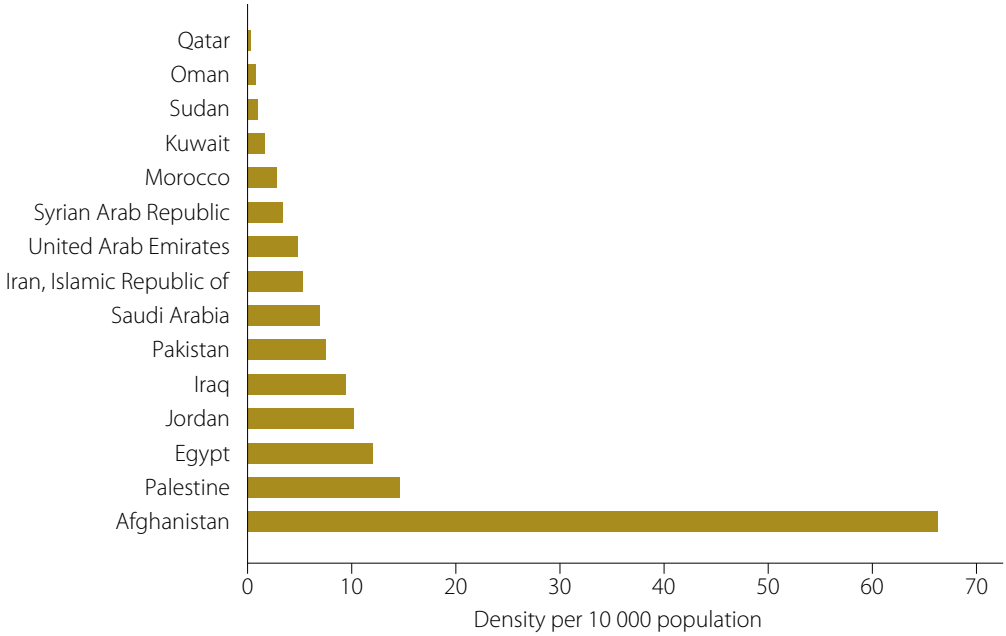
WHO is working to strengthen health workforce information systems through implementing health workforce observatories and setting indicators for measuring performance, taking into account the greater involvement of the private sector in educating and employing human resources for health. There have been some notable improvements in health workforce data collection including: development of health workforce observatories in Jordan, Libya, Morocco, Palestine and Sudan; development of a policy to address rural workforce retention in Afghanistan; and creation of a databank and centre for human resources for health research within the Ministry of Health and Medical Education in the Islamic Republic of Iran.

WHO has initiated the National Health Workforce Accounts (NHWA) as a tool to facilitate standardization of health workforce information systems to ensure interoperability and produce comparable data at subnational, national, regional and international levels, and to support tracking health workforce policy and performance. NHWA comprises a handbook detailing 78 indicators in 10 modules, an implementation guide and an online platform to help countries to identify appropriate and feasible indicators to monitor their health workforce *(61)*. The Regional Office for the Eastern Mediterranean organized a meeting in 2017 to introduce NHWA and support countries to take steps in building and strengthening their national health workforce observatories according to their local context and within international frameworks *(62)*.

3.6.3 Quality of health workforce training and the role of academia

In 2015, WHO conducted a situation assessment of medical education in the Region which revealed that 30–40% of responding medical schools and colleges have no accreditation system and that faculty development programmes are weak or nonexistent. Medical institutions face challenges in student assessment, programme evaluation and training methods, which ultimately affect the overall quality of the health workforce. In the majority of medical universities, training methods are teacher-centred with no emphasis on problem solving and community-based strategies. Continuing health professional development systems are not well developed in most countries of the Region, and are absent in more than half of countries. Despite the sharp increase in the number of trained physicians in the twenty-first century, the quality of medical education remains a major concern in the Region *(63)*. Data on the density of recent graduates (Fig. 17 and 18) show that high-income countries, despite having the highest density of health workforce, do not make a major contribution to production of health workforce; and as such, the quality of their workforce relies on the quality of medical education in exporting countries.

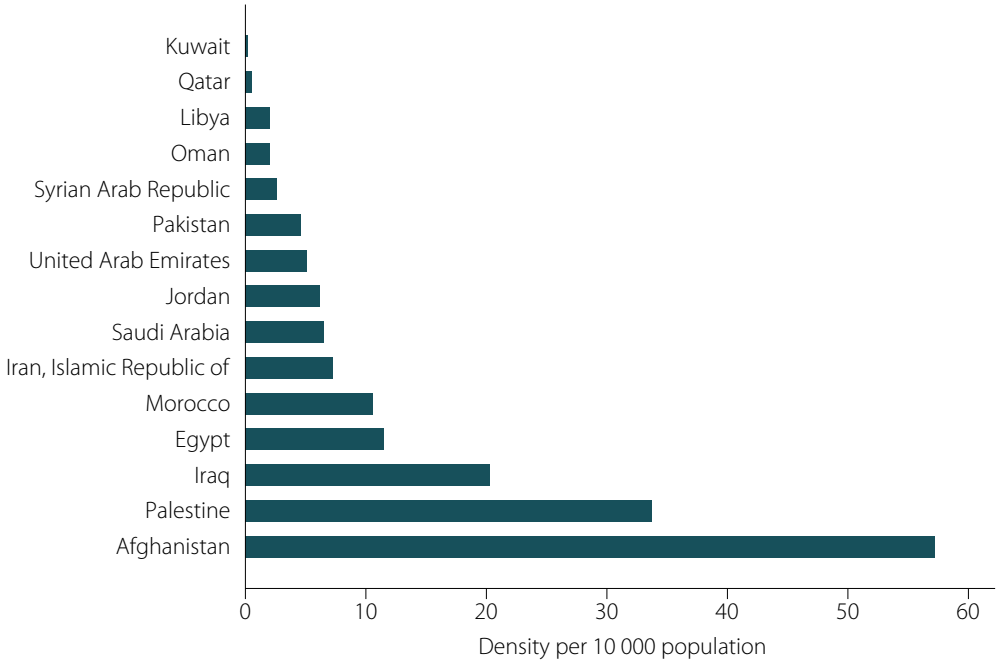
Fig. 17. *Density of recent graduate physicians, 2014–2018**



*Multiple years used to compute the regional average.

Source: WHO (2020) (9).

Fig. 18. *Density of recent graduate nurses and midwives, 2017*



Source: WHO (2020) (9).

There have been several initiatives to improve the quality of health workforce training in the Region, including: development of a regional prototype curriculum for nursing which has been used to guide curriculum review in many countries; development and pilot of a curriculum for enhancing capacity of general nurses for provision of mental health care; integration of WHO's multi-professional patient safety curriculum in 21 health care-related academic institutions in Oman; review and update of the curriculum for medical laboratory workforce in Sudan; and establishment of a BSc. nursing programme in Yemen *(22)*.

3.6.4 Protecting health workforce in emergencies

In 2018, a total of 725 attacks to health workers occurred in the Eastern Mediterranean Region resulting in 137 deaths *(22)*. In the first quarter of 2018, out of a total of 244 attacks on health care facilities recorded by WHO globally, 76% occurred in the Region. Such attacks threaten the survival of health programmes and health care delivery in affected areas. In the Region, health care providers have themselves been the victims of attacks during conflicts and emergencies on many occasions. In 2018 alone, eight health workers were killed or injured and 74 attacks were verified on health facilities in the Syrian Arab Republic *(64)*.

To enhance the safety and security of health workers, it is crucial to initiate specific actions to protect health facilities and staff, including: community engagement to gain people's collaboration and trust; using simple and visible signage to indicate health care activities; educating health workers on international humanitarian law, human rights and ethics to understand their rights and responsibilities in armed conflict and other emergencies;

and communicating with civil society, including religious and community leaders, to strengthen dialogue on protecting health services and health workers *(65)*. The WHO *Global plan of action on workers' health (2008–2017): baseline for implementation* is under evaluation to reflect the needs and priorities of the Eastern Mediterranean Region in the revised plan *(66)*.

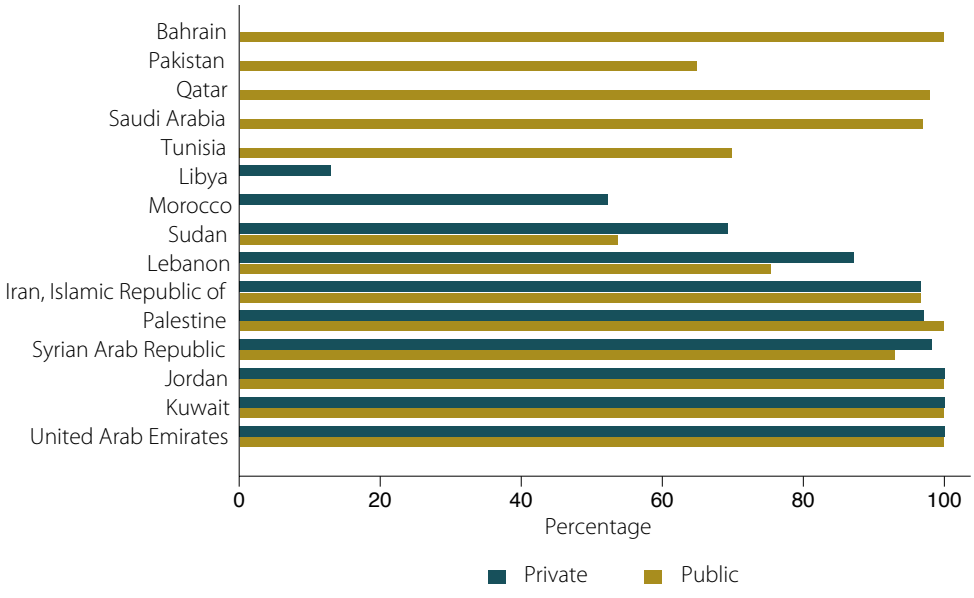
3.7 Access to medicines, vaccines and health products

3.7.1 Access to essential medicines

Globally, one third of the population lacks reliable and sustainable access to essential medicines or if they have access, the safety, quality or efficacy of the medicines are not guaranteed. According to WHO, around 10 million lives can be saved annually by improving access to essential medicines and vaccines. Essential medicines are defined by WHO as "those that satisfy the priority health care needs of the population". The classification of a drug as "essential" is a national responsibility and means it should be available for all people without discrimination within the framework of a functioning health system, with assured quality and at an affordable price *(67)*. In the Eastern Mediterranean Region, 12 of the 22 countries have an official national medicines policy, four have a draft policy and six have no national medicines policy. Half of the countries in the Region operate an essential medicines list.

Information about the level of access to essential medicines in the Region is limited. About 50% of countries report on availability of selected essential medicines in public health facilities and only eight countries (35%) report on availability in private health facilities (Fig. 19). In the Region, availability of essential medicines is generally higher in the private than the public sector, and most low- and middle-income countries are suffering from considerable shortage of essential medicines both in public and in private settings.

Fig. 19. *Availability of essential medicines (%) in public and private health facilities in selected countries, 2018*



Source: WHO (2020) (9).

Countries of the Region need to review national policy and regulations to improve good governance for medicines. Efforts have been made in several countries, including: conducting surveys on national policy and regulation for traditional and complementary medicine in eight countries (Afghanistan, Jordan, Lebanon, Morocco, Oman, Somalia, Syrian Arab Republic and Tunisia); and assessments of national regulatory capacity for regulation of medicines and vaccines in eight countries (Egypt, Islamic Republic of Iran, Morocco, Pakistan, Saudi Arabia, Somalia, Sudan and Tunisia), which resulted in the formulation of institutional development plans for national regulatory authorities.

A survey in 2018 on the capacity of local pharmaceutical manufacturers in the Region showed a low level of compliance with the Good Manufacturing Practice requirements and limited capacity to be self-sufficient. Most of the local pharmaceutical manufacturers in the Region are engaged in finished product production, with less than 20% undertaking active pharmaceutical ingredients production. Even fewer manufacturers are conducting research and development. Data from a survey on pharmacovigilance systems in the Region showed that 13 countries are full members of WHO's Programme for International Drug Monitoring and six countries are associate members. Fourteen countries have legal provisions for pharmacovigilance functions as well as a defined structure with clear responsibilities to conduct vigilance activities. Limited financial and human resources is one of the challenges facing Member States to perform vigilance activities.

In 2018, a regional survey on regulation of current biotherapeutics and similar biotherapeutic products was conducted; results showed that 60% of countries have established specific guidelines to regulate biotherapeutic products. The WHO Regional Office is actively involved in the African Medicines Regulatory Harmonization Initiative to promote the domestication of the African Union Model Law on Medicines Regulation in African countries *(22)*.

3.7.2 Assistive technology

Available data suggest there is increasing need for assistive technology in the Eastern Mediterranean Region. Several factors can account for this need, including the progressive increase in the proportion of older people (predicted to reach almost 15% in 2050), the rise of NCDs, and the increasing number of disabilities due to non-fatal road traffic injuries and as a causality to emergencies.

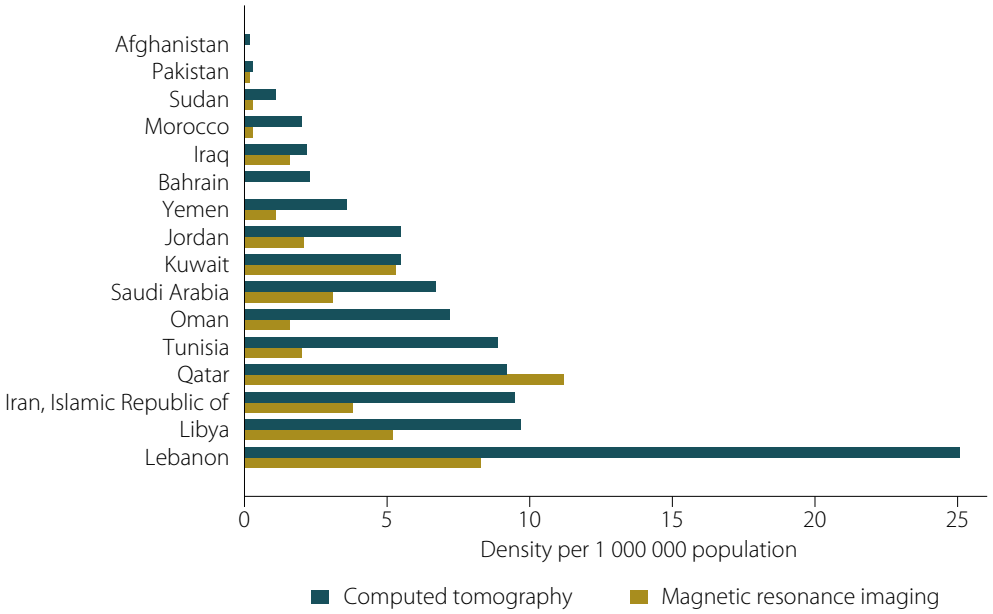
In 2017, a rapid assessment survey was conducted in 17 countries on the status of assistive technology in the Region. Results showed that service delivery and regulatory mechanisms for assistive technology are inadequate or nonexistent in many countries. At the policy level, Member States responded to this crucial public health issue by adopting resolution EM/RC63/R.3 in 2016 to ensure access to assistive technology and its integration into health systems as an essential component of UHC. At the global level, with leadership efforts by the Government of Pakistan, the Seventy-first World Health Assembly in 2018 endorsed resolution WHA71.8 on Improving access to assistive technology *(68)*. A regional framework for strategic actions on improving access to assistive technology has been developed in close consultation with Member States, and is being implemented in Bahrain and Iraq.

Regional efforts are strongly linked to the WHO Global Cooperation on Assistive Technology (GATE) initiative. Countries can make use of the GATE initiative to address the core elements of any successful assistive technology strategy, namely: policy and financing; products; personnel; and provision of services. A priority assistive products list has been developed by GATE as the first stage in supporting countries to implement their commitments to improving access to assistive products.

3.7.3 Selected medical devices

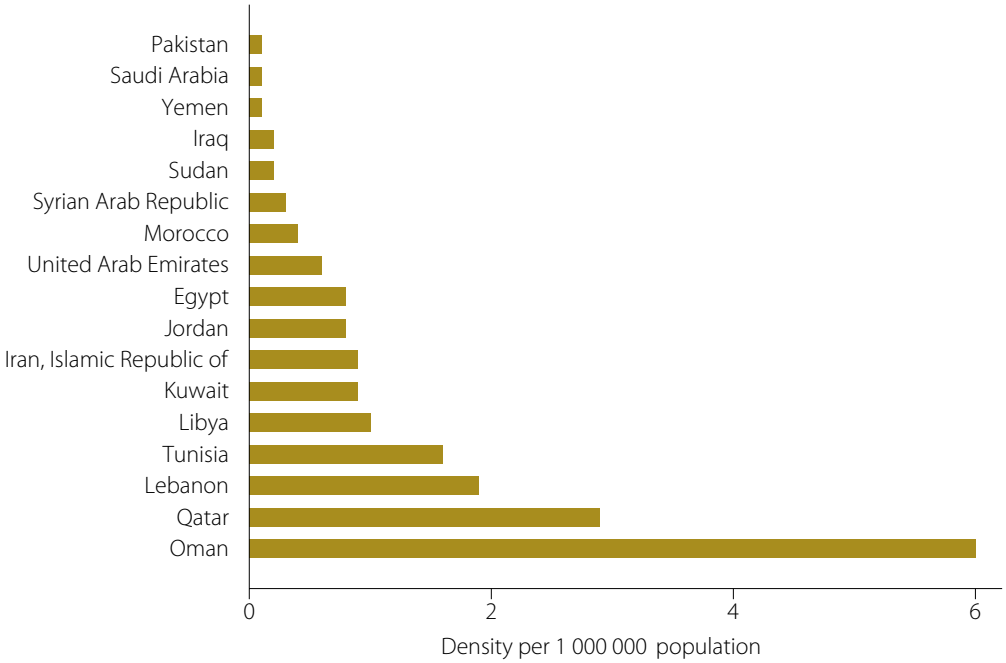
Availability of medical devices (computed tomography, magnetic resonance imaging, mammograph, radiotherapy) varies a great deal between countries in the Eastern Mediterranean Region. The reported density of medical devices per 1 million people, both in public and private facilities, is extremely low in many low- and middle-income countries and even in some high-income countries (Fig. 20–22). This impacts the ability of medical personnel to diagnose, prevent, monitor and/or treat diseases and injuries *(69)*.

Fig. 20. *Density of computed tomography and magnetic resonance imaging in public and private health facilities, 2013–2018*



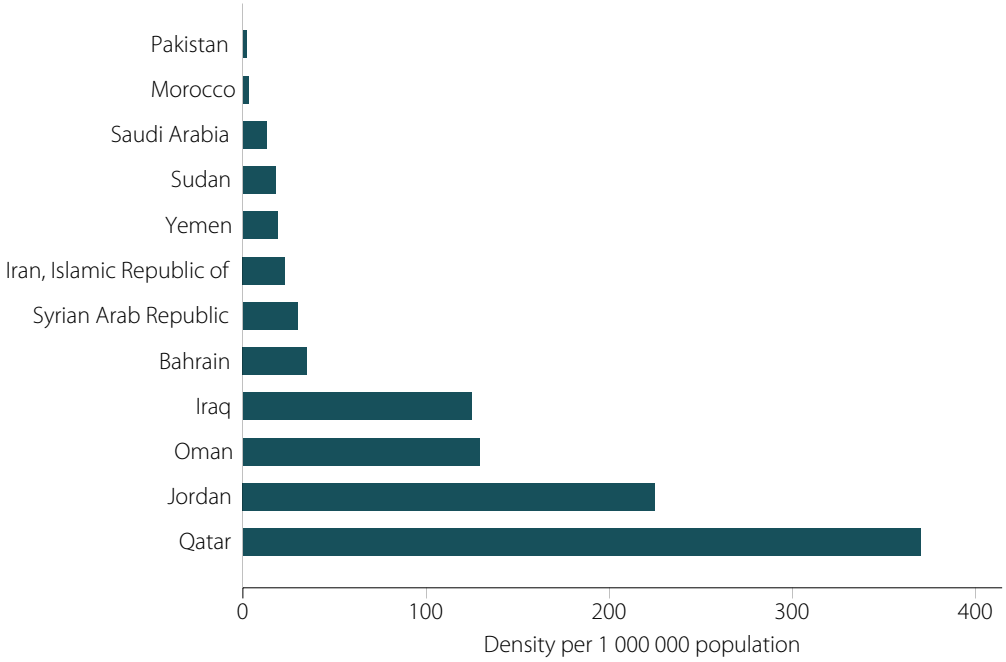
Source: WHO (2020) (9).

Fig. 21. *Density of radiotherapy in public and private health facilities, 2013–2018*



Source: WHO (2020) (9).

Fig. 22. *Density of mammographs in public and private health facilities, 2013–2018*



Source: WHO (2020) (9).

3.7.4 Availability of critical or life-saving commodities

The United Nations Commission on Life-Saving Commodities for Women and Children identified and endorsed an initial list of 13 overlooked life-saving commodities that, if more widely accessed and properly used, could save the lives of more than 6 million women and children. The list includes female condoms, oxytocin, injectable antibiotics, amoxicillin, contraceptive implants, misoprostol, antenatal corticosteroids, oral rehydration salts, emergency contraception, chlorhexidine, magnesium sulfate, zinc and resuscitation devices. Scaling up of these commodities in the Region is one of the most effective ways of getting more health for the money invested and preventing millions of maternal and child deaths *(70)*.

3.8 Research capacity and use of evidence

3.8.1 Research capacity and output

Health research is a vital component in health systems strengthening, in understanding the causes of poor health, and in predicting and mitigating the effects of different factors on health. The limited resources for health research must be used efficiently to respond to growing expectations in the Eastern Mediterranean Region for a longer and healthier life. There must be the culture, capacity and will in the Region to plan, design and conduct quality research and to disseminate, utilize and translate its findings into health policy and interventions *(71)*.

The Region's capacity to produce and use all types of relevant research (including systematic reviews) to respond to health priorities is inadequate *(72)*. A situation analysis conducted in 2014 revealed that only 19.1% of identified reviews matched the priority needs expressed by policy- and decision-makers and that no systematic reviews had the Eastern Mediterranean Region as the target jurisdiction. Furthermore, only 1.5% of identified systematic reviews had at least one author based in the Region. These findings indicate a gap in health system research governance and funding. In addition, better packaging of research findings for use in evidence-based decision-making is needed to make accessing research results easier for policy-makers *(73, 74)*. Cochrane has only one active geographic centre in the Region (Islamic Republic of Iran) and the Region hosts only two WHO-accredited registries for randomized controlled trials (Islamic Republic of Iran and Lebanon) *(75, 76, 77)*. A lower than expected number of research institutions have been designated as WHO collaborating centers in the Region *(78)*.

The health-related research output increased five-fold in the Region in a 10-year period (2004–2013), which also led to an increase in the Region's share of global research production from 0.9% to 2.4%. Per capita growth in production of health-related research output was highest in Qatar, followed by the Islamic Republic of Iran, Tunisia, Kuwait and Lebanon *(77, 79)*. The regional share of global research production is still very small, however, and progress is not distributed evenly with a few countries claiming a high share of publications. In 2004–2013, the highest share of publications belonged to the Islamic Republic of Iran (i.e. 39.3% of all related manuscript indexed in PubMed), followed by Egypt (14.1%), Saudi Arabia (10.6%), Tunisia (8.1%) and Pakistan (7.8%). The remaining 17 countries of the Region each had a contribution of less than 4%, with an overall share of about 20% of regional research production *(79, 80)*.

3.8.2 Research priorities, governance and support for health research

Even when funds are allocated for research and development, they are not well aligned with global public health needs. The latest available data from 2016 from the Organisation for Economic Co-operation and Development indicate that only 18 of 139 countries (12.9%) which received official development assistance managed to meet the targets envisaged for medical research and basic health sectors *(10)*.

A mapping exercise of research institutes in the Region found the majority (more than 75%) of responding institutions reported conducting public health research, followed by social/behavioural research and clinical/experimental research. Health policy and systems research is overlooked in the agendas of research institutes in the Region. Most institutions, especially in the public sector and among nongovernmental organizations, reported having an advisory board (65%). Close to 75% of reporting institutions, mostly in high-income countries, have an ethics review board. Only half of the institutions reported having policies to ensure researchers' compliance to Research Ethics Committee rules *(81)*.

Most countries of the Region lack a national agenda for priority health research. Even when priorities are set, there is no guarantee that they are being followed. There are inherent challenges in setting and implementing research priorities at national and even institutional level *(82)*. Challenges include: limited national, regional and international funding for health research institutions; lack of national strategies and policies to govern health research; underdeveloped human capacity for research; inadequate constructive engagement between policy-makers and health researchers to improve planning and conducting of health policy and systems research; and limited utilization of research outputs in public health policy and health systems development *(81)*.

"Brain drain" is another major challenge in the Region. Available figures for Egypt, Islamic Republic of Iran and Lebanon put them in the bottom 40 countries worldwide in a World Economic Forum ranking of vulnerability to brain drain. GCC countries, however, especially Qatar, Saudi Arabia, United Arab Emirates and Oman, score well for workforce retention. In light of the limited resources available for research in the Region, health systems need to have a developed structure with defined standards to be able to set their priorities and select quality research that will respond to existing needs and challenges. Insufficient strategic and institutional capacity make it difficult to prioritize, coordinate and oversee the health research initiatives that are necessary to address health issues in the Region *(83)*.

There have been initiatives to tackle these challenges in research status in the Region. Many GCC countries are attempting to draw researchers back to the Region, with generous funding offers available within national institutions and support comparable to major international research establishments. Fostering collaborative research can be another mechanism to address challenges in health research in the Region *(81)*. WHO conducts two coordinated research grants on a biennial cycle in order to improve research capacity in Member States of the Region and to provide valuable evidence for action on key health issues. These coordinated grants are the Research in Priority Areas of Public Health scheme, which is fully supported by the Regional Office, and the Special Programme for Research and Training in Tropical Diseases (TDR) small grants scheme,

which is done in coordination with the global TDR programme and uses their funding. Since 2016, these two grants have been advertised following an explicit research priority exercise by WHO. It is noteworthy that both grants are small and each supports only 10–15 projects per annum.

The Alliance for Health Policy and Systems Research (AHPSR) was established in 1999, in partnership with WHO, with the goal of building institutional capacity for health policy and systems research and strengthening health systems in low- and middle-income countries. AHPSR has supported establishment of systematic review centres engaged in health policy and systems research – called nodal institutes – in selected regions, including the Eastern Mediterranean. The nodal system in Lebanon has been involved in developing capacity to conduct health policy and systems research and has also engaged with several academic/research institutions in the Region – called sub-nodes – in three selected countries (Bahrain, Jordan, and Tunisia) *(84, 85)*. AHPSR has also supported research teams in other countries in conducting priority global and regional research studies. In addition, the Regional Office has implemented one round of research funding called Improving Programme Implementation through Embedded Research, in coordination with the AHPSR. Ad hoc research funding is also available from major global research funding institutions including the United States National Institutes of Health, the Wellcome Trust, and the Medical Research Council of the United Kingdom. However, the absorption of external health research funding remains low in the Region.

3.8.3. Use of research evidence for policy-making

In the Eastern Mediterranean Region, availability of research evidence for policy-making remains a challenge. This is often due to the obscurity or inadequacy of studies conducted in countries in the Region, as well as limited capacity of decision-makers in appraisal and use of best available evidence. The Index Medicus for the Eastern Mediterranean Region provides access to research published in national languages or in academic journals not listed in the main international databases of academic literature *(86)*. The medicus currently includes more than 200 000 citations from about 700 peer-reviewed health and biomedical science journals published in 20 countries of the Region. The main limitation is availability and use of consolidated sources of evidence, including systematic reviews of published literature *(87)*.

Findings from surveys on research institutions and health ministries across the Region suggest that, although the importance of using evidence in health policy is recognized, knowledge translation is hampered by: limited interaction between researchers and policy-makers during the policy-making process; lack of institutional and financial incentives to support knowledge translation; political sensitivity of some research findings; practical constraints to implementation; and non-receptive policy environments. In 2018–2019, an assessment of the status of institutional capacity for evidence-informed policy-making was conducted with 68 senior policy-makers (including former ministers of health) and senior policy developers within health ministries and academia from all 22 countries of the Region. Table 5 summarizes the key findings on whether evidence-informed making is understood and viewed favourably; availability and capacity for evidence-informed policy-making; and views on the role of WHO in supporting evidence-informed policy-making.

Table 5. *Status of evidence-informed policy-making in countries of the Region (77)*

a) Main finding 1: Evidence-informed policy-making is understood and viewed favourably in the Region

- 90% believed that their organizations support the use of research evidence in decision-making
- 69% believed that their organizations support professional development of policy analysts
- 74% reported regular attendance in meetings on policy development

b) Main finding 2: Availability of resources and capacity for evidence-informed policy-making are important challenges

- 51% believed that their organizations provide adequate support for evidence-informed policy-making
- Only 13% reported any existing policy to require the use of research evidence in policy-making
- Only 21% of organizations had conducted more than five research projects that addressed national needs to support health policy-making
- About 10% of the organizations had more than five policy analysts

c) Respondents' views on how WHO can help countries in evidence-informed policy development

In improving national capacity:[a]

- Provide capacity-building for researchers, policy-makers and policy analysts (83%)
- Recommend institutional settings and working guides for the use of evidence in policy-making (73%)
- Provide mentorship programmes and technical advice including experts and tools (72%)

In establishing regional mechanisms:[a]

- Develop policy briefs based on region/country-specific context (75%)
- Facilitate communication between researchers and policy-makers (73%)
- Increase accessibility of evidence sources (60%)
- Provide an accessible platform for best practices (58%)
- Develop public health/clinical practice guidelines (57%)
- Develop fast response team(s) for review and synthesis of context-sensitive evidence for emergency situations (48%)

[a] Percentages in brackets are the percentage of respondents who supported the action.

Despite global calls for action, work on knowledge translation and utilization of research in policy-making is still limited in the Region. Only about half of policy-makers collaborate with researchers and many believe that either the research evidence is not being delivered at the right time or it does not contain actionable messages *(77, 88)*. Only a small fraction of researchers and policy-makers in the Region report that evidence products such as policy briefs are developed and used systematically in national priority-setting activities *(77, 89, 90)*.

There is a need to expand institutional capacity for the use of research in policy-making, both among academic institutions for development of relevant quality research in a timely manner and also within ministries of health to be able to seek, identify and use the best research outputs for policy-making. WHO proposed a plan of action for enhancing institutional capacity for evidence-informed policy-making for health in countries of the Region. The plan was endorsed by the Regional Committee in October 2019, and resolution EM/RC66/R.5 should pave the way for consolidated action at regional and national levels in 2020–2024 *(52)*.

4. Health emergencies

4.1 Regional situation

Of the 131.7 million people in need of aid globally in 2018, 70.2 million (53.3%) lived in the Eastern Mediterranean Region *(22)*. By the end of 2018, there were about 80 million people affected by conflict, war and natural disasters globally, of which more than 37 million (46%) were from countries of the Region and almost 39% (31 million) were still residing in the Region. More than two thirds (67%) of all refugees worldwide come from just five countries, three of which (Syrian Arab Republic, Afghanistan and Somalia) are in the Eastern Mediterranean. The Region is hosting more than 10 million refugees; additionally, two of the five main host countries for refugees, Pakistan and Sudan, are in the Region. Lebanon and Jordan are the hosts to the largest number of refugees relative to their national population, where 1 in 6 people (156 per 1000) and 1 in 14 people (72 per 1000), respectively, were refugees in 2018. Among the 10 countries with highest numbers of returning refugees in 2018, five are in the Region; Iraq is ranked highest, with close to 1 million Iraqis returning to their country. The large number of displaced people, together with their disproportionate distribution in a few countries and the large volume of returnees to other countries, can strain health systems already struggling with long-term and in some cases protracted emergencies *(8)*.

In 2018, nine emergencies were graded in the Region including: three Grade 3 major emergencies in Somalia, Syrian Arab Republic and Yemen; four Grade 2 emergencies in Iraq, Libya, Palestine and Sudan; and two Grade 1 emergencies in Afghanistan and Pakistan. Saudi Arabia has been at Grade 2 for Middle East respiratory syndrome coronavirus (MERS-CoV) since 2012. Seven other countries are directly or indirectly affected by emergencies, namely Djibouti, Egypt, Jordan, Kuwait, Lebanon, Oman and United Arab Emirates *(22)*.

In 2018, 19 major outbreaks of 10 different emerging and epidemic-prone diseases occurred or continued in 12 countries in the Region. Outbreaks included: chickenpox (varicella) in Pakistan; chikungunya in Sudan; cholera in Somalia and Yemen; Crimean-Congo haemorrhagic fever in Afghanistan, Iraq and Pakistan; dengue fever in Oman, Pakistan, Sudan and Yemen; diphtheria in Yemen; extensively drug-resistant typhoid fever in Pakistan; MERS-CoV in Kuwait, Oman, Saudi Arabia and United Arab Emirates; travel-associated Legionnaires' disease in United Arab Emirates; and West Nile fever in Tunisia *(22)*.

4.1.1 Country capacity to respond to emergencies

Under the International Health Regulations (IHR) (2005), minimum core public health capacities for surveillance, response and reporting of health emergency events with possible international concern are required for all States Parties. This capacity is assessed through annual self-assessment reports by Member States and voluntary joint external

evaluations (JEE). Available data for 2018 indicate that countries generally have better performance in reporting and detecting emergencies (e.g. surveillance and laboratory, with the average scores of around 70% globally), than in responding to them (e.g. emergency preparedness and response, with a global average score of 59%) *(9)*.

Seventeen countries in the Region have conducted JEE with the overall mean JEE score of 3 across the 19 technical areas, which means "developed capacity". Based on JEE results, a regional plan has been developed to enhance the One Health approach in countries. Additionally, a regional profile was developed in 2018 for potential hazards and hazard-specific contingency plans to facilitate support to countries responding to public health emergencies. Another regional initiative aiming at furthering implementation of IHR (2005) and pursuing global health security is the Khartoum Declaration on Sudan and Bordering Countries: Cross-Border Health Security, signed by Chad, Egypt, Ethiopia, Libya, South Sudan and Sudan in 2018. The signatory countries committed to strengthen their preparedness and response capacity to public health emergencies across borders *(22)*.

4.1.2 Safe hospitals initiative

WHO has been working with countries to determine the level of emergency preparedness and risk management in the Region, and has developed a strategic framework by which countries can work to safeguard hospitals and health facilities from disasters. The framework seeks to ensure that all new hospitals are built with a level of resilience that will maintain their functionality in disaster situations, and to promote mitigation measures to reinforce existing health facilities, particularly those providing primary health care services *(91)*.

4.2 Preparedness to respond to outbreaks

The likelihood of the emergence and rapid transmission of high-threat pathogens has increased in the Region due to acute or protracted humanitarian emergencies, knowledge gaps regarding risk factors for transmission and epidemiology, absence of country-focused strategies, rapid urbanization, climate change, weak surveillance, limited laboratory diagnostic capacity and increased human–animal interaction *(92)*. There are critical organizational and implementation gaps in the emergency care system and in hospital emergency preparedness and response in the Region. To address these challenges, a regional strategy for surveillance, outbreak response, social mobilization and vector control was rolled out by WHO in 2012. There have also been several initiatives to address outbreaks, such as the 2016 WHO declaration of a public health emergency of international concern with regard to clusters of microcephaly and neurological disorders potentially associated with Zika virus, response to MERS-CoV to improve public health preparedness, and response to Crimean-Congo haemorrhagic fever considering its geographic expansion in the Region.

A regional network of experts and technical institutions has been established to facilitate support for international outbreak response to the growing frequency, duration and scale of disease outbreaks *(92)*. WHO has developed a strategic framework to guide countries in cholera preparedness and response. Surveillance systems and national

influenza centres have been established in 16 countries to build preparedness capacity for outbreak detection and response to influenza-like illness and severe acute respiratory infections in the Region. Seven countries (Afghanistan, Egypt, Jordan, Lebanon, Morocco, Sudan and Yemen) have benefited from the Pandemic Influenza Preparedness (PIP) Framework. The PIP Framework is a unique public–private partnership initiative for detection and response to influenza with pandemic potential and increasing access to vaccines and other pandemic-related supplies *(93, 94)*.

To rapidly identify and respond to outbreaks during humanitarian crises when routine surveillance is not functional, WHO developed the Early Warning Alert and Response Network (EWARN) *(95)*. WHO, health partners and health ministries are currently implementing EWARN systems in seven countries in the Region that are facing protracted emergencies: Afghanistan, Iraq, Libya, Somalia, Sudan, Syrian Arab Republic and Yemen *(96)*.

WHO has developed a specialized tool for the purposes of the Research and Development Blueprint to determine which diseases and pathogens should be prioritized for research and development in the context of public health emergencies. This tool seeks to identify those diseases that pose a public health risk because of their epidemic potential and for which there are no, or insufficient, countermeasures. The list of diseases identified through this process was reviewed in 2018 *(97)*.

To respond to emerging infectious diseases, the regional Emerging and Dangerous Pathogens Laboratory Network was established in 2017 to develop high-security laboratories for the timely detection, management and containment of outbreaks. Additionally, the Global Outbreak Alert and Response network (GOARN) provides support to the operational response in time of outbreaks. Rapid field investigation and deployment of surge staff from the Regional Office, together with involvement of GOARN partners and swift implementation of public health containment measures, successfully contained outbreaks of emerging infectious disease in Pakistan (dengue fever), Somalia (cholera), Sudan (acute watery diarrhoea) and the United Arab Emirates (travel-associated Legionnaires' disease) *(98)*.

Informal or "nontraditional" public health surveillance is another innovation that can enable quicker recognition of outbreaks in the Region. To materialize this idea, the Training Programs in Epidemiology and Public Health Interventions Network, a professional network of 71 field epidemiology training programmes, developed EpiCore through a joint venture with partners. EpiCore is a system that aims to complement existing surveillance methods and speed up the process of finding, reporting and verifying public health events *(99)*.

4.2.1 Epidemic prevention campaigns

In 2015, the Regional Office implemented the first mass vaccination campaign with oral cholera vaccine from the global stockpile in response to a cholera outbreak *(100)*. In May 2017, the first-ever oral cholera vaccination campaign in Yemen was launched to prevent the resurgence of the world's largest cholera outbreak with more than 1 million suspected cases since the outbreak began in April 2017. The campaign was implemented by national health authorities with the support of WHO and UNICEF, in partnership with

the World Bank and Gavi, the Vaccine Alliance. Sudan launched its first-ever yellow fever mass preventive vaccination campaigns in 2014, vaccinating close to 7.5 million people aged between 9 months and 60 years in seven high-risk states identified by a risk assessment conducted in 2012–2013. Areas with active circulation of yellow fever virus were targeted for preventive vaccination campaigns.

In 2018, WHO and partners completed a large-scale vaccination campaign to control the spread of diphtheria in high-risk areas in Yemen. The campaign targeted nearly 2.7 million children aged 6 weeks to 15 years in 11 governorates. In Somalia, national and local health authorities with the support of WHO and UNICEF ran a nationwide campaign to protect more than 4.7 million children aged from 6 months to 10 years against measles in 2017 *(101)*.

4.3 Preparedness to respond to humanitarian emergencies

One of the three pillars of WHO's GPW 13 is "1 billion more people better protected from health emergencies" by 2030. The regional *Vision 2023* of "health for all by all" is in line with UHC and aims at leaving no one behind, including in emergency situations happening under any condition such as conflicts, natural disasters or outbreaks, as well as health emergencies arising during international mass gatherings. According to a World Bank review, the average number of natural disasters in the Middle East and North Africa region has almost tripled in three decades (1980s to 2011), while the global absolute number of disasters has almost doubled. Governments across the Region are increasingly seeking comprehensive disaster risk management services. Since 2007, the Global Facility for Disaster Reduction and Recovery (GFDRR) has supported country-level programmes to increase disaster resilience in Djibouti, Morocco and Yemen *(102)*.

WHO continues to strengthen its management of emergencies through application of the Incident Management System, an international best practice that has been adopted by many public health agencies worldwide. The regional Emergency Operations Centre continues to coordinate the organizational response for graded emergencies. To provide a sustainable response to emergencies, the Emergency Medical Teams initiative was launched to establish a cadre of skilled national multidisciplinary medical teams to act as first responders when an emergency strikes *(22)*.

4.3.1 Availability of life-saving health services

Providing life-saving health services is a top priority for response to emergencies, especially in those countries affected by long-term and protracted emergencies such as Afghanistan, Libya, Syrian Arab Republic and Yemen. Life-saving health services include provision of essential supplies and medicines such as surgery kits, medicines for NCDs including hypertension or renal failure, pneumonia kits and diarrhoea kits *(103)*.

WHO and partners have made robust humanitarian efforts to provide life-saving support continuously in areas most in need through WHO's logistics hub in Dubai. Medicines and medical supplies were delivered to the Region and beyond, reaching more than 23.5 million beneficiaries in Iraq, Somalia, Syrian Arab Republic and Yemen in 2017 *(101)*. Nearly 75% of all WHO health supplies procured globally in 2018 were delivered to countries in the Region *(22)*.

4.3.2 Mental health and psychological support

Conflict predisposes a population to the development of mental disorders. Stressors of war include loss (human or material) and grief, safety concerns, disruption of the fabric of society, loss of identity and potential discrimination. Displacement increases the vulnerability of exposed populations to different mental illnesses such as depression, anxiety and post-traumatic stress disorders. Recent WHO estimates show that one in five people (22%) living in an area affected by conflict has some form of mental disorder, which is more than double the figure for the general population. The rates of depression and anxiety in countries of the Region are among the highest in the world, wholly explained by the prevailing emergency situations *(104)*. Palestine has one of the highest burdens of adolescent mental disorders: about 54% of Palestinian boys and 47% of girls (aged 6–12 years) reportedly have emotional and/or behavioural disorders. The overall disease burden for mental illness in Palestine is estimated to account for about 3% of DALYs *(105)*. Furthermore, estimates show that more than 50% of the population in the Syrian Arab Republic, particularly women and children, were in need of mental health and psychosocial support services by the end of 2016 *(106)*.

WHO is addressing mental health in countries and territories with populations affected by large-scale emergencies including Afghanistan, Iraq, Jordan, Lebanon, Libya, Pakistan, Somalia, Sudan, Syrian Arab Republic, the West Bank and Gaza Strip, and Yemen. First, this involves assessing the needs of affected populations and available resources, including which government services, local nongovernmental organizations and international partners have the capacity and knowledge to manage mental health problems. Following assessment, WHO supports capacity-building for mental health and psychosocial support services, including community engagement, in coordination with partners and local providers. Over the past decade, in collaboration with partners, WHO has developed a range of practical guides to help to establish and scale up mental health and psychosocial support in emergency settings, including psychological first aid guidance and the Mental Health Gap Action Programme (mhGAP) humanitarian intervention guide through which general health workers are trained to recognize and provide first-line support for common mental disorders *(107, 108)*.

In some countries, emergencies have been the catalyst for building quality mental health services. In the Syrian Arab Republic, for example, before the conflict there was scarcely any mental health care available outside of mental hospitals in Aleppo and Damascus. Now, due to growing recognition of the need, mental health and psychosocial support has been introduced in primary and secondary health facilities, community and women's centres, and through school-based programmes. In Lebanon, the Government has taken the opportunity to strengthen mental health services, so that they benefit not only new arrivals but also the local population. Such examples, as well as work in Afghanistan, highlight that mental health and psychosocial support interventions not only help people survive extreme distress and hardship, but also support peace, development and recovery. However, there are serious barriers to providing mental health services to immigrants originating from countries of the Region, as they often have limited knowledge about the host country's culture and language, and many are illiterate or have low education levels.

4.3.3 Rehabilitative services

Based on WHO estimates, the Region is home to almost 100 million people with disabilities; reported disability prevalence in countries ranges between 0.4% and 4.9%. About 80% of the total population of people with disabilities live in developing countries *(109)*, and protracted and widespread violent conflicts, wars and emergencies in the Region can contribute to increasing numbers of disabilities. Rehabilitative services need to be an inherent element of any emergency response planning for two main reasons: first, people with disabilities are among the most vulnerable groups during emergencies; and second, disabilities can increase during time of emergencies due to injuries, poor basic surgical and medical care, emergency-induced mental health and psychological problems, and dismantled health and support systems *(110)*. Rehabilitative services should be integrated into all levels of the emergency response; however, such services are inadequately addressed in policy, planning and service delivery for emergency situations in the Region.

4.4 Coordination and collaboration among United Nations agencies and other partners

WHO has three main operational partnerships worldwide, all of which are active in the Region: the Global Health Cluster; GOARN; and the Emergency Medical Teams initiative. The Global Health Cluster is the main operational partner in humanitarian crises, with 29 clusters active at country and regional levels, operating out of eight national and 42 subnational sites, and aiming to serve approximately 65 million people in need of health services worldwide. GOARN represents a network of public health institutions that deploys technical experts in response to outbreaks and public health events worldwide. The Regional Office for the Eastern Mediterranean hosts 12 GOARN partners *(22)*.

Activation of health clusters in the Region, coordinated by WHO and supported by health partners, has provided timely response to health emergencies in eight countries of the Region. WHO and health partners have supported a variety of interventions such as preventing closure of hospitals in the Gaza Strip by providing fuel for generators, immunization of 99% of target children in newly accessible areas in Iraq, reaching 6 million people with life-saving health services in Yemen, underpinning the transition from emergency to development in the Federally Administered Tribal Areas in Pakistan, and supporting 14.4 million medical procedures and providing 8.6 million courses of treatment in the Syrian Arab Republic.

The WHO European and Eastern Mediterranean regions have started to map and define potential areas for future collaboration and to identify synergies between the two regions. Collaboration has begun in several areas, including: preparing to transition towards domestic financing in TB, HIV and malaria programmes; addressing leishmaniasis among neighbouring endemic countries in the African, European and Eastern Mediterranean regions; documenting and estimating the TB burden in selected areas of the northeast Syrian Arab Republic; and collaboration on laboratory regulatory frameworks, workforce and external quality assessment *(22)*.

4.5 Rebuilding health systems in countries affected by emergencies

The health systems in countries affected by war and conflict often face challenges such as damaged infrastructure, limited human resources, weak stewardship and proliferation of nongovernmental organizations. To rebuild the health system in countries affected by emergencies, strategies that benefit the largest number of recipients including women and children need to be prioritized. In Afghanistan, for example, a basic package of health services for primary health care settings was designed to tackle the most urgent health needs while simultaneously strengthening other elements of the health system. WHO technical support and coordination with international donors is crucial in countries going through this transition period. Countries need to be prepared for a gradual decrease in donor contribution and focus on community-based initiatives to be able to provide the most accessible and affordable services *(111)*.

Considering the protracted emergencies and increasing number of natural disasters and outbreaks in the Region, specific focus needs to be placed on resilience in rebuilding health systems. Health systems resilience can be defined as the capacity of health systems to absorb, adapt and transform when exposed to a shock such as a pandemic, natural disaster or armed conflict. A resilient health system would retain and maintain core functions and structure when a crisis hits *(112)*. A Regional Office initiative, the Health Systems in Emergencies Lab, was launched in 2018 to improve health systems resilience by experimenting with new ways for integrating health systems strengthening with emergency preparedness, response and recovery *(22)*.

In 2019, WHO highlighted the "recovery phase" and will provide technical support to countries that are gradually stepping out of crisis through development of guidance to health systems recovery in emergencies in the Region, focusing on transforming challenges into opportunities *(113)*.

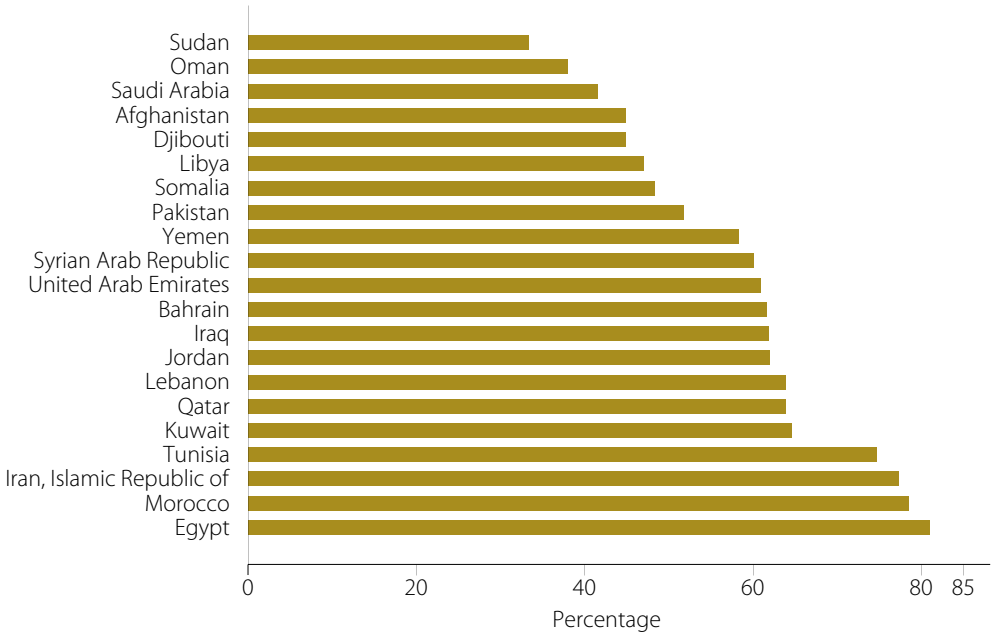
5. Promoting health across the life course

5.1 Reproductive, maternal, newborn, child and adolescent health, and ageing

5.1.1 Reproductive and maternal health

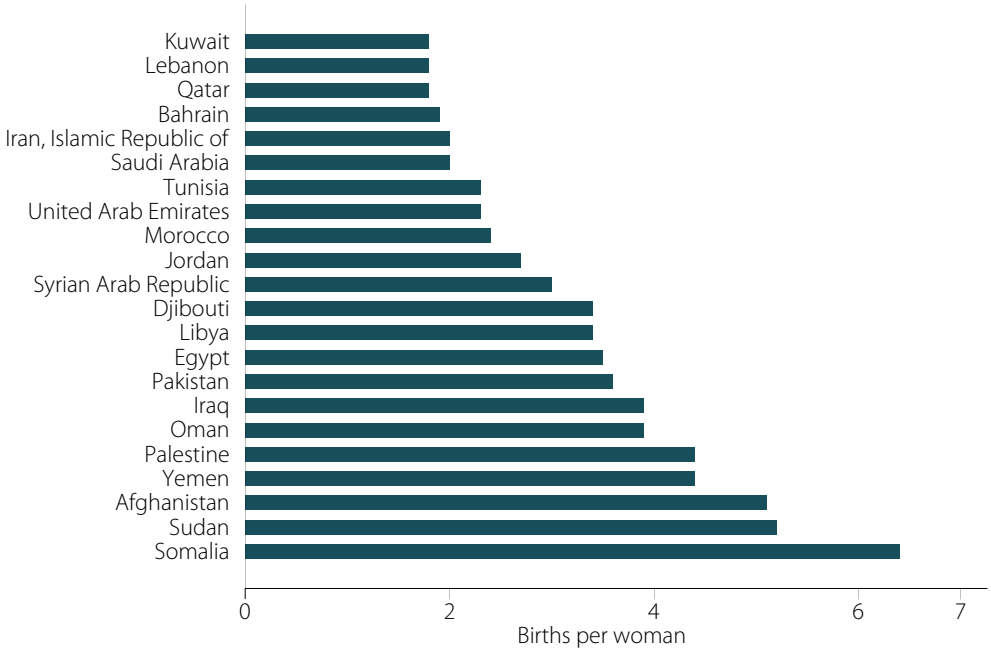
Family planning, safe pregnancy and childbirth, and prevention and control of sexually transmitted infections, including HIV/AIDS, are among basic sexual and reproductive health rights. In the Eastern Mediterranean Region, the proportion of women of reproductive age (15–49 years) who have their need for family planning satisfied with modern methods ranges from 33.3% in Sudan to 81% in Egypt (Fig. 23). The average rate for this indicator is lower for the Region than the global average, and the second lowest among all WHO regions. The fertility rate per woman ranges from 1.8 to 2.0 in six countries (Bahrain, Islamic Republic of Iran, Kuwait, Lebanon, Qatar and Saudi Arabia); the highest reported rate is 6.4 in Somalia (Fig. 24). Adolescent fertility rate (births per 1000 girls aged 15–19 years) ranges from 0 in Kuwait to 87 in Sudan (Fig. 25). The average adolescent fertility rate for the Region is 44.5, which is higher than the global average and the third highest among WHO regions.

Fig. 23. *Women of reproductive age (15–49 years) who have their need for family planning satisfied with modern methods (%), 2017*



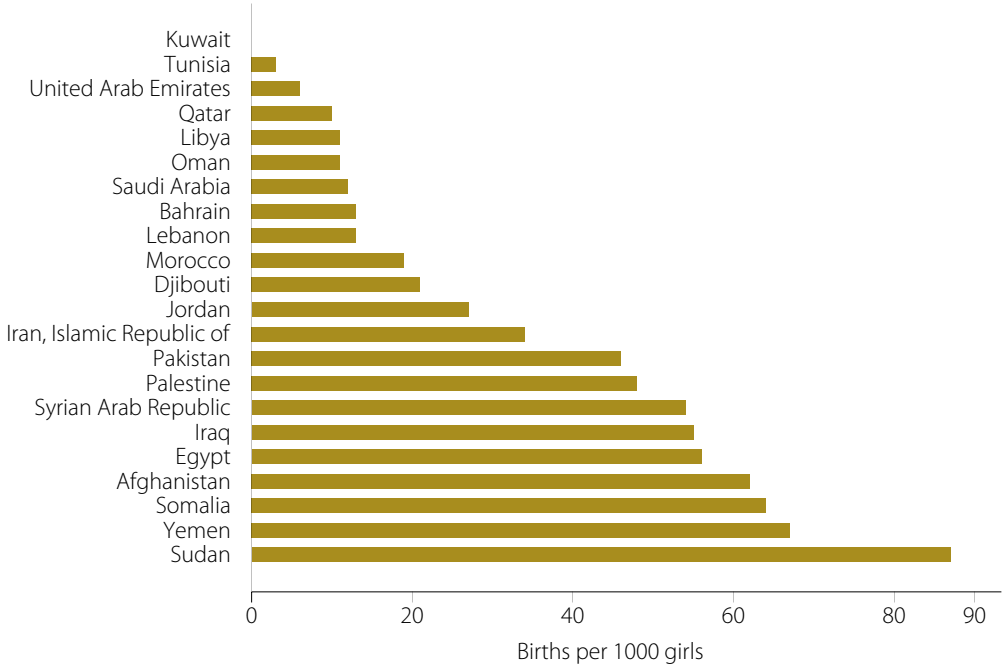
Source: WHO (2020) (9).

Fig. 24. *Total fertility rate per woman, 2013–2018*



Source: WHO (2020) (9).

Fig. 25. *Adolescent fertility rate per 1000 girls (aged 15–19 years), 2013–2018*

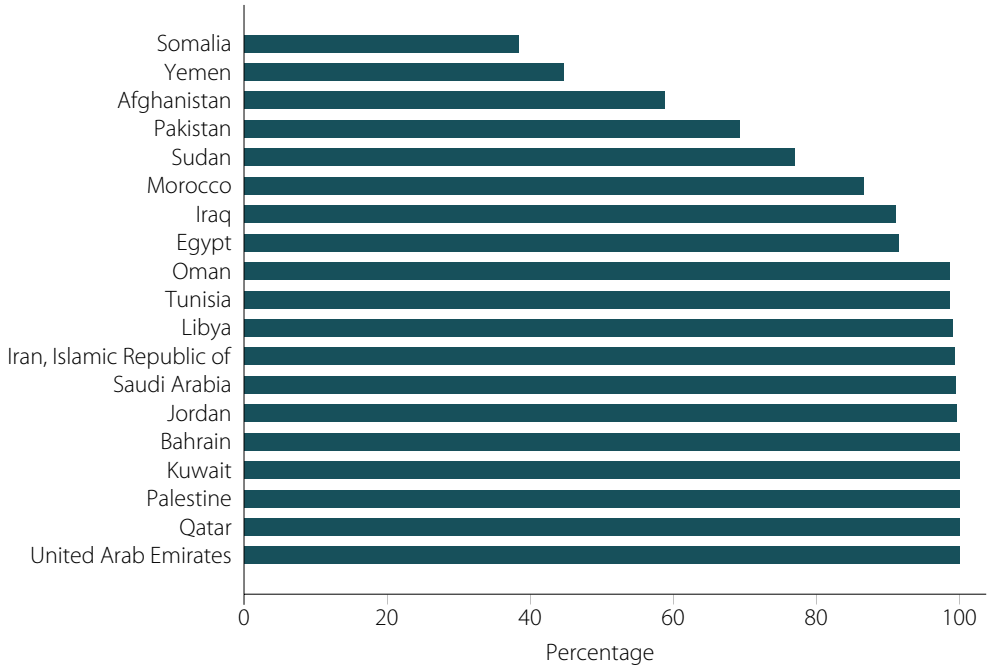


Source: WHO (2020) (9).

In the Region, coverage of births attended by skilled health personnel in 2013–2018 is above 90% in 13 countries, although it is less than 50% in two countries (Somalia and Yemen) (Fig. 26). The average rate of skilled birth attendance is lower in the Region than the global rate and the second lowest among WHO regions. Available data for 2013–2017 indicate that coverage of at least one clinic visit for antenatal care is 80% and above in

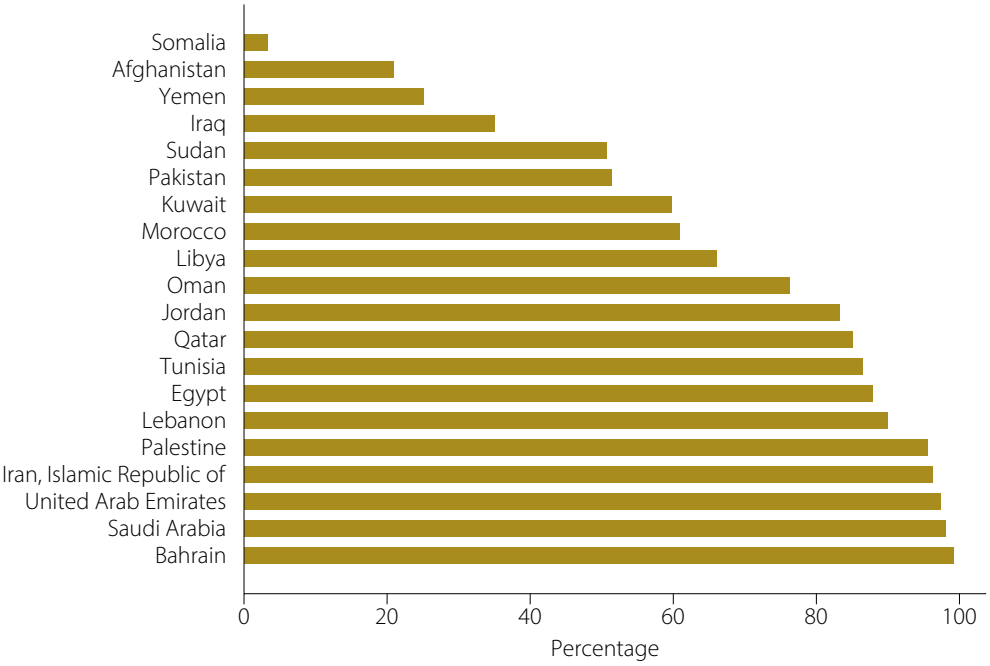
most countries. However, coverage of at least four clinic visits for antenatal care is under 80% for 10 countries, and as low as 3.3% in Somalia (Fig. 27). This indicates insufficient antenatal care in the Region.

Fig. 26. *Percentage of births attended by skilled health personnel (%), 2014–2018*



Source: WHO (2020) (9).

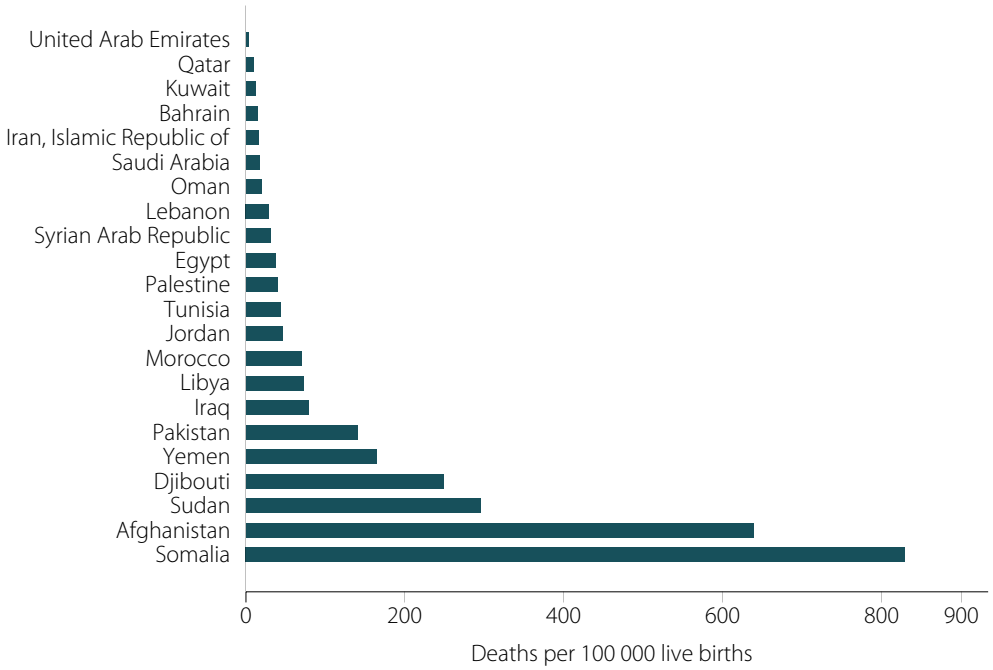
Fig. 27. *Antenatal care coverage (four visits or more) (%), 2013–2018*



Source: WHO (2020) (9).

The maternal mortality ratio (MMR) is 166 deaths per 100 000 live births in the Region. The regional MMR is less than the global ratio of 216, although it is the second highest among WHO regions. Somalia and Afghanistan have the highest MMR in the Region at 829 and 638, respectively. The MMR is under 20 in all GCC countries and the Islamic Republic of Iran (Fig. 28). Maternal haemorrhage has been the leading cause of maternal mortality since in 1990, both globally and regionally.

Fig. 28. *MMR, 2017*



Source: WHO (2019) (10).

Between 1990 and 2017, MMR declined by 50% in the Region and progress in some countries has been remarkable. Morocco was one of only 10 countries globally that met the Millennium Development Goal 5 requirement of an annual rate of decline exceeding 5.5% for MMR between 1990 and 2015, achieving more than 75% reduction in MMR from 1990 levels. In Morocco in 2017, the MMR was 70 deaths per 100 000 live births, which just meets SDG target 3.1 on reduction of MMR. However, at the end of 2017, nine out of 22 countries in the Region had an MMR greater than the global target for 2030. Implementing specific reproductive and antenatal health interventions such as in-facility delivery, skilled birth attendance, family planning services, emergency obstetric care and postnatal care have contributed to reducing negative pregnancy outcomes in these countries. However, low-income countries have seen the least improvement or no improvement at all. For example, the MMR increased in Afghanistan and Djibouti between 1990 and 2015 *(114)*.

In 1985, the international health community considered the optimal rate for caesarean section to be between 10% and 15%. The average rate of caesarean section in the Region is 21%, with country rates ranging from one of the world's highest (52% in Egypt) to the lowest (2% in Somalia) *(115)*.

Female genital mutilation (FMG) is still practiced in many countries in the Region and can happen from infancy through to adolescence. FGM is unacceptable from both a human rights and a health perspective. There are short-term health consequences for females who have suffered FMG, such as severe bleeding and urination problems, while later problems can include cysts, infections, complications in childbirth and increased risk of newborn death. Mental health problems are another major issue for young girls experiencing FMG *(116)*.

There are WHO tools and standards for improving the quality of care for reproductive and maternal health in the Region, including the *Standards for improving quality of maternal and newborn care in health facilities* and the *Medical eligibility criteria wheel for contraceptive use (117, 118)*. Countries of the Region can adapt these tools to their local context, similar to efforts in the Islamic Republic of Iran *(22)*. WHO implements projects to strengthen sexual and reproductive health policies and practice for better women's health in Egypt, Islamic Republic of Iran, Morocco, Pakistan and Tunisia. The main objective of projects is to integrate comprehensive sexual and reproductive health and rights into national policies, programmes and practices to reduce maternal mortality and morbidity due to unwanted pregnancies *(119)*. A project has also been initiated to improve family planning practices in emergency situations in refugee camps in Lebanon, based on WHO practice recommendations on safe and effective contraceptive use *(98)*.

The main challenges to improving sexual and reproductive health and rights in the Region are: lack of national plans supporting the provision of sexual and reproductive health care; fragmented service delivery mechanisms; poor accessibility to care services among the population groups who need them most; poor quality of care; social and cultural barriers; lack of national policies fulfilling women's and girls' rights to achieving positive reproductive health outcomes; and instabilities and conflicts that have made the already inadequate infrastructure for sexual and reproductive health more fragile *(120)*.

5.1.2 Newborn and young child (under 5 years) health

Children aged under 5 years old represent 12% of the total population of the Eastern Mediterranean Region. High newborn and young child mortality rates in the Region indicate that coverage of health services for this age group is inadequate. In 2017, an estimated 800 000 children died in the Region before reaching their fifth birthday. The mortality rate among children aged under 5 years is higher in the Region than the global rate, and second highest among WHO regions after the African Region. In 2017, more than 450 000 newborns died in the Region, accounting for more than 54% of all deaths in children under 5 years. The neonatal mortality rate in the Region is higher than the global rate (Table 6) and higher than in other WHO regions, alongside the African Region.

About 95% of all under-5 mortality in the Region occurs in only nine countries. In 2017, the highest under-5 mortality rate was in Somalia (127 deaths per 1000 live births) and the lowest in Bahrain and Saudi Arabia (7 deaths per 1000 live births) (Fig. 29). The overall under-5 mortality rate fell by 51% in the Region between 1990 and 2017. During the same period, the neonatal mortality rate declined by 35% in the Region. In 2017, the highest neonatal mortality rate was in Pakistan (44 deaths per 1000 live births) and the lowest in Bahrain (3 deaths per 1000 live births) (Fig. 30). Infant mortality rates were

highest in Somalia (80 deaths per 1000 live births) and lowest in Bahrain and Saudi Arabia (6 deaths per 1000 live births) (Fig. 31).

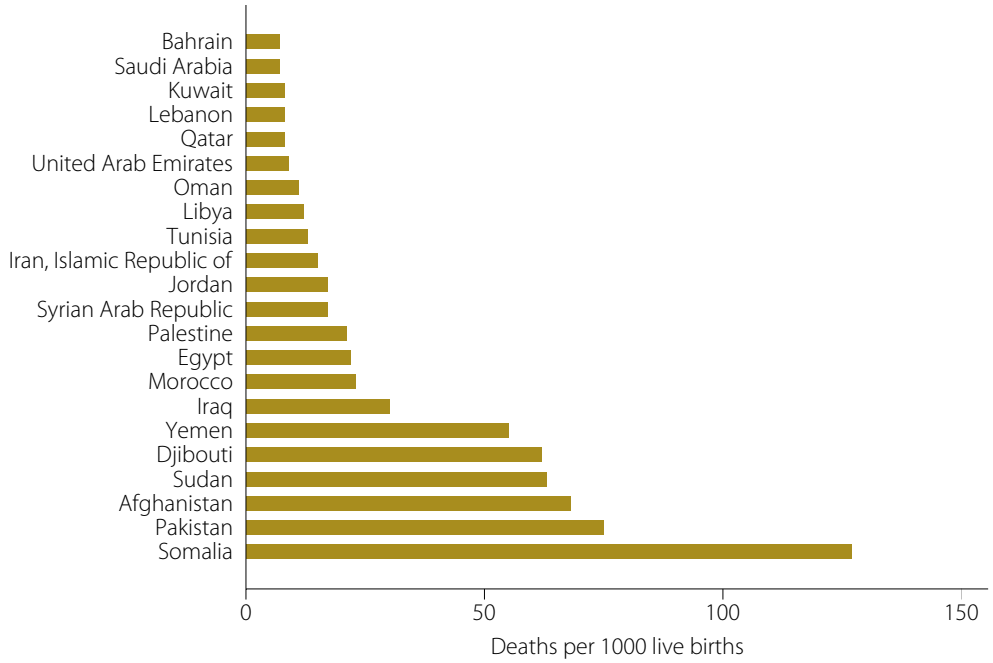
In terms of SDG targets, by the end of 2017, seven out of 22 countries in the Region still had an under-5 mortality rate higher than the global target (25 deaths per 1000 live births) for 2030, while eight countries had a neonatal mortality rate higher than the global target (12 deaths per 1000 live births) for 2030.

Table 6. *Regional and global estimates of neonatal and under-5 mortality rates, 2016*

	SDG target 3.2	
	Under-5 mortality rate (deaths per 1000 live births)	**Neonatal mortality rate (deaths per 1000 live births)**
	2016	2016
Regional	50	27
Global	39	18

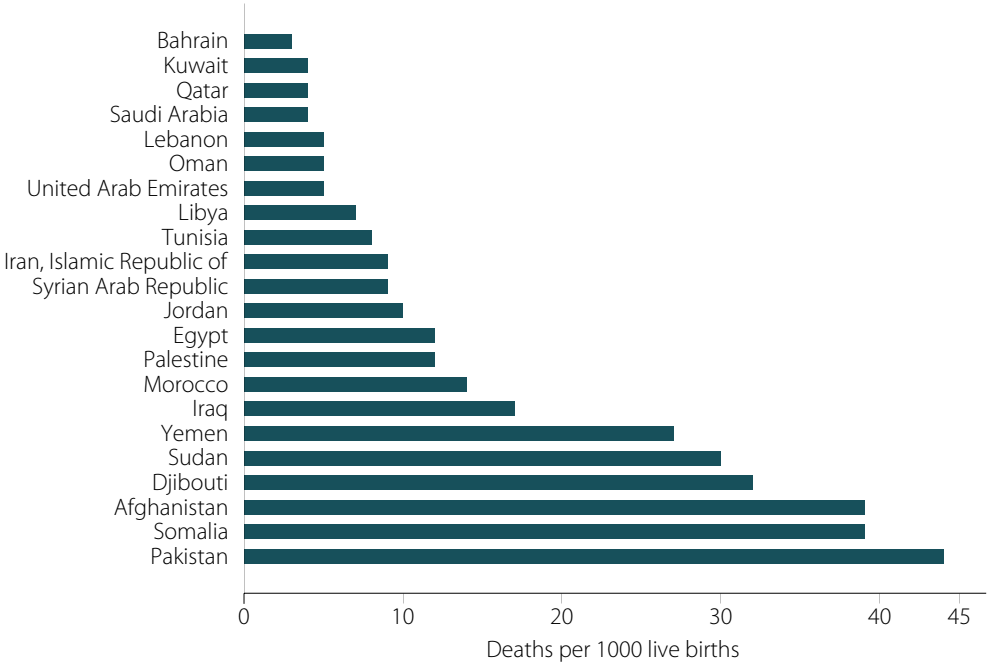
Source: WHO (2019) (10).

Fig. 29. *Under-5 mortality rates, 2017*



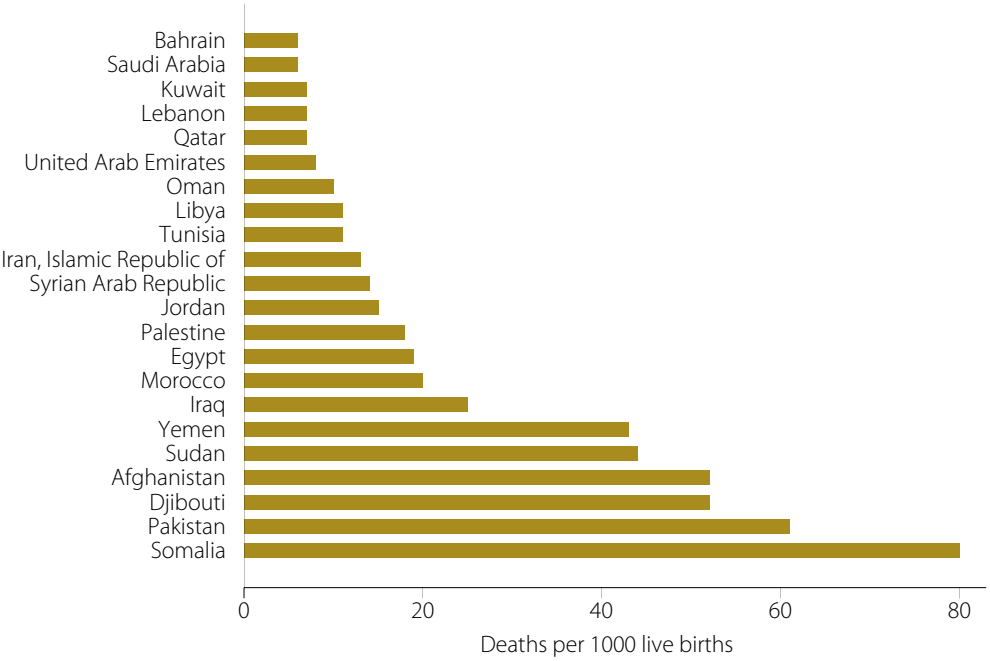
Source: WHO (2020) (9).

Fig. 30. *Neonatal mortality rates, 2017*



Source: WHO (2020) (9).

Fig. 31. *Infant mortality rates, 2017*

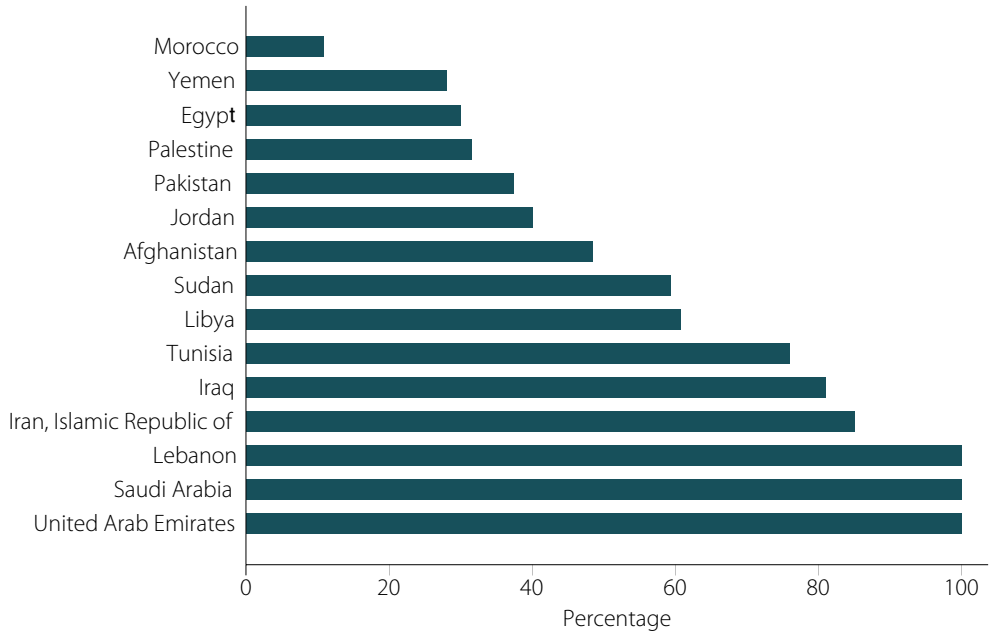


Source: WHO (2020) (9).

In countries of the Region with low under-5 mortality rates, the main causes of death are prematurity and congenital anomalies; while in countries with high under-5 mortality, pneumonia, diarrhoea and birth asphyxia are still the main cause *(121)*. Prematurity is the leading cause of neonatal mortality in the Region, with one in five deaths among children aged under 5 years due to preterm labour (21%). Congenital abnormalities (birth defects) are of increasing importance in the care of newborns. This is especially relevant in the Region, where the high rate of consanguineous marriages constitutes a major risk factor for congenital abnormalities. Results of a situational analysis of the whole Region suggest less than half of countries conduct surveillance on birth defects, which leads to inadequate data required for prevention, service planning and family support for management of birth defects *(122)*.

One of the key factors contributing to high neonatal and child mortality rates in the Region is the low coverage of essential interventions, such as attendance of skilled health professionals during delivery, which puts a large number of newborns at risk of early neonatal death. Evidence-based interventions for prevention and treatment of infectious diseases such as pneumonia and diarrhoea are also lacking in some countries. Only half of children under 5 years with pneumonia receive antibiotics, and about two thirds of children are born in countries (mostly middle-income) that do not offer pneumococcal conjugate or rotavirus vaccines. Access to water and sanitation services is low in many countries of the Region, which increases the risk of diarrhoea and other waterborne diseases. The coverage of oral rehydration therapy for children suffering from diarrhoea is less than 60% in half of reporting countries (Fig. 32).

Fig. 32. *Children under 5 (%) with diarrhoea treated with oral rehydration therapy, 2014–2018*



Source: WHO (2020) (9).

Despite high rates of under-5 and neonatal mortality in some countries of the Region, more than 60% of countries have been successful in their efforts to reduce these rates in line with the global targets for 2030. Evidence-based strategies that have contributed to these achievements in countries include: appropriate home care and timely treatment of complications for newborns; Integrated Management of Childhood Illness (IMCI) for all children under 5 years of age; implementation of the Expanded Programme on Immunization; and promotion of infant and young child feeding. Additionally, measles vaccination has saved more than 2.5 million lives between 2000 and 2017. However, as reflected above, the Region is still behind most other WHO regions, with subnational disparities within countries at different levels of socioeconomic development *(121)*.

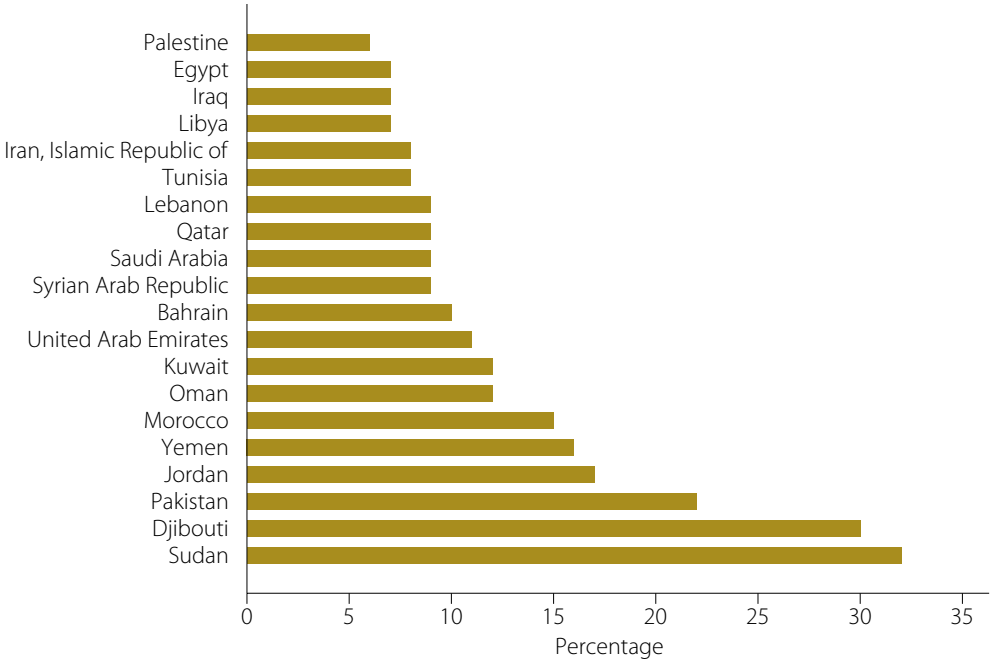
To address the high levels of child and maternal mortality, a regional initiative on saving the lives of mothers and children was announced in the 2013 Dubai Declaration to accelerate progress toward achieving Millennium Development Goals 4 and 5 *(123)*. Following this initiative, maternal and child health acceleration plans were developed and implemented in countries with a high burden of maternal and child deaths. During the same year, the Regional Office actively contributed to the development of the *Global Action Plan for Prevention and Control of Pneumonia and Diarrhoea (GAPPD)*, to reduce the death toll from these two conditions that account for about a quarter of child deaths globally *(124)*.

To end preventable newborn deaths, the global *Every Newborn* action plan was endorsed by the Sixty-seventh World Health Assembly in 2014. In 2016, countries of the Region identified five key priority actions for each strategic objective of the action plan to be integrated into national strategic reproductive, maternal, newborn, child and adolescent health plans *(125)*. IMCI is the main strategy for child health in primary health care settings in 16 countries, with large variations in coverage ranging from 29% to 100% *(121)*.

The *Newborn, child and adolescent health implementation framework for the Eastern Mediterranean Region, 2019–2023* is the road map developed by the Regional Office to guide development or update of countries' national strategic plans for newborn, child and adolescent health and development, in line with GPW 13 and *Vision 2023*. The framework was endorsed by the 66th session of the Regional Committee in 2019 (resolution EM/RC66/R.2). The framework aims at an integrated and multisectoral approach, considering the fact that almost half of deaths among children aged under 5 years are preventable through interventions outside of the health sector such as education and water and sanitation *(121)*.

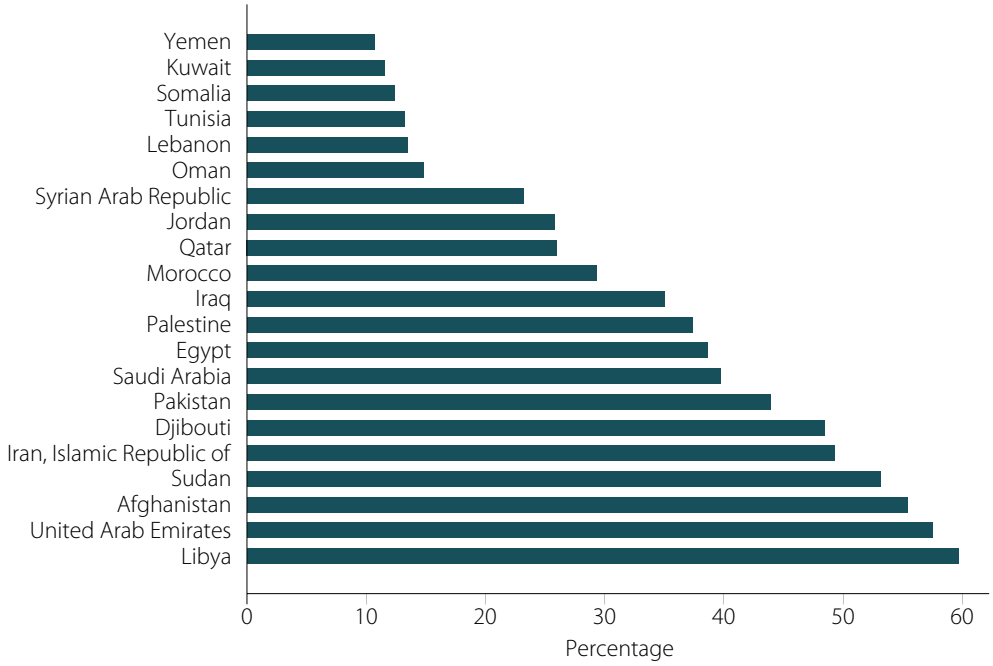
Low birth weight is associated with short-term health problems and consequences for health and well-being later in life, including an increased risk of chronic diseases. In the Region, prevalence of low birth weight is similar in high- and middle-income countries, and highest in Sudan, Djibouti and Pakistan (Fig. 33). Globally, suboptimal breastfeeding contributes to 11.6% of mortality in children under 5 years old. The average rate of exclusive breastfeeding (0–5 months) is 32.5% in the Region, which is lower than the global rate of 38% *(126)*. Four countries of the Region (Afghanistan, Libya, Sudan and United Arab Emirates) have reached the global target for 2025 of at least 50% for exclusive breastfeeding in the first 6 months of life, and two countries (Djibouti and Islamic Republic of Iran) are very close (Fig. 34). This means that more than 75% of countries in the Region, regardless of their income level, are not meeting the target and need to enhance their efforts for an evidence-informed policy and programme response.

Fig. 33. *Low birth weight among newborns (%), 2014–2018*



Source: WHO (2020) (9).

Fig. 34. *Exclusive breastfeeding (%) 0–5 months of age, 2014–2018*



Source: WHO (2019) (10).

5.1.3 Child and adolescent health and development

The child and adolescent mortality rate in the Eastern Mediterranean Region is the second highest among WHO regions, after the African Region. In general, the health needs of children aged 5–9 years have been overlooked. In low- and middle-income countries, the mortality rate in children aged 5–9 years was 109 deaths per 100 000 population in 2016. For the Region as a whole, the mortality rate in children aged 5–9 years was 96 deaths per 100 000 population in 2016 compared to 158 deaths per 100 000 population in 2000. The Region has the slowest rate of reduction in mortality in this age group between 2000 and 2016 at only 39%, compared to 47% in the African Region, 61% in the South-East Asia Region and 54% in the European Region. The leading causes of death among children aged 5–9 years are collective violence and legal intervention, followed by road traffic injuries *(121)*.

Adolescents (10–19 years) represent 20% of the Region's population. Adolescence is a key developmental stage for assuring health across the life course. As one fifth of the population of the Region are adolescent, their specific health and development needs should be addressed in health policy-making and health system planning. In addition to general health risks in this phase of development, young people in many countries of the Region are exposed to additional health hazards because of conflicts and civil unrest. The impact of these instabilities on young people include the direct physical effects of violence and increasing rates of mortality and injuries, as well as longer term effects such as damage to mental health and sexual and reproductive health. Other health risks among young people include their vulnerability to substance use, overweight and physical inactivity. Addressing these NCD risk factors would improve the health and social function of adolescents both at present and during the life course.

There is a lack of data for adolescent health status in the Region, particularly among 10–14-year olds and in countries affected by conflict and war. The quality of collected data is debatable and data might be outdated. Sensitive and important data (such as FGM) is particularly scarce, and needs to be addressed more actively in future data collection and processing efforts *(127)*.

The Eastern Mediterranean Region is the only WHO region in which the young adolescent (10–14 years) mortality rate has increased between 2000 and 2016, from 76 deaths per 100 000 population in 2000 to 89 deaths per 100 000 population in 2016. For older adolescents (15–19 years), the Region has the second highest mortality rate (134 deaths per 100 000 population) after the African Region in 2016. Collective violence and legal interventions are the leading causes of mortality among adolescents in any age group. The leading causes of years lived with disability among adolescents in the Region are mental illnesses, substance abuse and nutritional deficiencies (particularly iron deficiency). In 2017, half of the people in need of humanitarian assistance in emergency settings were children and adolescents aged under 18 years *(121)*.

Several global and regional strategies, as well as operational guides, have been developed to support countries in their efforts for planning, monitoring and evaluating of child and adolescent health. The *Global Strategy for Women's, Children's and Adolescents' Health (2016–2030)* sets targets based on the SDGs to addresses all communities, including those affected by emergencies, with the aim of leaving no one behind *(128)*. In 2017, WHO

in collaboration with six other United Nations and international agencies developed the *Global accelerated action for the health of adolescents (AA-HA!): guidance to support country implementation*, based on the Global Strategy for Women's, Children's and Adolescents' Health. The AA-HA! aims at supporting Member States to address adolescent health issues and to plan for their health needs *(129)*. WHO also contributed in the development of *Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential*, in collaboration with UNICEF and the World Bank. The nurturing care framework is an evidence-based road map based on UHC, drawing on a whole-of-society and whole-of-government approach for achieving the most sustainable nurturing environment for young children *(130)*.

To address the needs of young people in humanitarian emergencies, WHO developed a regional operational field guide for child and adolescent health in humanitarian settings for programme managers, and also developed a guide on vaccination in acute humanitarian emergencies. In addition, innovative approaches have been used to overcome challenges when human and financial resources are limited, such as development of an IMCI computerized training tool *(121)*.

In 2017, the Regional Committee adopted resolution EM/RC64/R.4 to operationalize the adolescent health component of the *Global Strategy for Women's, Children's and Adolescents' Health (2016–2030)*. The resolution urged countries to develop and/or update national adolescent health action plans using the AA-HA! implementation guidance *(131)*. Sudan was the first country globally to apply AA-HA! in developing a country strategic plan for adolescent health and development. In 2019, the Regional Committee endorsed the Regional implementation framework on ending preventable newborn, child and adolescent deaths and improving health and development (2019–2023) *(132)*. The framework provides guidance on implementing global strategies and initiatives, and will help countries in the Region to select priority actions and interventions for newborn, child and adolescent health and development, which can be adapted to their local context.

Unfortunately, progress on child and adolescent health remains uneven in the Region and there have even been some setbacks, particularly in countries affected by humanitarian crises. In this context, WHO builds partnerships with other concerned United Nations agencies such as UNICEF and UNFPA and promotes the transfer of knowledge and expertise related to maternal, child and adolescent health to Member States. A prominent example in this area is collaboration of 13 United Nations agencies and entities in development of the *Regional framework of joint strategic actions for young people in the Arab States and Middle East and North Africa Region (2016–2017) (133)*.

5.1.4 Ageing and health, including dementia

The average life expectancy in countries of the Region was 69.1 years in 2016 *(10)*. However, life expectancy varies considerably across the Region. Similar to the rest of the world, the population of older people (60 years and older) is increasing in the Region. In the year 2000, older people comprised 5.8% of the population in the Region, while in 2017 the proportion of older people reached nearly 7% of the total population. It is projected that older people will make up nearly 15% of the population in 2050 *(134)*. In 2015, WHO published the first *World report on ageing and health* and in 2016 the World

Health Assembly adopted the *Global strategy and plan of action on ageing and health*. These reflect a new conceptual model of healthy ageing that focuses on functional ability for older people to live independently rather than only the absence of disease *(135)*. WHO conducted a global survey in 2017 to monitor implementation of the global strategy, followed by a regional survey on active healthy ageing and old age care, and on the age-friendly cities and age-friendly primary health care initiatives *(22)*. The Regional Office has developed "primary health care for older persons: a regional guide for primary health care workers", which is available in Arabic *(136)*.

The age-friendly cities initiative has been implemented in several cities in the Region. Sharjah in the United Arab Emirates has demonstrated a successful model in creating an age-friendly environment for its senior citizens. Joint efforts, networking and coordination with key partners will be vital to overcome the limited resources available to support healthy ageing programmes in countries of the Region, especially those in emergency situations *(22)*.

In the Eastern Mediterranean Region, older adults are highly respected within families and family members are discouraged from institutionalizing them; consequently, care facilities for older adults are not well developed in the Region. Providing long-term care for severely disabled older family members can put considerable mental and economic strain on families. With the increase in life expectancy and the increased population of older people, dementia has become one of the most prevalent public health issues among this age group. Diagnosis of dementia in the Region faces major challenges due to language barriers in using assessment tools (which mostly come from western countries), lack of verified translations of assessment instruments, and use of assessment tools that are culturally inappropriate. These barriers, together with inadequate numbers of skilled professionals in the field of geriatrics and lack of care facilities specialized for older people, can delay diagnosis of dementia in the Region. Additionally, as care is usually provided within the family system, the family carer's own knowledge and skills about dementia play a major role in providing services to older people.

The estimated prevalence of dementia in people aged 60 years and older is 8.7% in the Middle East and North Africa region, which is the highest rate among the regions of the world. In the Region, about 2.3 million people are living with dementia and this is expected to rise to 4.4 million by 2030. The costs of dementia per annum in countries of the Region increased from US$ 4.5 billion in 2010 to US$ 16 billion in 2015, and costs per capita increased from US$ 3926 to US$ 6925, most of which is informal care costs borne by families rather than formal medical or social care costs.

The *Global action plan on the public health response to dementia 2017–2025*, adopted by the Seventieth World Health Assembly in 2017, provides the road map for action organized across seven areas: dementia awareness and friendliness; dementia risk reduction; dementia diagnosis; treatment and care; support for dementia carers; information systems for dementia; and dementia research and innovation *(137)*. In light of the fact that health, economic, societal and developmental costs of dementia are going to rise, and health and social systems are not equipped to provide holistic care, it is imperative to scale up action on dementia through development and implementation of national plans for dementia based on the seven domains of the global action plan. WHO has developed tools and instruments to facilitate and support

countries in implementing the provisions of the global action plan. Tools include: a guide to formulating a comprehensive policy response to dementia; mhGAP intervention guide; iSupport for dementia, an online training programme that helps caregivers of people living with dementia to provide good care and take care of themselves; the Global Dementia Observatory; WHO's toolkit for dementia-friendly initiatives; and WHO guidelines on risk reduction of cognitive decline and dementia.

Care and treatment for dementia needs to be prioritized by decision-makers in public health planning, and resources need to be mobilized for awareness-raising about dementia in the Eastern Mediterranean Region *(138)*.

5.2 Violence, injuries and disability

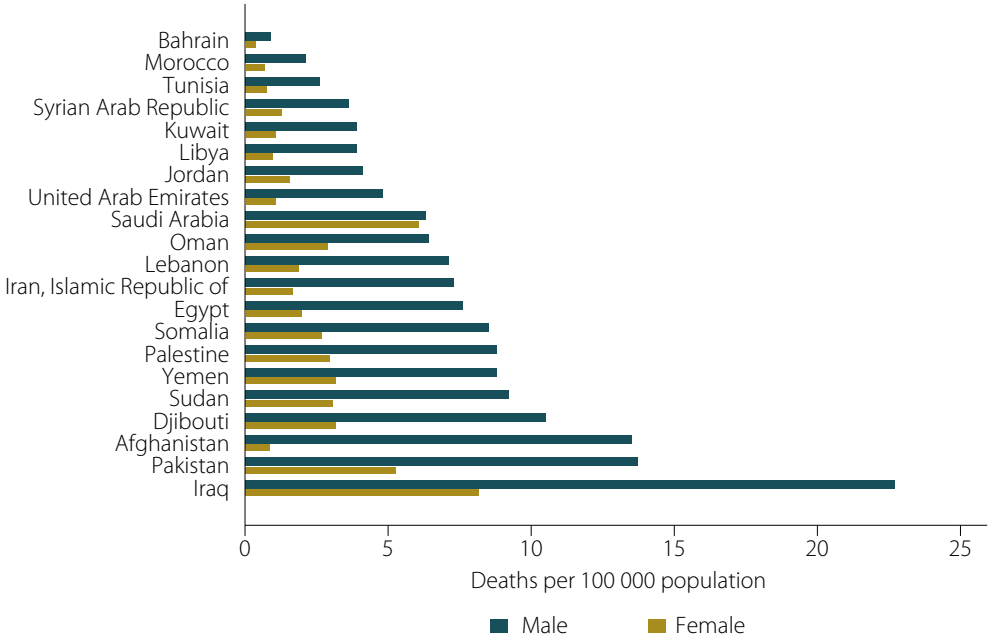
5.2.1 Violence and injuries, in particular against women, girls and children

Among WHO regions, the Eastern Mediterranean Region is estimated to have the second highest prevalence (37%) of ever-partnered women who have experienced physical and/or sexual intimate partner violence at some point in their lives, after the South-East Asia Region (37.7%). In 2016, the mortality rate due to homicide was 6.8 per 100 000 population in the Region, which is higher than the global average (6.4) and the third highest among WHO regions. Mortality due to homicide is almost three times higher among men than women (9.9 among men; 3.4 among women) – a further aspect of gender-related violence that demands attention and action in the Region (Fig. 35).

Estimated direct deaths from major conflicts is 24.1 per 100 000 population in the Region, which is about 10 times higher than the global rate (2.5) and significantly higher than in other WHO regions (range: 0.1–1.7). The rate of injuries as cause of death per 100 000 population is 100 or above in seven countries, with the highest rate registered in the Syrian Arab Republic where injuries caused 443 deaths per 100 000 population in 2016 (Fig. 36). The humanitarian crises and sociopolitical and economic instability in the Region further compound gender inequalities, compromise women's agency in their lives and increase the risk of violence against women.

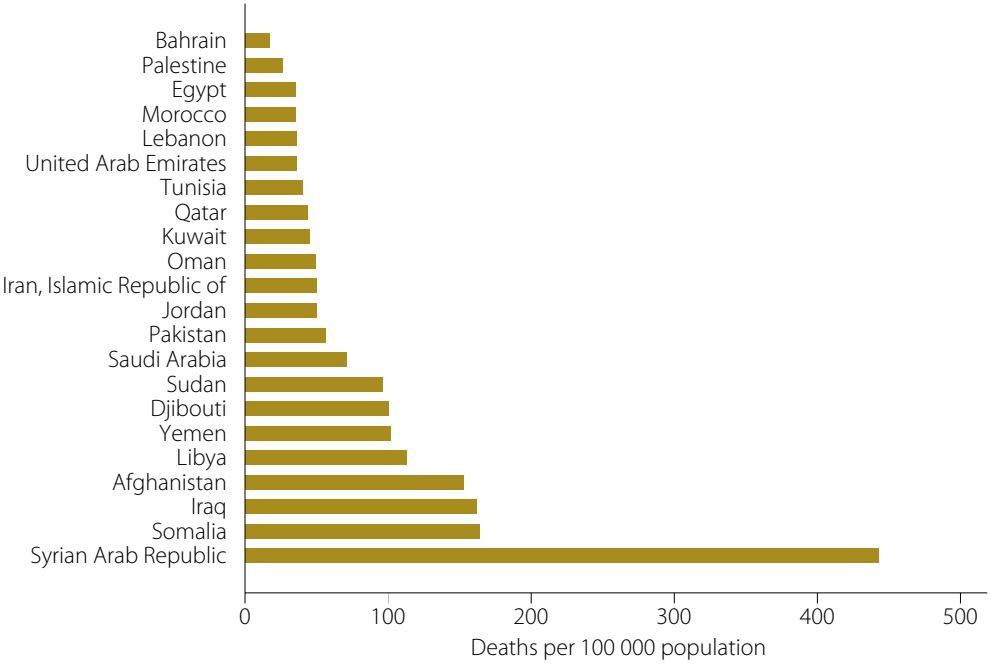
Recognizing these issues, WHO and Member States endorsed the *Global plan of action to strengthen the role of the health system within a national multisectoral response to address interpersonal violence, in particular against women and girls, and against children*, through World Health Assembly resolution WHA69.5 in 2016. Joint efforts by WHO and United Nations agencies (for example, UNFPA) have concentrated on promoting sustainable comprehensive survivor-centred interventions at the regional level through the joint action initiative for the elimination of violence against women and girls in the Arab States, and at country level through ongoing work in Egypt and Tunisia to pilot the essential services package for women and girls subject to violence *(139)*.

Fig. 35. *Mortality rates due to homicide, by sex, 2016*



Source: WHO (2019) (10).

Fig. 36. *Age-standardized mortality rates caused by injuries, 2016*



Source: WHO (2020) (9).

There has been remarkable progress in some countries of the Region to promote gender equality and women's empowerment while combating violence against women and girls. In Afghanistan in 2014, the Ministry of Public Health, together with WHO and the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), launched the first ever gender-based violence treatment protocol for health care providers *(140)*. By June 2020, it is expected that 6500 doctors, nurses and midwives will have been trained based on this protocol. As of 2019, WHO has completed training of 5300 health providers in 21 provinces of the country. In Pakistan in 2017, a national clinical handbook on health care for survivors of gender-based violence was developed by the Ministry of National Health Services Regulations and Coordination through adapting the WHO global handbook to the local context *(98)*.

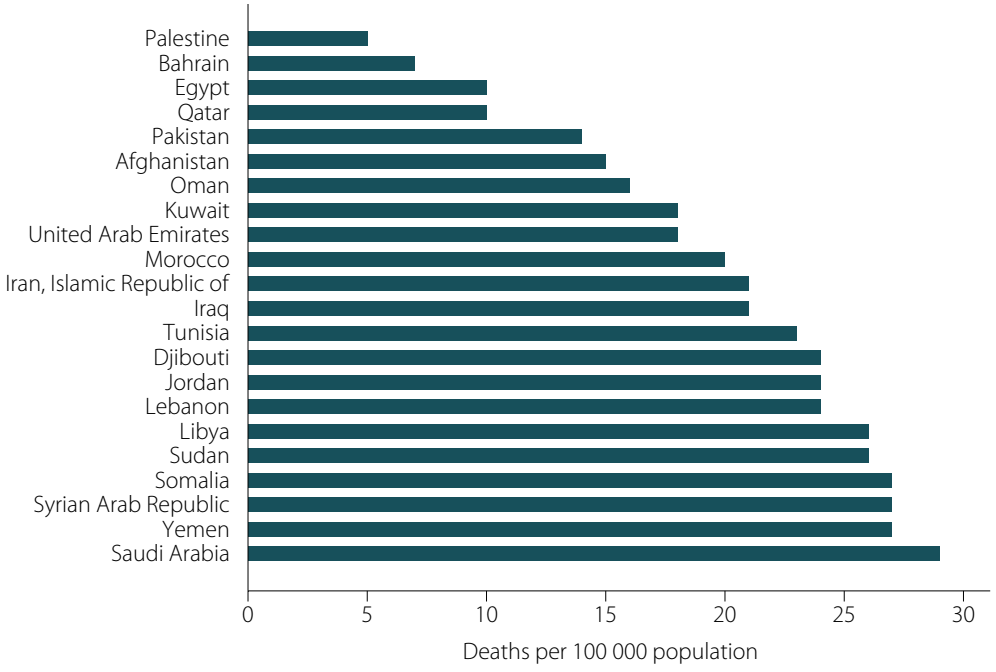
WHO is also making continuous efforts to address violence against women and girls in countries affected by emergencies. A major initiative was started in 2018 to institutionalize essential response and prevention services for survivors/victims of gender-based violence in countries in crisis (including among refugees) into WHO preparedness, response and recovery plans. The initiative was piloted in Afghanistan, Iraq and the Syrian Arab Republic; Somalia and Sudan were included in 2019, and it will be expanded to Libya in 2020. WHO is providing technical support for training of service providers at different levels of the health system, especially primary health care, in addition to building capacity of nongovernmental organizations to work with communities and raising awareness on gender-based violence. Furthermore, health clusters in these countries are now integrating gender-based violence into their Humanitarian Needs Overview and response plans *(141)*.

In Egypt, efforts by the Ministry of Health and Population, WHO, UNFPA and other partners are leading to an updated version of the *Medical protocol/guidelines for management of victims of gender-based violence (including sexual violence)*, to ensure that the protocol is in line with WHO global tools and guidelines and within the Egyptian legal context *(142)*. The Ministry of Health in Iraq, with technical support from WHO, is adapting the WHO global handbook to the local context. Furthermore, in Iraq, WHO and Johns Hopkins University are conducting research to assess the capacity, readiness and quality of health services for survivors of gender-based violence, and to develop and pilot an adapted version of the gender-based violence service readiness assessment/quality assurance tools for use in diverse humanitarian settings. Prevention of child abuse and neglect has been pursued in collaboration with the national family safety programme in Saudi Arabia, and a regional workshop on the seven INSPIRE strategies to end violence against children was organized during the fifth Arab Regional Conference on the Prevention of Child Abuse and Neglect *(98)*. Eighteen countries in the Region have taken part in a WHO global survey, which will feed into the forthcoming global status report on preventing violence against children *(22)*.

5.2.2 Road traffic injuries

Road traffic crashes leading to death and injury are a growing, although preventable, public health problem. Every day, 3700 people worldwide lose their lives on the roads, and the number of people who are seriously injured or receive a lifelong disability reaches to tens of millions every year. The *Global status report on road safety 2018* shows that road traffic injury continues to be a serious public health problem in the Eastern Mediterranean Region, with almost 9% of global road traffic deaths occurring in the Region. The Eastern Mediterranean has the third highest mortality rate (18 deaths per 100 000 population in 2016) due to road traffic crashes among WHO regions, after the African and South-East Asia regions. In the Region in 2016, the lowest mortality rates were in Palestine (5 deaths per 100 000 population) and the highest in Saudi Arabia (29 deaths per 100 000 population) (Fig. 37). The victims of road traffic crashes in the Region are mostly men, and younger and economically active populations are hardest hit. The majority (80%) of road traffic deaths occur in middle-income countries. However, what distinguishes the Eastern Mediterranean Region from other regions is that the death rate due to road traffic accidents does not decrease in line with an increase in country income. The overall road traffic fatality rate of high-income countries in the Region is three times the average rate of similar countries worldwide *(143)*.

Fig. 37. *Estimated mortality rates from road traffic injuries, 2016*



Source: WHO (2020) (9).

Countries of the Region are taking measures to address this major public health problem. The majority of countries have an agency to lead national road safety efforts; however, these agencies are rarely fully functional and funded. Almost all countries have road safety laws in place on key road safety behavioural risk factors such as speed, drink-driving and non-use of motorcycle helmets, seatbelts and child restraints; but they

usually lack best practice criteria. Additionally, the effectiveness of the legislation seems undesirable as the level of enforcement of existing road safety laws is rated "good" in less than one third of countries in the Region. There are hardly any data on indicators that measure road user behaviour and law enforcement, such as seatbelt or helmet wearing. The absence of a Safe System road safety approach combined with insufficient multisectoral coordination and significant gaps in emergency and trauma care and rehabilitative services are additional challenges to overcome to make roads safer in the Region *(22)*.

Despite the challenges, there has been progress in the Region in developing policies for sustainable transport and measures for the safety of roads. The Decade of Action for Road Safety and the SDGs, alongside consecutive World Health Assembly resolutions and Regional Committee resolution EM/RC56/R.7, provide great opportunities for countries of the Region to enhance their existing endeavours towards increasing road safety *(144)*. A regional strategic framework for establishing a road safety system has been developed in close consultation with countries, and is being implemented in the Islamic Republic of Iran to develop the national strategy for the next decade. A regional legislative initiative was also launched under the Eastern Mediterranean Forum for Road Safety Legislators. The initiative aims to support countries to review and update their road safety policy and legislative frameworks based on international best practices.

5.2.3 Disability, including prevention of blindness and deafness

Based on WHO estimates that 15% of the global population live with some form of disability, the Region is home to almost 100 million people with disabilities. Reported disability prevalence in countries ranges between 0.4% and 4.9%. About 80% of the total population of people with disabilities live in developing countries *(109)*, and protracted and widespread violent conflicts, wars and emergencies in the Region can contribute to increasing numbers of disabilities (see section 4.4 on Rehabilitative services).

About 4.9 million people in the Region are blind, 18.6 million have low vision and 23.5 million are visually impaired. To date, 16 countries have developed and revised their five-year national action plans on eye health in line with WHO's *Universal eye health: a global action plan 2014–2019 (145)*. WHO continues its collaboration with the International Agency for the Prevention of Blindness and has contributed to the development of the *World report on vision (146)*.

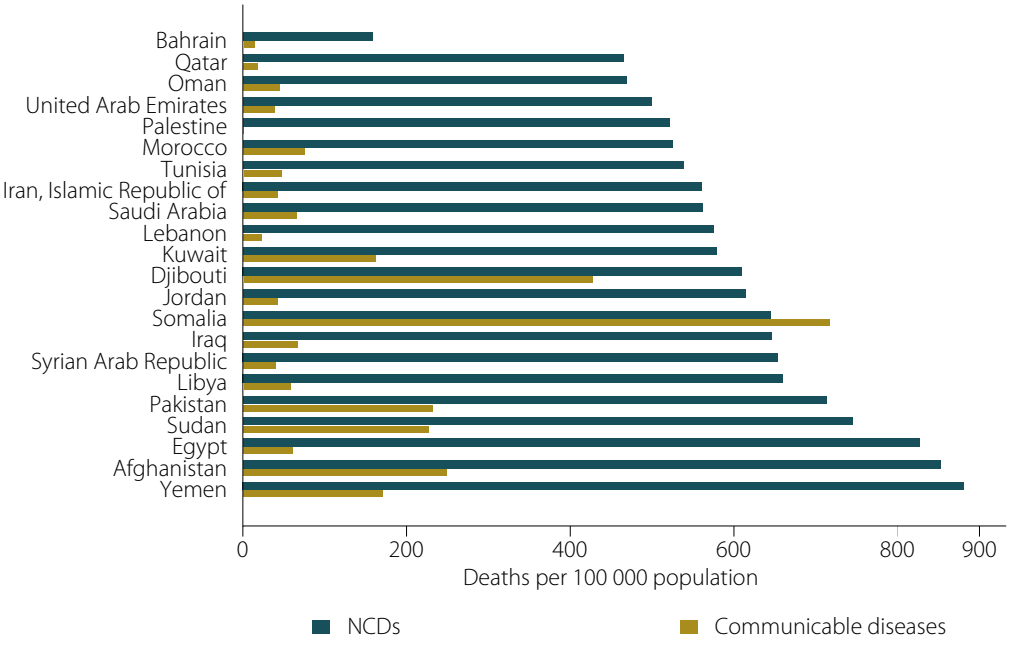
About 10.7 million people aged 15 years and older have disabling hearing loss in the Region. Efforts have been made to understand the ear health situation in the Region, such as conducting a situation analysis and developing national plans for ear and hearing care. However, these efforts are limited to a few countries and for those who have declared political commitment to improving the ear health situation, support should be provided for translating policies into programmatic action. Resource allocation, coordination, multisectoral action, enforcement, implementation and the evaluation of policy and legislative frameworks all need further attention *(22, 98)*.

5.3 NCDs

5.3.1 The burden of NCDs

NCDs were responsible for 2.6 million deaths in the Eastern Mediterranean Region in 2016, a figure expected to increase to 3.8 million by 2030. NCDs are the main cause of death in all countries of the Region, except Somalia where communicable diseases remain the major cause. Afghanistan, Egypt and Yemen report the highest burden of NCDs, with more than 800 deaths per 100 000 population (Fig. 38).

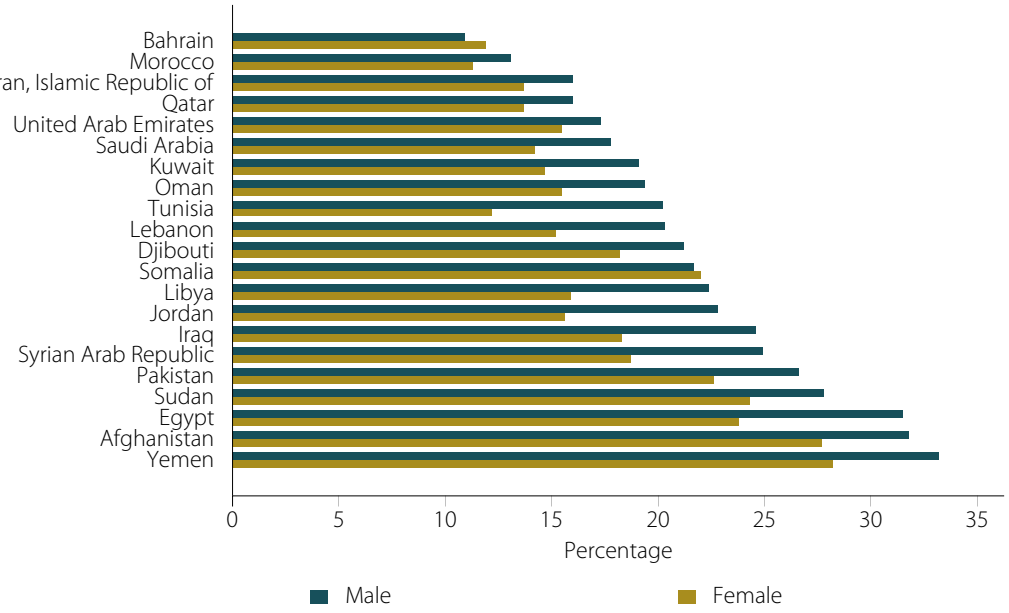
Fig. 38. *Age-standardized mortality rates of communicable diseases and NCDs, 2016*



Source: WHO (2020) (9).

The probability of dying between exact ages 30 and 70 from major NCDs (cardiovascular disease, cancer, diabetes, chronic respiratory disease) is higher among men compared to women in the Region (Fig. 39). The highest probability is 30.6% in Afghanistan and the lowest is 11.3% in Bahrain. Probability for this indicator stands at 22% in the Region, which is higher than the global rate (18.3%) and the second highest among WHO regions.

Fig. 39. *Probability of dying from any cardiovascular disease, cancer, diabetes or chronic respiratory disease between exact ages 30 and 70 (%), by sex, 2016*



Source: WHO (2020) (9).

The regional framework for action on NCDs, endorsed by the Regional Committee in 2012 and updated in 2019, is a road map for countries to implement the United Nations Political Declaration on Prevention and Control of Noncommunicable Diseases *(147)*. The framework includes 19 strategic interventions and 15 monitoring indicators covering the areas of NCD governance, prevention, surveillance and health care. WHO monitors implementation of the framework and reports to countries on the progress made and pace of implementation. By 2019, only eight countries in the Region were fully achieving six or more of the subindicators and the remaining 14 countries were achieving less than one third of subindicators. More than 35% of countries have created operational multisectoral strategies or plans that integrate the major NCDs and their shared risk factors, and more than 40% of countries have established evidence-based national guidelines/protocols/standards for management of major NCDs through a primary health care approach *(148)*. By 2019, 10 of 22 countries in the Region (45%) had developed national multisectoral NCD action plans *(22, 148)*.

To achieve SDG target 3.4 to reduce premature deaths due to NCDs by one third by 2030, countries need to prioritize NCD prevention and treatment strategies in their national health policies alongside implementing required legislative and regulatory measures, safeguarding sustained financial resources and promoting capacity-building initiatives. The health sector cannot address NCDs alone, although it has a major role in mobilizing existing resources to promote multisectoral, multistakeholder, HiAP, whole-of-government and whole-of-society approaches *(148)*.

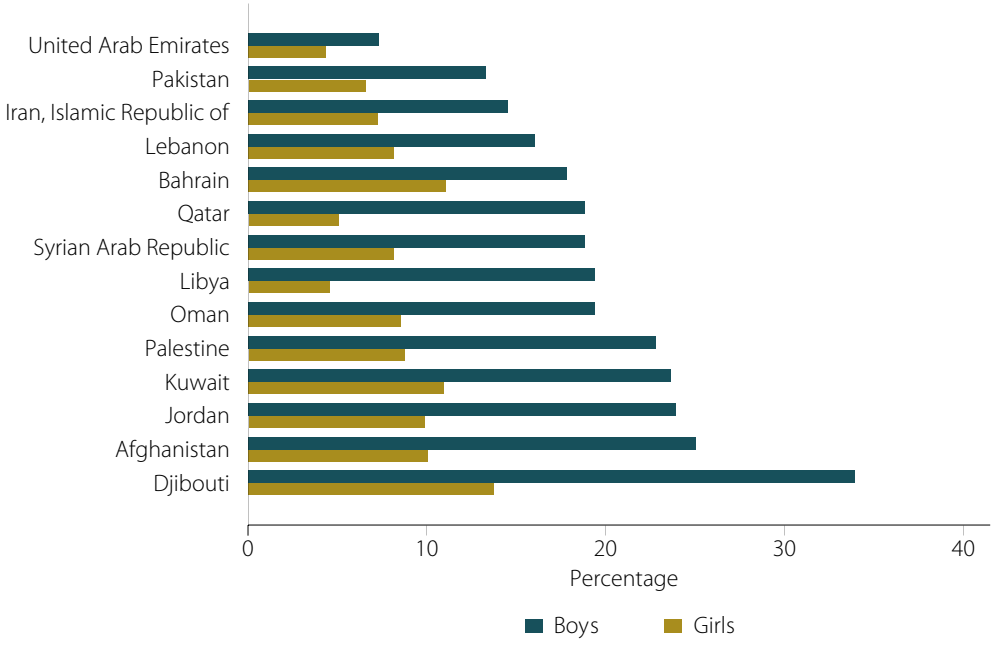
5.3.2 Main risk factors of NCDs

5.3.2.1 Tobacco use

The age-standardized prevalence of tobacco use among adults (aged 15 years and older) was 19.3% in the Eastern Mediterranean Region in 2018, which is below the global average and the third lowest among all WHO regions. The prevalence of tobacco smoking among men in all reporting countries is above 10%, and in some countries (such as Lebanon and Tunisia) more than half of the male population smoke tobacco *(149)*. The average prevalence of tobacco use among women is almost half of the global average, with the prevalence below 1% in many countries of the Region. Although this indicates a generally low prevalence of female tobacco use in the Region, some countries exhibit very high rates, notably Lebanon (29%) *(150)* and Jordan (16%).

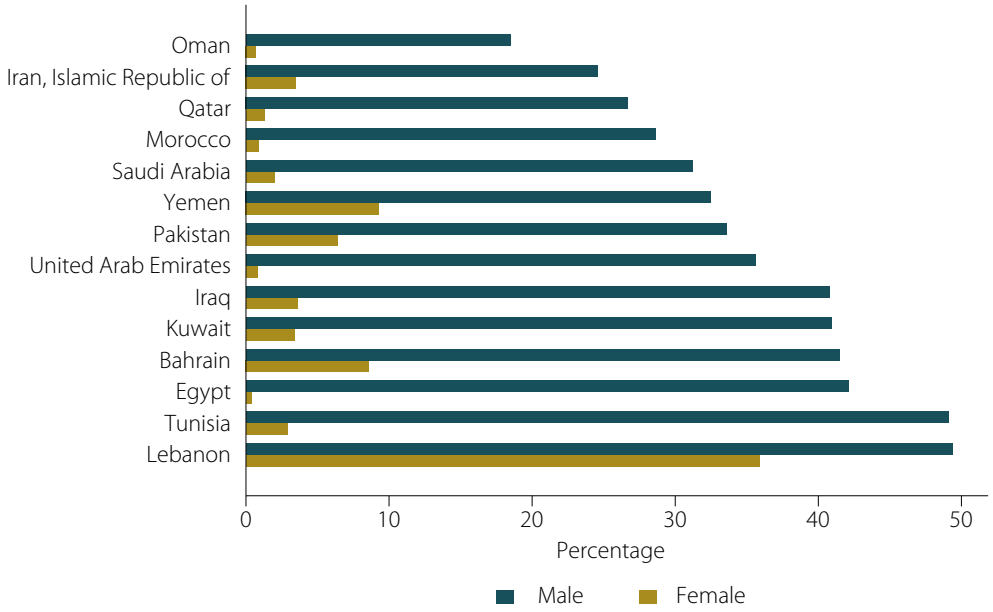
During 2013–2016, tobacco use among male adolescents (aged 13–15 years) ranged from 7.3% in the United Arab Emirates to 33.9% in Djibouti. Among female adolescents, tobacco use ranged from 4.4% in the United Arab Emirates to 13.8% in Djibouti (Fig. 40). Among males aged 15 years and older, the age-standardized prevalence of tobacco use in 2017 was lowest in Oman (18.5%) and highest in Lebanon (49.4%); rates among females were lowest in Egypt (0.4%) and highest in Lebanon (35.9%) (Fig. 41).

Fig. 40. *Tobacco use among adolescents (13–15 years) (%) in selected countries, 2013–2016*



Source: WHO (2020) (9).

Fig. 41. *Age-standardized prevalence (%) of tobacco use among persons aged 15 years and older in selected countries, 2017*



Source: WHO (2019) (148).

The overall prevalence of tobacco use in the Region is projected to decrease considerably from an estimated 23% in 2010 to 17% in 2025, a 26% relative reduction. Although significant, this means that the Region is still projected to miss the global voluntary NCD target of a 30% relative reduction in tobacco use by 2025 (from 2010 as the baseline year). The Region is one of three WHO regions for which the number of tobacco users is projected to increase, with the absolute number of tobacco smokers projected to reach 94 million by 2025 *(149)*.

In 2003, the Fifty-sixth World Health Assembly adopted the WHO Framework Convention on Tobacco Control (WHO FCTC). All countries of the Region, except Morocco and Somalia, are Parties to the WHO FCTC. Six countries (the Islamic Republic of Iran, Iraq, Kuwait, Pakistan, Qatar and Saudi Arabia) are also Parties to the Protocol to Eliminate Illicit Trade in Tobacco Products. Efforts are ongoing to scale up implementation of both the WHO FCTC and the Protocol in the Eastern Mediterranean Region *(22)*. In 2008, WHO introduced the MPOWER policy package to help countries to implement key articles of the WHO FCTC. The set of MPOWER interventions have a proven effect on reducing demand for tobacco *(151)*.

Recent and representative data for both adults and youth are available in 12 countries of the Region, covering 78% of the population *(151, 152)*. Smoking bans to create 100% smoke-free environments in all public places have been introduced in only seven countries, although these countries comprise 64% of the Region's population *(152)*. Compliance with smoke-free laws, however, is low in many cases *(151)*. In the Region, only two countries report that none of the tobacco cessation services recommended as part of the MPOWER package are being provided. However, very few countries are providing

a well-developed package of cessation services. Only Kuwait, Saudi Arabia and the United Arab Emirates are in accordance with the requirements for full implementation of the MPOWER cessation component, providing cost-covered nicotine replacement therapy and cessation support as well as a national toll-free quitline.

In the Region, 61% of people are covered by policy effecting large graphic health warnings on cigarette packs and packaging, although this only comprises five countries (Djibouti, Egypt, Islamic Republic of Iran, Pakistan and Saudi Arabia) *(152)*. Saudi Arabia is currently the only country in the Region that requires plain packaging on all cigarette packs. Between July 2016 and July 2018, 12 countries ran at least one substantial anti-tobacco mass media campaign. However, mass media campaigns often do not have the required preparation and characteristics to be in effective in reducing tobacco use. For example, in Jordan – which has the highest rate of tobacco use in the Region – a media campaign was conducted through joint efforts by the Government and nongovernmental organizations. The campaign reached millions of people, however, the outcome of the campaign in terms of changes in awareness, attitude and behaviour requires proper assessment *(153)*.

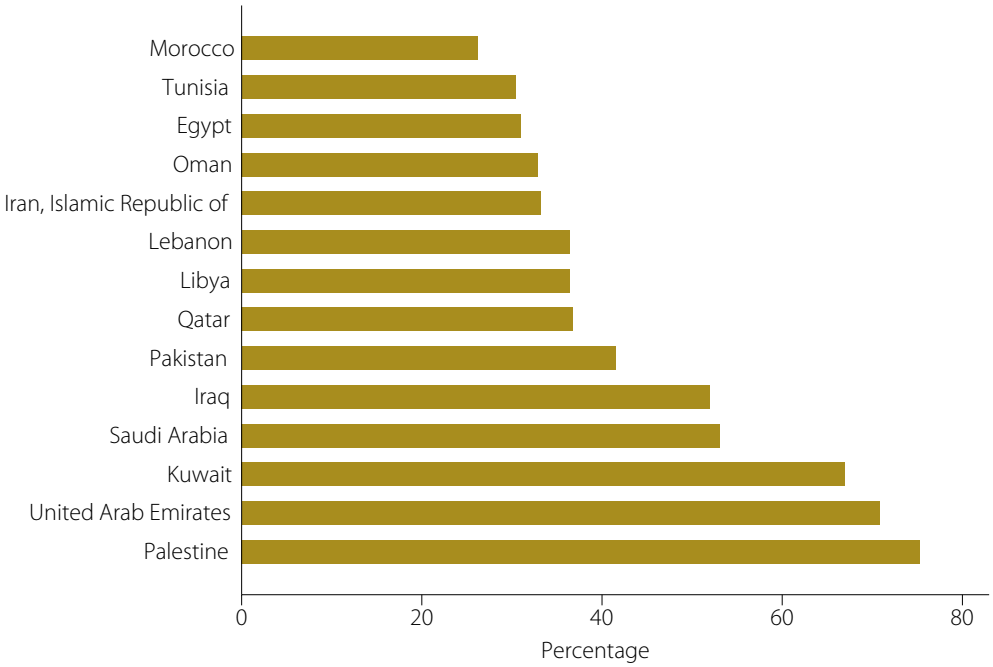
There is at least one type of ban on tobacco advertising, promotion and sponsorship in all but one country of the Region *(151)*; however, enforcement of bans varies considerably between countries. Ten countries have a comprehensive ban on tobacco advertising, promotion and sponsorship, fulfilling the requirements for full implementation of the MPOWER measure. In half the countries of the Region, the share of total taxes in the retail price of the most widely sold brand of cigarettes is more than 50%. Tobacco taxation ranges from 4.1% in Afghanistan to 83.5% in Palestine. In 12 countries of the Region, cigarettes have become less affordable since 2008. However, only three countries (Egypt, Jordan and Palestine) have fully implemented the MPOWER measure on increasing taxation, covering just 16% of the population of the Region *(152)*.

In general, despite high coverage for certain interventions in the WHO FCTC and MPOWER policy package, few countries in the Region have comprehensively and fully implemented most of the key tobacco control measures to reduce tobacco use.

5.3.2.2 Physical inactivity

Prevalence of physical inactivity is 44.5% in the Eastern Mediterranean Region (Fig. 42). Globally and in the Region, physical inactivity is more prevalent among women than men *(10)*. Data collected as part the global school-based student health survey show that physical inactivity is also a major problem among adolescents in the Region. On average, only 16% of adolescents meet the global recommendation of at least 60 minutes of physical activity per day on five or more days of the week. In 2012, the Regional Committee adopted resolution EM/RC59/R.2 and a regional framework for action to facilitate the implementation of the United Nations Political Declaration on NCDs, including the proven interventions related to physical activity *(154)*.

Fig. 42. *Insufficient physical activity (%) among adults (18 years and above) in selected countries, 2016*



Source: WHO (2020) (9).

There have been efforts at both policy and planning level to address physical inactivity in the Region, although the response is inadequate. A mapping on policy situation and response to physical inactivity revealed that 10 out of 12 responding countries have a national health policy that includes physical activity or have national NCD policy/ strategic plans with an objective focused on physical activity. Legislation to mandate inclusion of physical education into school curricula for both girls and boys has been identified in five countries of the Region. In some countries, physical activity is addressed in sectors outside of health such as urban design, sport and transport. Mapping also showed that most countries follow a multisectoral approach, and have set up national coordination committees or developed partnerships across different ministries notably health, sports, youth and education. Adopting international guidelines and recommendations, including WHO global recommendations on physical activity, was reported by three countries of the Region. Twelve countries have implemented at least one national campaign to promote physical activity. In nearly 55% of countries, public awareness and motivational communication interventions on physical activity have been implemented.

5.3.2.3 Harmful use of alcohol

Alcohol consumption among the adult population (aged 15 years and above) in the Region is 0.6 litres per capita, which is one tenth of the global rate and much lower than in other WHO regions. The Region's share of global alcohol consumption is only 0.7%; however, 70.5% of alcohol consumption in the Region is unrecorded (i.e. not accounted for in national statistics on alcohol taxation or sales as it is produced and sold outside the official channels). The trend of alcohol consumption has remained stable in the Region since 2000, and the prevalence of heavy episodic drinking has deceased.

The Eastern Mediterranean Region has the highest level of sobriety compared to other WHO regions, with 97.1% of the population having abstained from alcohol in the past 12 months. The prevalence rate of current drinking among young people (aged 15–19 years) is only 1.2%, which constitutes up to 700 000 young people in the Region. The sex ratios for current drinking and heavy episodic drinking are the highest among all WHO regions, suggesting that alcohol use is mostly a masculine behaviour in the Region.

The Region has the highest per capita consumption (24.3 litres) of alcohol among current drinkers, which is attributable to the proportion of the population who engage in heavy episodic drinking. This is alarming for the health sector as it suggests that, despite the very low prevalence of alcohol consumption in the Region, those who do drink are more vulnerable to harmful effects of alcohol such as diabetes mellitus.

Compared to other WHO regions, the Eastern Mediterranean has the lowest age-standardized burden of disease and injury attributable to alcohol consumption, at 7 deaths and 322 DALYs per 100 000 population. Alcohol use disorders and alcohol dependence among persons aged 15 years and above in the Region are estimated to be 0.8% and 0.4%, respectively, which are the lowest rates globally. Information about treatment coverage in the Region is very limited, and most countries do not have specialized treatment services for alcohol use disorders and dependence *(155)*.

Policy and legislation to control alcohol production, sale and marketing is quite strict in the Region. Nearly 55% of countries have restrictions on alcohol advertising/promotion, 50% of countries restrict the physical availability of retailed alcohol, and more than 40% of countries have increased the excise tax on alcoholic beverages *(148)*.

5.3.3 Surveillance and evaluation of NCDs and their risk factors

Countries of the Region continue to strengthen NCD risk factor surveillance systems by implementing the WHO STEPwise approach to Surveillance (STEPS). For example, seven countries in the Region collect national physical activity surveillance data using WHO's STEPs survey. These data provide an estimate of the proportion of the adult population that currently meet the global recommendations of at least 150 minutes of moderate physical activity per week. There are limited trend data from countries in the Region, as more than half of the countries have undertaken the STEPs survey on more than one occasion as of 2019. Several other countries have plans to conduct a second survey *(156)*.

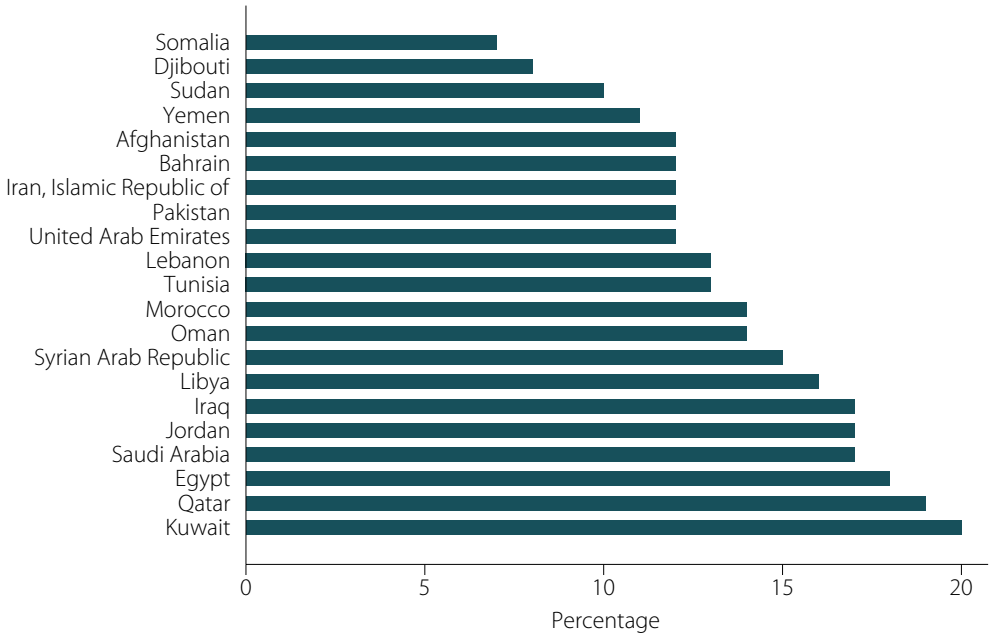
In 2018, 13 countries set timebound national targets for surveillance, monitoring and evaluation of NCDs and their risk factors based on WHO guidance. All countries in the Region have integrated Tobacco Questions for Surveys into their national NCD surveys *(22)*.

5.4 Priority NCDs

5.4.1 Diabetes

About 43 million people in the Eastern Mediterranean Region are living with diabetes. The Region has the highest age-standardized rate of DALYs due to diabetes among WHO regions. DALYs due to diabetes increased three-fold in the Region during 1990–2015. Analysis of the Global burden of disease 2015 study and results of other studies show this increasing trend is beyond estimates, and that epidemics of obesity and physical inactivity are the main risk factors for type 2 diabetes *(157)*. Among countries of the Eastern Mediterranean Region, raised blood glucose among the adult population is lowest in Somalia (6.8%) and highest in Kuwait (19.6%) (Fig. 43).

Fig. 43. *Age-standardized prevalence of raised blood glucose among adults (18 years and above), 2014*



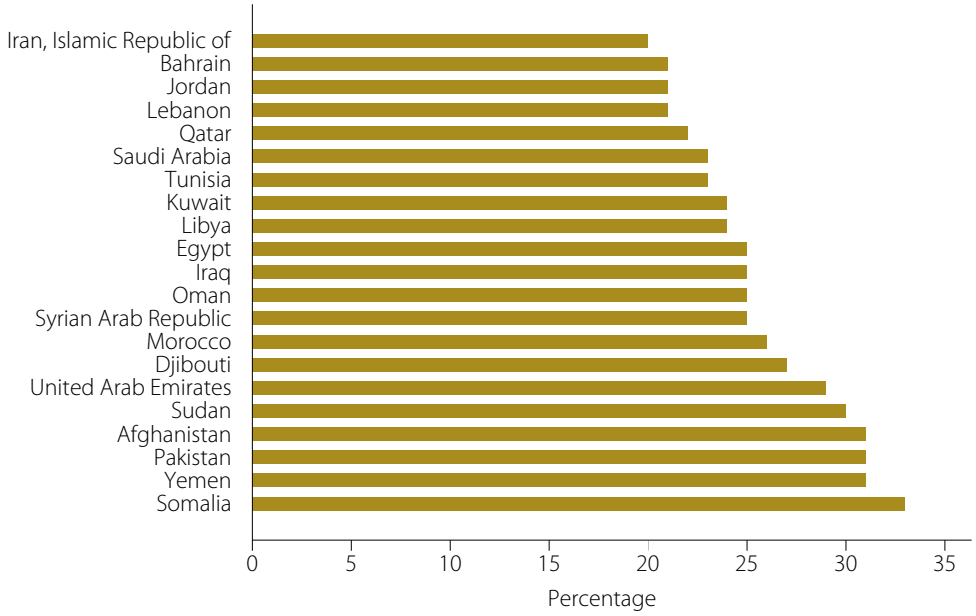
Source: WHO (2020) (9).

Countries in the Region are at different stages of prevention and control of diabetes. All GCC countries, except Oman, and some middle-income countries such as Islamic Republic of Iran, Jordan, Lebanon and Tunisia have an operational policy, strategy or plan of action for diabetes. However, about half of the countries, including all low-income countries, lack the required policy and programmes at national level to tackle the increasing burden of diabetes *(157)*.

5.4.2 Cardiovascular diseases and hypertension

The Global burden of disease 2015 study showed that CVDs are the leading cause of disease burden in the Region; close to 33 million years of life were lost due to premature mortality or disability from CVDs in 2015 *(158)*. It is estimated that 54% of deaths from NCDs in the Region are due to CVDs *(159)*. More than 1.3 million people died from CVDs in the Region in 2015, accounting for around one third of all deaths. The proportion of deaths attributed to CVDs (out of total deaths) ranges from 49% in Oman to 13% in Somalia. Sedentary lifestyles and risk factors such as hypertension, diabetes (ranging from 4% in the Islamic Republic of Iran to 19% in Sudan) and hypercholesterolemia (ranging from 14% in Lebanon to 52% in the Islamic Republic of Iran) contribute to the high burden of CVDs in the Region *(160)*. On average, one in four adults in the Region has raised blood pressure; the highest prevalence is reported as 32.9% in Somalia and the lowest is 19.7% in the Islamic Republic of Iran (Fig. 44).

Fig. 44. *Age-standardized prevalence of raised blood pressure among adults (18 years and above), 2015*



Source: WHO (2020) (9).

WHO's Package of essential noncommunicable disease interventions (WHO PEN) for primary health care in low-resource settings proposes a mix of cost-effective population-wide and individual approaches to reduce the burden of major NCDs, such as methods for early diagnosis using inexpensive technologies, nonpharmacological and pharmacological approaches for modification of risk factors, and affordable medications for prevention and treatment of heart attacks and strokes, diabetes, cancer and asthma *(161)*. At country level, longstanding vertical programmes on hypertension

and diabetes using local tools are in place; however, integration and focus on CVDs and their risk factors, monitoring of health system performance, and uptake and sustainable use of WHO PEN are limited. There have been a few community-based measures in the Region such as implementation of the Global Hearts Initiative in Bahrain, Oman and Palestine, and implementation of the WHO PEN protocol in the Islamic Republic of Iran as "IraPEN" by community health workers (or *behvarzes*), and the Iranian CVD-SUPPORT Trial.

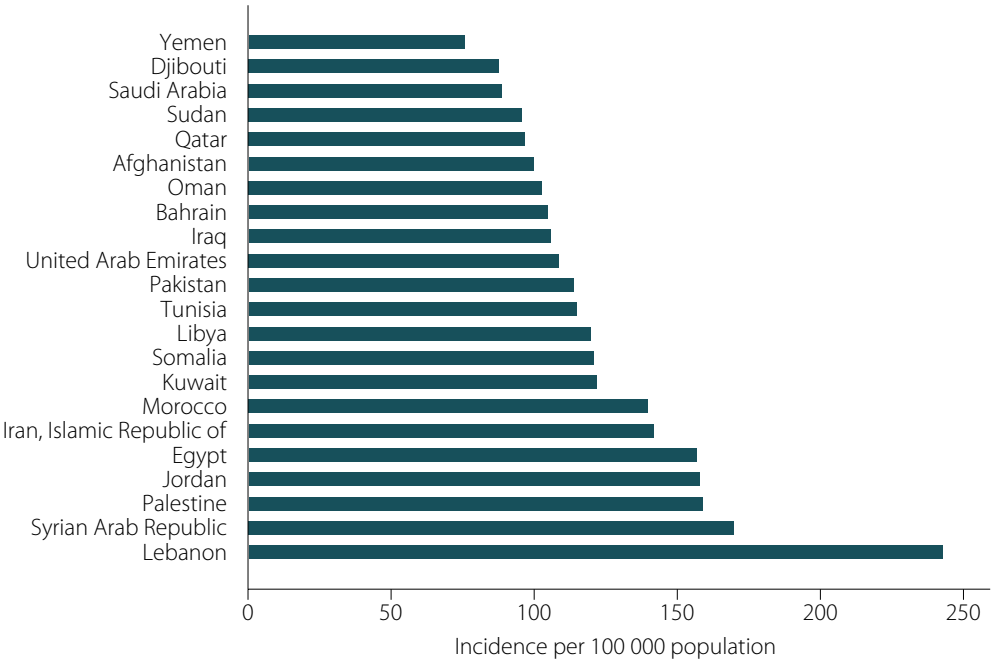
There are serious challenges in implementing the regional framework for action on NCDs, including economic constraints and the complex emergencies affecting many countries. Nevertheless, WHO tools and frameworks have been well received across the Region and WHO continues to support countries in implementation. To address CVDs, countries of the Region need to focus on three domains of action:

- CVD prevention and reduction of risk factors – implementing the evidence-based NCD "best-buys" for tackling tobacco use (i.e. WHO FCTC and the MPOWER package), alcohol abuse, unhealthy nutrition (excessive salt, trans-fatty acids, sugar intake) and physical inactivity;
- CVD management and health care – full implementation of the recommendations of the Global Hearts Initiative, with a focus on primary health care through implementing WHO PEN;
- CVD surveillance, monitoring and evaluation – capacity-building to conduct country surveys (STEPs and other risk factor surveys) to generate more reliable cause-specific mortality data, and to agree on key performance indicators at facility level (using the Global Hearts Initiative monitoring and evaluation module) *(162)*.

5.4.3 Cancer care and services

The incidence of all types of cancer in the Eastern Mediterranean Region ranges from 76 per 100 000 people in Yemen to 243 per 100 000 people in Lebanon (Fig. 45). It is predicted that the burden of cancer will double in the Region by 2030, which is the highest estimated increase in cancer burden of all six WHO regions. Population growth, an ageing population and progressively unhealthy lifestyles (including smoking, poor diet and inactivity) contribute to this increasing burden, similar to other NCDs. Cancer is one of the major killers in the Region and results in nearly 400 000 deaths annually. In 2012, more women than men were diagnosed with cancer (293 000 versus 263 000); however, more men lost their lives because of cancer compared to women (191 000 versus 176 000). In 2012, breast cancer was the leading cause of cancer mortality (42 000 deaths) in the Region, followed by lung cancer (29 000 deaths).

Fig. 45. *Incidence of cancer, 2018*



Source: WHO (2020) (9).

Furthermore, cancer survival rates in the Eastern Mediterranean Region are lower than in the Region of the Americas and the European Region, because patients usually present at a late stage when cancer is likely to be incurable. In the Region, there is 1 cancer death per 1.5 cancer cases, whereas in the Americas the rate is 1 cancer death for every 2.2 cancer cases. Therefore, although the absolute number of cancer cases and deaths is much higher in western countries, a person diagnosed with cancer in the Region is almost twice as likely to die than a person diagnosed in the Americas. There is also a substantial diversity in cancer profiles between the countries in the Region, according to the level of human development. For example, higher proportions of cervical cancers are found in countries with lower development levels, such as Somalia or Djibouti, while higher income countries record a higher proportion of colorectal cancers *(163)*.

The five most common cancers identified as amenable for early detection in the Region are breast, colorectal, cervical, prostate and oral cancers. Breast cancer is the most common cancer among women and its incidence is increasing in all countries of the Region; incidence of colorectal and prostate cancers is also increasing. Oral cancer is common in some countries due to the high prevalence of *toombak*, *qat* and tobacco chewing *(163)*.

In 2005, World Health Assembly resolution WHA58.22 urged all Member States to develop and implement a national cancer control programme. Given the limited resources in countries, it was proposed that a national cancer control committee be set up at country level to prioritize interventions, treatments and best use of resources. Progress in cancer control has been generally slow in the Region. Currently, eight countries in the

Region have an operational policy or strategy on cancer control, and three are partially implementing one. However, the remaining 10 countries (45%) have not commenced implementation of a cancer strategy. Furthermore, a multisectoral committee for cancer control is fully available in only five countries and partially available in four countries. The majority of countries (73%) have a population-based cancer registry in place that either covers a region in the country (e.g. Karachi in Pakistan and Gharbiah in Egypt) or the whole country (e.g. Kuwait) *(163)*.

Challenges in implementing cancer control programmes in the Region include: early detection strategies often being focused on screening rather than early diagnosis methods; variable access to treatment options; lack of guidelines for cancer treatment and referral in more than half of countries; and limited integration of early detection into primary health care in most countries, particularly low- and middle-income countries. However, there are good examples of breast cancer early diagnosis initiatives in Jordan and Morocco that can be modelled for breast cancer early detection by other countries of the Region *(163)*.

There are serious shortfalls in cancer management in the Region. Only half of the countries (mostly GCC countries and upper middle-income countries) have approved guidelines for cancer management. Among low-income countries, only 17% have approved cancer management guidelines and none have protocols for post-diagnosis referrals. Furthermore, service models incorporating multidisciplinary teams with different specialties (e.g. pathology, radiology, and surgical, medical and radiation oncology) are available in only a few countries in the Region, such as Jordan and Oman. Availability of cancer medicines is another challenge for several countries in the Region. Surgical interventions for cancer are available in most countries in the Region (77%); however, the availability of specialist cancer surgery is limited in several countries. There is enough radiotherapy equipment to cover 60% of the Region's radiotherapy needs; however, equipment is not evenly distributed *(163)*.

Palliative care is available in the public health system in only three countries of the Region. Existing palliative care services are generally not well developed or well integrated within national health care systems. Furthermore, there is a lack of adequately trained professionals for palliative care in the Region, since it is not a mandatory module in medical education in most countries. Availability and access to pain management medications is also restricted in many countries, resulting in low opioid consumption for cancer pain relief *(163)*.

In 2017, the Seventieth World Health Assembly discussed Agenda item 15.6 on Cancer prevention and control in the context of an integrated approach, and urged Member States to scale up national cancer control measures as part of national responses to NCDs. In alignment with increased global efforts, the 64th Regional Committee in 2017 endorsed a Framework for action on cancer prevention and control in the WHO Eastern Mediterranean, aiming to support countries to develop a more systematic approach to cancer control *(163)*.

5.4.4 Asthma and chronic respiratory diseases

According to WHO estimates, 300 million people suffer from asthma and 255 000 people died of asthma in 2005, with over 80% of asthma deaths occurring in developing countries. Available evidence suggests that about 8% of the population of the Region suffer from asthma. The prevalence of asthma is increasing and WHO has projected it will cause 27 000 deaths in the Region in 2030. Asthma is mostly underdiagnosed and undertreated, particularly in children *(164)*.

The environmental risks are greater in low- and middle-income countries and among the lower socioeconomic sections of society. Exposure to indoor smoke caused by heating and cooking can lead to chronic obstructive pulmonary disease (COPD) and lung cancer and in children, pneumonia and asthma. About 50% of all households worldwide and 90% of rural households use fuels that reduce indoor air quality, exposing over 2 billion people to noxious smoke especially in low-income households.

Data on the situation of asthma and chronic respiratory diseases in the Region are inadequate. A literature review showed that prevalence of asthma is higher among GCC countries. Less information is available on COPD, but studies indicate that COPD is far more prevalent in low- and middle-income countries. The literature review showed the pooled prevalence of asthma and COPD as 9.4% (95% confidence interval [CI]: 9.2–9.6) and 5.39 (CI: 5.12–5.6), respectively *(165)*.

The key element in reducing and controlling COPD is addressing risk factors, including indoor smoke exposure and tobacco use, through political, social and public health initiatives, as well as developing cost-effective management protocols for COPD especially in low-income settings *(166)*.

5.5 Mental health and substance use disorders

5.5.1 Burden of mental disorders

Mental disorders impose an enormous disease burden on societies throughout the world. The complex and bi-directional pathways leading to a vicious cycle of disadvantage (poverty, childhood adversity, conflict and violence) and mental disorders suggest a critical role for mental disorders in the intergenerational transmission of poverty. One in 10 people suffer from a mental disorder at any given time and one in four people will experience a mental health episode in their lifetime, directly affecting one in four families. The public health burden incurred by mental disorders has grown by 41% in the last 20 years and WHO estimates that mental health conditions will soon account for 15% of the global disease burden. Mental disorders are associated with high levels of mortality, for example, through suicide or due to comorbid medical conditions; about 13 million excess deaths occurred in 2015 in people with mental disorders.

In 2015 in the Eastern Mediterranean Region, 10.7 million DALYs (95% CI: 7.1–15.0) were due to mental disorders, accounting for 4.7% of total DALYs and making mental disorders the ninth leading cause of disease burden. In the Region, females have higher rates of DALYs caused by mental disorders than males. The increasing burden of mental

disorders is mainly attributable to population growth and ageing rather than an increase in prevalence rates, except in the case of substance use disorders which have registered an absolute increase not attributable to demographic shift alone. When setting public health agendas for the Region, it needs to be considered that greater numbers of people will be experiencing mental disorders and for longer durations *(167)*.

Depressive illnesses and anxiety disorders are highly prevalent in the Region, especially in countries affected by emergency situations. Treatment rates for people with mental disorders are low in the Region; estimates show that only 1 in 27 people with a mental disorder receives treatment. The treatment gap, i.e. the proportion of people who require care but do not receive treatment, has been estimated to be more than 90% in some countries of the Region, with wide variation between countries belonging to different income groups. Data on the coverage of services for mental disorders are available for less than 50% of countries in the Region. Coverage ranges from a low of 3.6% in Bahrain to 100% in Kuwait, Oman, Palestine, Qatar and Saudi Arabia. This massive treatment gap is mainly due to limited human and financial resources and pervasive stigma and discrimination attached to mental health disorders. The median public expenditure on mental health is US$ 3.43 per capita, and the Region has only 7.7 mental health workers per 10 000 population (compared to 9.0 globally) and 5.6 beds for mental health per 100 000 population (compared to 16.4 globally) *(168, 169)*. Furthermore, even these limited resources for mental health care are often invested inefficiently in inpatient services in large psychiatric hospitals that are inaccessible to most of the population and associated with human rights violations *(168)*.

5.5.2 Addressing the treatment gap

In order to bridge the treatment gap, countries need to not only increase the resources for mental health care but – more importantly – to utilize available human and material resources efficiently, taking advantage of the paradigm shift articulated in WHO's comprehensive *Mental health action plan 2013–2020* from institutional to an integrated community-based model of mental health care *(170)*. The Regional framework to scale up action on mental health in the Eastern Mediterranean Region operationalizes the objectives of the global plan into concrete measurable activities, by scaling up action on mental health, strengthening the health system, and advancing towards the SDG target of UHC. The framework identified high-impact, cost-effective, affordable and feasible strategic actions supported by a set of indicators to monitor the implementation of the plan *(171)*.

WHO's Mental Health Gap Action Programme (mhGAP) aims to scale-up services for mental, neurological and substance use disorders in countries, especially low- and middle-income countries. The mhGAP is based on evidence that with proper care, psychosocial assistance and medication, effective treatment can be provided for people with priority mental, neurological and substance use disorders even where resources are scarce *(172)*. WHO is supporting mhGAP implementation across almost all countries in the Region (Afghanistan, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Pakistan, Palestine, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia and United Arab Emirates) to enhance access to mental health services through the primary health care system. Furthermore, the mental health component of the regional programme for family physicians has been strengthened through incorporation

of mhGAP in its curriculum. Integration of mental health services into primary health care and priority health service delivery platforms such as HIV, maternal and child health and NCDs is an evidence-based cost-effective approach to addressing mental health. The Regional Office has developed a guidance package to support countries in integration of mental health in primary health care.

Efforts are also underway to increase mental health services and beds in general hospitals and for scaling down standalone mental institutions, especially in Afghanistan, Iraq, Jordan, Lebanon Palestine and Syrian Arab Republic. Community-based services, such as community mental health centres and day treatment facilities, can also play a major role in increasing access to affordable mental health services; however, such services are underdeveloped in the Region *(173)*. Some popular interventions such as mass promotion and media campaigns are not cost-effective for low- and middle-income countries, and their long-term effects are not well understood. The available evidence suggests that internet interventions for mental health have wide access to different population groups, even in low- and middle-income countries, and are at least as effective as face-to-face interventions at reducing the stigma of mental disorders especially among adolescents. Virtual or face-to-face interaction with persons with mental disorders is one of the best-evidenced interventions effective in changing people's knowledge, attitudes and behaviour towards mental ill health and enabling individuals to assist people vulnerable to acquiring mental health problems, suicidal people or those in crisis. This intervention is being implemented in two countries of the Region (Pakistan and Saudi Arabia) *(174)*.

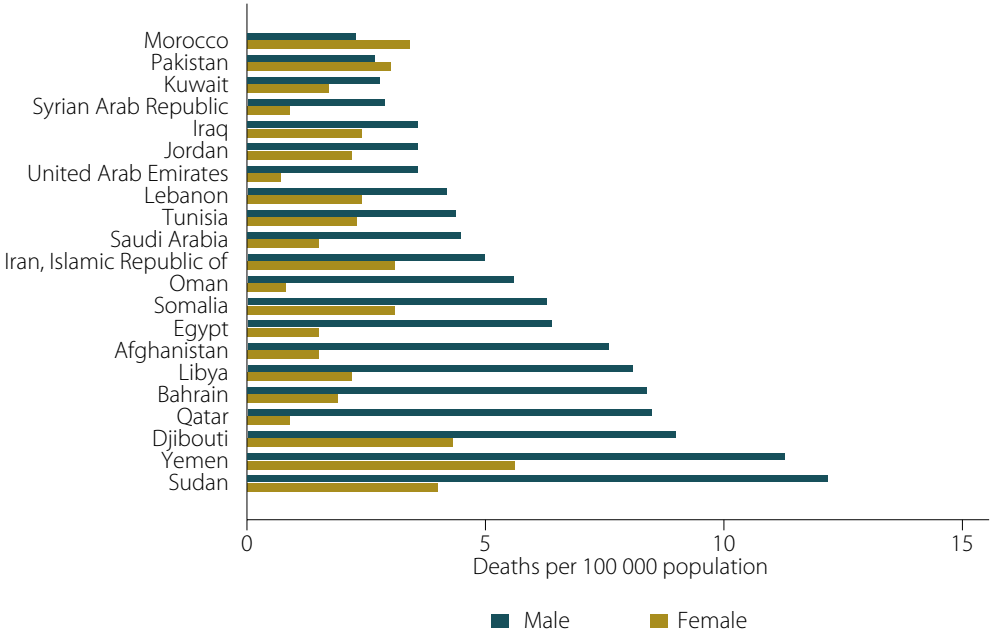
WHO has developed a package to promote mental health literacy and reduce stigma, delivered through multiple channels including regional media organizations. There is strong evidence suggesting that it is best to start mental health interventions at early life *(175)*. One of the best practices for early intervention with long-term positive benefits is promoting child (aged 0–3 years) and maternal mental health through integrated services delivered by non-specialists. These interventions have the potential to be scaled up in low- and middle-income countries. The package was developed and piloted in the Region and has been adopted globally; it is being currently implemented in countries in other WHO regions as well. There is also robust evidence that good schools provide a suitable and potentially sustainable platform to build social and emotional competencies. The School Health Implementation Network (SHINE) promotes mental health through a manualized school-based intervention in countries of the Region and is also being adopted by other regions. Parent skills training programmes for children with development difficulties and psychosocial interventions for prevention of mental disorders and promotion of mental health of adolescents are also currently being piloted in countries of the Region (Egypt, Islamic Republic of Iran, Jordan, Lebanon and Pakistan). There are further interventions that are considered good practice, but their implementation needs to be piloted in the Region and scale up would need careful evaluation and assessment.

Worldwide, about 60% of suicide deaths can be attributed to mental and substance use disorders. Globally, the mortality rate following a suicide attempt is two-fold higher among men than women; however, the attempt itself is 2–4 times more common among women. The suicide mortality rate in the Region is lower than the global rate, and lower than in other WHO regions. However, the same sex pattern can be observed

in the Region, where mortality rate due to suicide is about 2.5 times higher among men compared to women (Fig. 46).

According to WHO estimates for the Region, the age-standardized suicide rate is less than half the global rate (4.3 per 100 000 compared to 10.5 per 100 000) *(176)*. Suicide prevention interventions, such as reducing access to means and responsible reporting by the media, have strong evidence to support their uptake; however, suicide prevention programmes have had limited uptake in countries of the Region due to a range sociocultural challenges. WHO has developed guidance and tools to support countries, and Afghanistan, Islamic Republic of Iran and Tunisia are developing and implementing national suicide prevention programmes *(22)*.

Fig. 46. *Suicide mortality rate by sex, 2016*



Source: WHO (2019) (10).

5.5.3 Substance use disorders

Substance use disorders were responsible for about 4.2 million DALYs in the Region during 2017. According to the *World drug report 2019*, around 271 million people worldwide are estimated to have used an illicit drug at least once during the preceding year, and some 35.3 million people who use drugs suffer from substance use disorders *(177)*. Substance use disorders account for about 0.5 million deaths globally and for 0.55% of the total global burden of disease (0.70% for men and 0.37% for women). These drugs predominantly include cannabinoids, opioids, cocaine and/or amphetamine-type stimulants. Cannabis is the drug most commonly used by the adult population of the Eastern Mediterranean Region, with a median annual prevalence of 3.6%. The prevalence of opioid dependence is estimated to be 0.29% in the Region, which is higher than the global prevalence; the estimated prevalence of cocaine and amphetamine dependence

is similar to the estimated global prevalence *(178)*. There are emerging trends in drug use in the Region, including use of tramadol and amphetamine-type substances such as Captagon (fenethylline). The emergence of newer psychotropic substances, particularly synthetic cannabinoids, has been reported in some countries of the Region; however, their use is relatively low. Although cannabis is still the most widely used drug worldwide, opioids accounted for 76% and 85% of deaths and 75% and 92% of lost DALYs attributable to substance use disorders globally and regionally, respectively.

Despite the scale of the problem, fewer than one in seven people with a substance use disorder worldwide receive evidence-based treatment, while in countries of the Region only one in 13 receive treatment. Data on treatment for substance use disorders are available for eight countries (35%) in the Region: treatment is available at a very limited scale (1–10%) in Afghanistan and Pakistan; limited scale (11–20%) in Egypt and Morocco; substantial scale (21–40%) in Saudi Arabia and the United Arab Emirates; and above 40% in Bahrain and the Islamic Republic of Iran *(9)*. The low treatment rates can be attributed to paucity of political commitment and resources. Over 50% of countries in the Region either do not have any specialized treatment facilities or these are only available in the capital city.

In the light of this massive treatment gap, the Regional Committee in 2019 endorsed the *Regional framework for action to strengthen the public health response to substance use* (resolution EM/RC66/R.7). The framework is organized across five domains: governance; health sector response; promotion and prevention; monitoring and surveillance; and international cooperation. The framework identifies key strategic evidence-informed interventions for countries to implement, shifting the current focus from supply-reduction measures to public health measures *(179)*.

5.6 Double burden of malnutrition

5.6.1 Nutrition situation and challenges

A double burden of malnutrition – the presence of undernutrition along with overweight and obesity, or diet-related NCDs – characterizes the nutrition problem in the Eastern Mediterranean Region. The expected outcome of the problem is having simultaneously large numbers of stunted and underweight children as well as obese and overweight children and adults within countries and across the Region.

In 2016, the total number of stunted children aged under 5 in the Region was estimated to be 20.3 million (representing 25.6% of this age group). Malnutrition and food insecurity in countries also pose significant challenges to the optimal growth of children. A nutritional transition in the Region has contributed to shaping the other side of the nutrition problem i.e. the high rates of overweight and obesity, which are also closely linked to physical inactivity and unhealthy diet. This transition is prominent in infant feeding, with more and more infants not being breastfed. The global target for 2025 is to increase the rate of exclusive breastfeeding in the first 6 months to at least 50%. The latest available data for the Region indicate that only Afghanistan, Sudan and the United Arab Emirates had exclusive breastfeeding rates over 50% by the end of 2018.

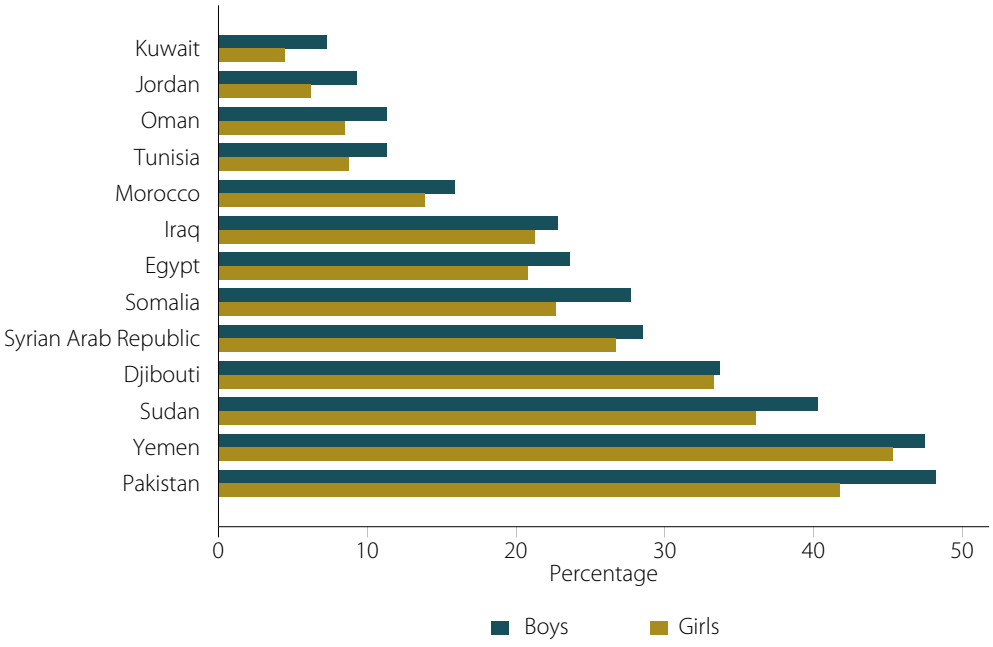
On average, one in four children in the Region is stunted (Table 7), which is higher than the global average and the third highest among WHO regions (Fig. 47). The average of wasting among children in the Region is 7.8 % (Table 7), which is higher than the global average and the second highest among WHO regions (Fig. 48). Within countries of the Region, the average of wasting and stunting among boys and girls is either similar or somewhat higher among boys. Out of 13 countries with data available for 2009–2018, nine countries were not meeting the global target for 2025 of reducing childhood wasting to less than 5% (Fig. 49).

Table 7. *Regional and global prevalence of stunting, wasting and overweight in children under 5 years, 2009–2018*

	SDG target 2.2		
	Prevalence of stunting in children under 5 (%)	Prevalence of wasting in children under 5 (%)	Prevalence of overweight in children under 5 (%)
	2009–2018		
Regional	24.7	7.8	5.7
Global	21.9	7.3	5.9

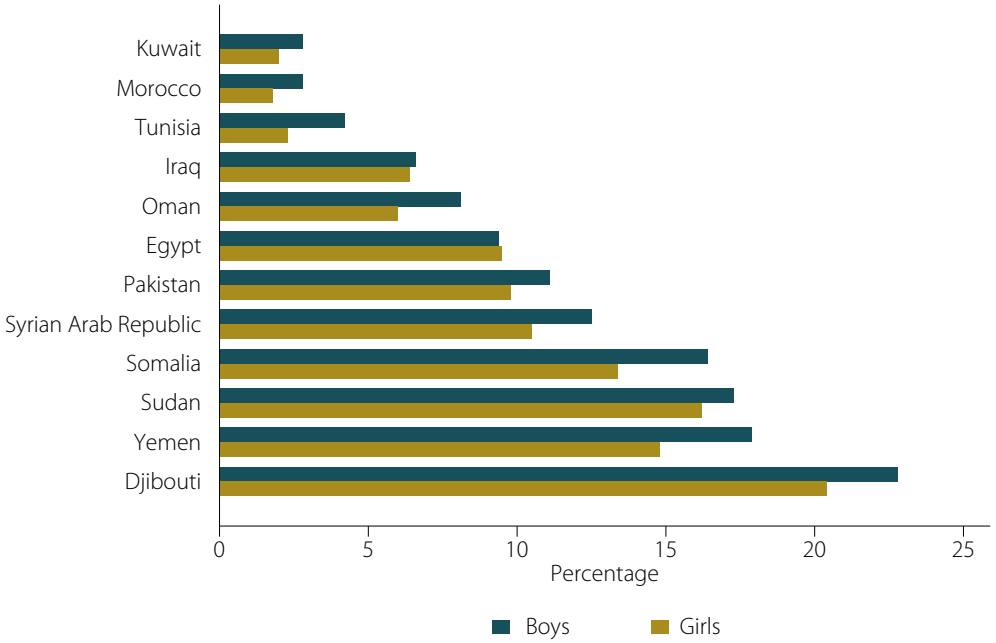
Source: WHO (2019) (10).

Fig. 47. *Prevalence of stunting in children under 5 (%) by sex, 2009–2018*



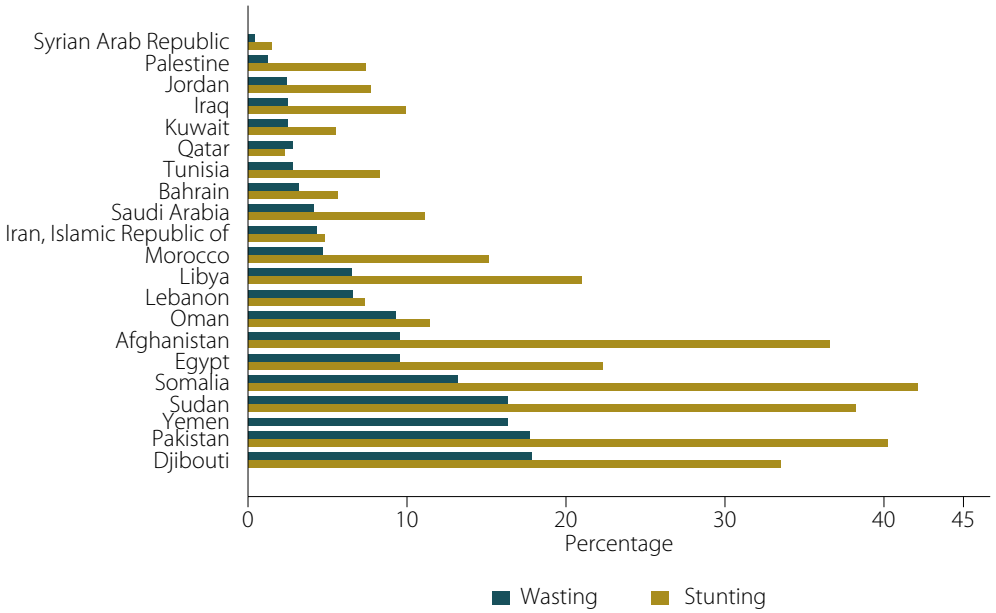
Source: WHO (2019) (10).

Fig. 48. *Prevalence of wasting in children under 5 (%) by sex, 2009–2018*



Source: WHO (2019) (10).

Fig. 49. *Prevalence of wasting and stunting among children under 5, both sexes (%), 2013–2018*

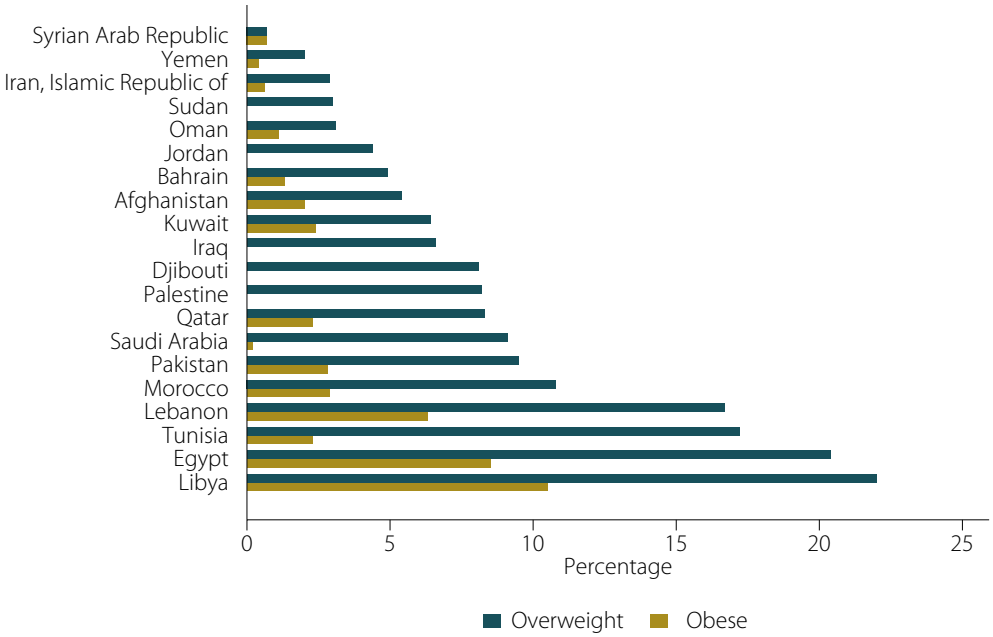


Source: WHO (2020) (9).

The average prevalence of overweight in children aged under 5 years in the Region is less than the global rate and the third highest among WHO regions. In the Region, Egypt and Libya have the highest levels of overweight and obesity among this age group, with one

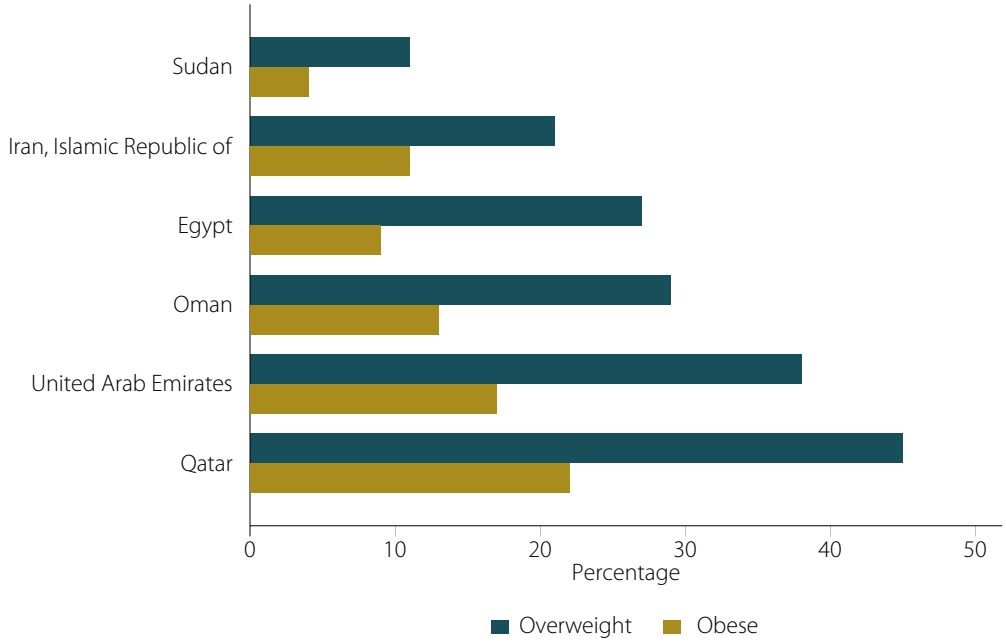
in five children being overweight (Fig. 50). Limited data are available for this indicator for adolescents aged 13–18 years. However, existing data for six countries is alarming, showing a high prevalence of overweight and obesity among adolescents in the Region. For example, almost 50% of young people in Qatar are overweight and 22.5% are obese (Fig. 51).

Fig. 50. *Overweight and obesity among children under 5 (%), 2013–2018*



Source: WHO (2020) (9).

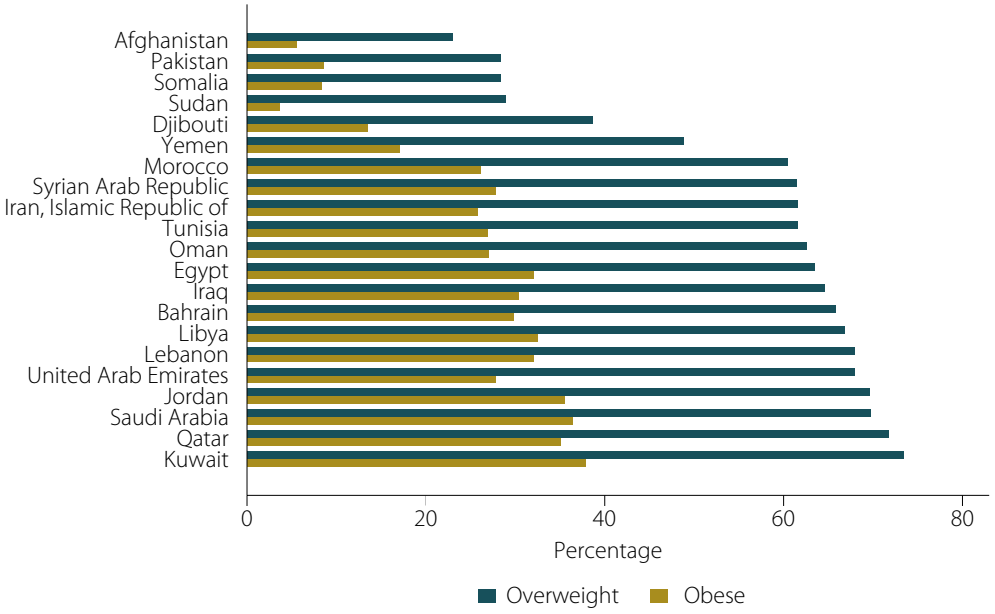
Fig. 51. *Overweight and obesity among adolescents (13–18 years) (%), 2014–2018*



Source: WHO (2020) (9).

In about 70% of countries in the Region, over half of adults are overweight, with the highest rate in Kuwait (73.4%). In almost 60% of countries, at least one in four people (25–38%) is obese, with the highest rate in Kuwait (38%) (Fig. 52). Being overweight or obese is equally prevalent across the Region, regardless of the level of income development in countries.

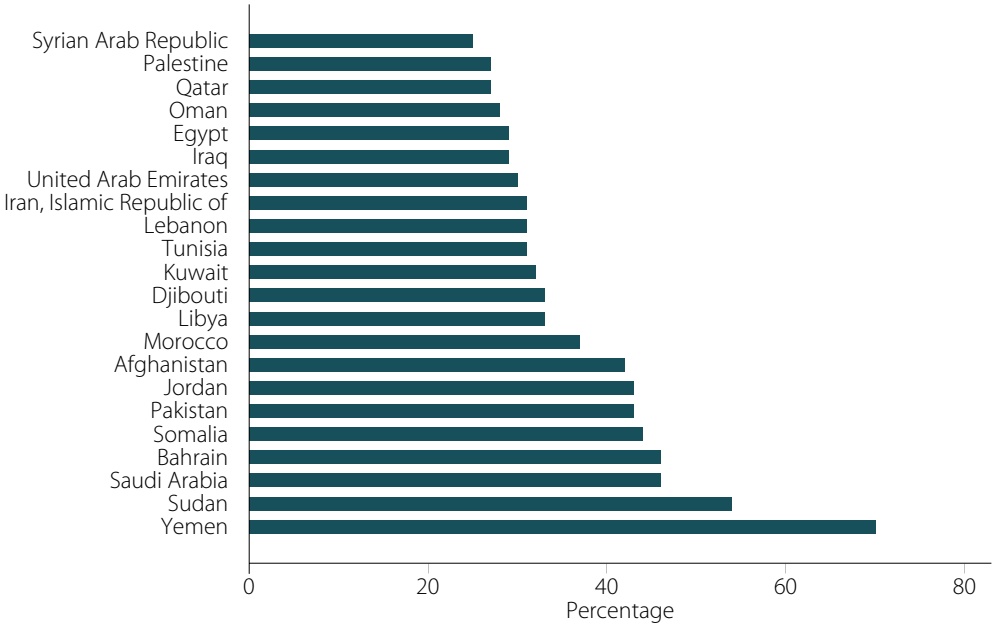
Fig. 52. *Age-standardized prevalence (%) of overweight and obesity among adults (18 years or above), 2016*



Source: WHO (2020) (9).

Anaemia among women of reproductive age (15–49 years) is a very prevalent condition in all countries of the Region, regardless of their income level. Almost two in five (37%) women of reproductive age are affected by anaemia in the Region. The highest estimated rate is in Yemen (69.6%) and the lowest estimated rate is in the Syrian Arab Republic (24.5%) (Fig. 53).

Fig. 53. *Prevalence of anaemia among women of reproductive age (15–49 years) (%), 2014–2018*



Source: WHO (2020) (9).

Malnutrition in all its forms takes a heavy toll on the health, well-being and sustainable development of populations in the Eastern Mediterranean Region. Some countries, especially those affected by conflict, continue to experience high levels of food insecurity, undernutrition and micronutrient deficiencies. The growth of an estimated 20.2 million children under 5 years of age has been stunted by poor nutrition. At the same time, 53% of women, 45% of men and 8% of school-age children or adolescents are obese. NCDs are now responsible for two thirds of deaths in the Region, and unhealthy diets – along with physical inactivity – are key contributors to this burden.

5.6.2 Strategic approaches

The *Regional strategy on nutrition 2010–2019 and plan of action* was put in place to support Member States to strengthen or establish action on nutrition *(180)*. Throughout the past decade, there have been significant changes in the nutrition landscape. Many countries in the Region have continued to move through the nutrition and epidemiological transition, and the burden of diet-related NCDs has increased. Other countries have seen increases in undernutrition associated with conflict and political instability. Over the same period, there has also been a series of landmark global and regional commitments to tackle malnutrition in all its forms. New global targets on maternal, infant and young child nutrition, as well as global targets on NCDs, have been agreed and integrated into the 2030 Agenda for Sustainable Development. To accelerate progress towards these global targets, the United Nations declared a Decade of Action on Nutrition between 2016 and 2025, centred around six key areas for action *(181)*.

Despite commitments at the global, regional and national levels, countries are still struggling to implement strategies, policies and regulatory measures to address malnutrition. Much work remains to be done in the Region to meet the nutrition and NCD targets. There is now greater recognition that current food systems are failing to deliver nutrition for all and that radical transformation of food systems is needed to improve access to healthy, sustainable diets. Meanwhile, there is a growing body of evidence on the effectiveness, cost-effectiveness and feasibility of policy interventions to improve nutrition, and there is an urgent need to translate this knowledge into action and to disseminate lessons learned from implementation on the ground. More than ever, there is a need for comprehensive, multisectoral action to address malnutrition in all its forms across the Region *(181)*.

Given this challenging context, there continues to be strong demand from Member States for WHO technical support to develop strategies and support implementation of policies to improve nutrition. In October 2019, the Regional Committee endorsed the *Strategy on nutrition for the Eastern Mediterranean Region, 2020–2030* through resolution EM/RC66/R.1 *(181)*. The comprehensive nutrition strategy has been developed to establish a framework for efforts to reach agreed targets on nutrition, diet-related NCDs and sustainable development, as well as to guide implementation of the remainder of the United Nations Decade of Action on Nutrition (2016–2025) in the Region.

5.7 Elimination and eradication of high-impact communicable diseases

5.7.1 Enhancing vaccination coverage

The Region has made progress in eliminating vaccine-preventable diseases through maintaining the average immunization coverage at 80%. However, the progress has been uneven, with high levels of coverage in some countries and serious challenges in countries suffering from protracted emergencies or in post-conflict situations.

In 2016, one in 10 children worldwide did not receive even the first dose of diphtheria-tetanus-pertussis vaccine (DTP). In the same year, the global coverage for the third dose of DTP vaccine (DTP3) among children was 86% (Table 8), which showed no progress had been made since 2010. In the Eastern Mediterranean Region, there has been an increase in coverage of DTP3 from 81% in 2017 to 82% in 2018, with 14 countries achieving and maintaining 90% coverage nationally. However, an estimated 2.9 million children missed at least one dose of DPT vaccine in 2018, of whom more than 90% were in six countries (Afghanistan, Iraq, Pakistan, Somalia, Syrian Arab Republic and Yemen). An outbreak of diphtheria in Yemen, first reported in October 2017, led to over 3000 cases including 178 deaths *(22)*. DPT3 immunization coverage among 1-year-olds in the Region is lower than the global rate and only higher than the African Region. Maternal and neonatal tetanus elimination has been achieved in more than three quarters of countries in the Region, and only five countries (Afghanistan, Pakistan, Somalia, Sudan and Yemen) are yet to achieve this goal *(182)*.

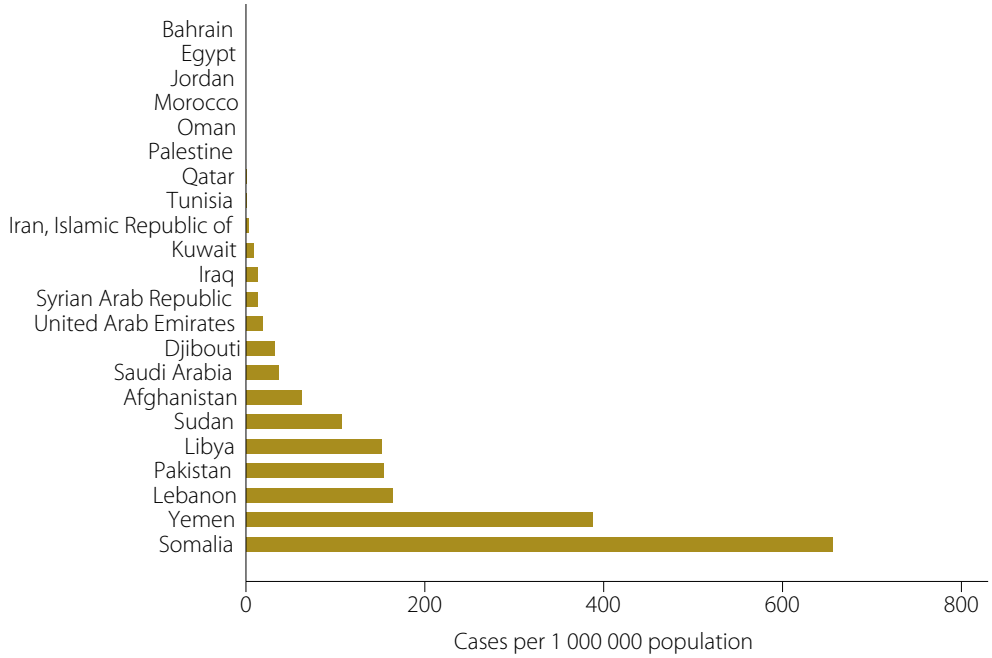
From 2010 to 2016, the global coverage for the second dose of measles-containing vaccine (MCV2) increased from 39% to 64% (Table 8); however, this is still insufficient to prevent measles outbreaks and avoid preventable deaths. Coverage of MCV2 is 69% in the Region (Table 8), which is above the global rate, although lower than the European and Western Pacific regions. The measles incidence rate is over 100 cases per million population in six countries in the Region, namely Somalia, Yemen, Lebanon, Pakistan, Libya and Sudan. More than half of countries in the Region (12 countries) continue to suffer from measles outbreaks because of insufficient levels of immunization coverage (Fig. 54) *(182)*.

Table 8. *Regional and global DTP, measles and pneumococcal conjugate vaccination coverage, 2016*

	SDG target 3.b.1		
	DTP3 immunization coverage among 1-year-olds (%)	MCV2 immunization coverage (%), by nationally recommended age	Pneumococcal conjugate third-dose immunization coverage among 1-year-olds (%)
Regional	80	69	48
Global	86	64	42

Source: WHO (2019) (10).

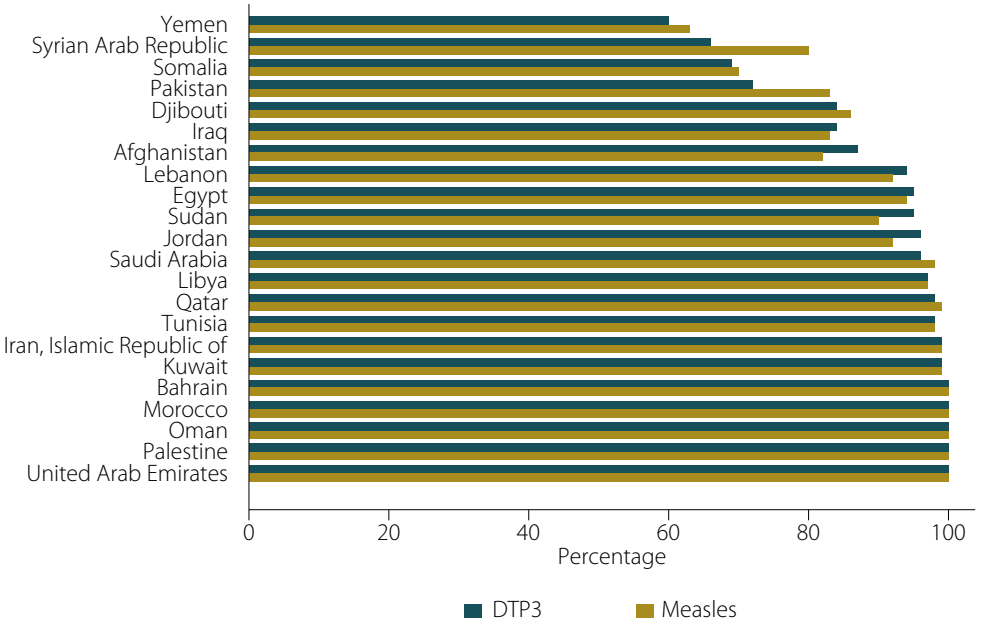
Fig. 54. *Measles incidence, 2018*



Source: WHO (2020) (9).

Measles case-based laboratory surveillance is implemented in all countries of the Region, and eight countries are close to achieving the elimination target of measles incidence of less than 1 per million in 2018. In 12 countries, coverage of the first dose of measles-containing vaccine (MCV1) was 95% or above in 2018 and in four countries it was 90–94% in 2018 (Fig 55). In eight countries, the coverage of MCV1 was under 90% (range 46–85%) in 2017. Routine MCV2 was provided in almost all countries of the Region (21 countries) *(22)*.

Fig. 55. *Coverage of DTP3 and measles vaccination (%), 2018*



Source: WHO (2020) (9).

By the end of 2018, nine countries in the Region reported a very low incidence of endemic measles virus transmission (less than 2 cases per million population) and five countries (Bahrain, Egypt, Jordan, Oman and Palestine) reported zero endemic measles transmission and as such, are seeking verification of elimination (22).

Regional efforts to expand immunization coverage include implementing the Reaching Every District (RED) strategy to achieve the goal of 80% coverage in all districts and 90% nationally in WHO Member States *(183, 184)*. Supplementary immunization activities and mass vaccination campaigns are also effective strategies for vaccination of children missed by routine immunization services, such as hard-to-reach and underserved groups and communities, or to provide vaccination for older susceptible individuals who are not among the age groups targeted by the Expanded Programme on Immunization. Countries that are still experiencing measles outbreaks have made huge endeavours to implement measles supplementary immunization activities, vaccinating more than 75 million people with measles-containing vaccines during 2017–2018 *(185)*. In 2018, more than 50 million children received measles-containing vaccines in Afghanistan, Libya and Pakistan through vaccination campaigns, achieving over 90% coverage *(22)*.

All countries in the Region, except Djibouti and Somalia, are implementing national measles and rubella case-based laboratory surveillance.

In addition to strengthening vaccination programmes for high-impact vaccine-preventable diseases, there has been remarkable progress in introducing new life-saving vaccines. By the end of 2018, all countries of the Region had included *Haemophilus influenzae* type B vaccine in their national immunization programmes, 17 countries had included pneumococcal conjugate vaccine, and 14 countries had introduced rotavirus vaccine. Inactivated poliovirus vaccine has been introduced in all countries of the Region *(182)*. The Eastern Mediterranean vaccine action plan 2016–2020 provides strategic guidance to support countries in reaching the goal of eliminating vaccine-preventable diseases *(186)*.

5.7.2 Polio eradication and the transition agenda

The Eastern Mediterranean Region is on the verge of eradicating poliomyelitis. Wild poliovirus transmission is at its lowest levels ever and is limited to a few zones in two countries – Afghanistan and Pakistan. In 2018, 33 cases of poliomyelitis were reported (21 in Afghanistan and 12 in Pakistan). An outbreak of circulating vaccine-derived poliovirus type 2 (cVDPV2) started in the northeast Syrian Arab Republic in 2017, and officially ended in December 2018. Poliovirus type 2 is most likely to regain virulence and cause outbreaks in communities with low routine immunization coverage, particularly in inaccessible and conflict-affected areas. An outbreak of cVDPV2 and type 3 in Somalia in 2018 testifies to this vulnerability. For this reason, live virus vaccines containing type 2 poliovirus are now no longer being routinely used globally. Three countries in the Region are at very high risk, namely Somalia, Syrian Arab Republic and Yemen, and three are at high risk, namely Iraq, Libya and Sudan *(22)*.

Surveillance for acute flaccid paralysis (AFP) in the Region reported nearly 23 000 cases in 2018, which is a 43% increase compared to 2016 (more than 16 000 reported cases). This increase reflects improvements in the sensitivity of surveillance systems in the Region. In 2018, 20 countries (90%) met the key standard surveillance indicators for non-polio AFP rates (2 per 100 000 children under 15 years of age). The Regional Laboratory Network, comprising 12 WHO-accredited laboratories, supports this surveillance activity. Environmental surveillance is another approach helping the polio programme to expand its reach by facilitating the early detection of VDPVs, especially in emergency-affected and hard-to-reach areas. Environmental surveillance is currently implemented in Afghanistan, Egypt, Islamic Republic of Iran, Jordan, Lebanon, Pakistan, Somalia, Sudan and Syrian Arab Republic *(22, 187)*.

Countries with endemic status and those considered at risk have taken measures to contain the problem. In Afghanistan and Pakistan, the national programme and local authorities, supported by WHO, UNICEF and international partners, have carried out immunization response based on national emergency action plans for polio eradication to reach chronically missed children and those living in inaccessible areas, despite facing tremendous difficulties in conflict zones. To keep the rest of the countries in the Region free of poliomyelitis, supplementary immunization activities continue to be carried out in the two endemic and six at-risk countries across the Region (at-risk countries include

Iraq, Libya, Somalia, Sudan, Syrian Arab Republic and Yemen). A simulation outbreak exercise was carried out in 17 countries during 2016–2017, with the support of the regional polio team, to test and improve individual country preparedness to respond to polio outbreaks *(22)*.

Increasing coverage of the Expanded Programme on Immunization is crucial to sustain the gains made in polio eradication. All countries in the Region, whether identified as priority countries or not, should have a polio transition plan. Somalia and Sudan have made progress in developing transitional plans, while non-endemic countries such as Iraq, Syrian Arab Republic and Yemen are working on development of a transition plan. Other countries need to focus on using polio assets to improve routine immunization and find the best mechanisms to synergize and support priority countries in maintaining polio-free status *(92)*. Four countries (Afghanistan, Pakistan, Somalia and Sudan) are among the 16 countries in the Region that have been identified globally as a priority for post-eradication transition planning. An additional four countries (Iraq, Libya, Syrian Arab Republic and Yemen) are considered regional priorities for development of a transition plan. However, the outbreak of cVDPV in Somalia and continued transmission of wild poliovirus type 1 in Afghanistan and Pakistan have affected implementation of transition plans *(188)*.

5.8 Priority communicable diseases

5.8.1 Malaria and other vector-borne diseases

The population at risk of contracting malaria in the Eastern Mediterranean Region is 295 million, of which about two thirds live in Pakistan. In 2018, the Region reported more than 5 million presumed and confirmed malaria cases, of which nearly 2.2 million were confirmed *(22)*. The estimated number of malaria-related deaths in 2017 was 8300, of which 1627 were reported confirmed cases which shows an increase compared to 2015 (1016 confirmed death cases) *(182)*. Six countries (Afghanistan, Djibouti, Pakistan, Somalia, Sudan and Yemen) account for more than 99% of confirmed cases in the Region, with Sudan (51%), Pakistan (25%) and Afghanistan (11%) having the highest numbers. *Plasmodium falciparum* is the most prevalent malaria parasite in the Region (69%) followed by *P. vivax* (31%) *(9)*.

The incidence of malaria in the Region was 14.8 per 1000 population at risk in 2017, which was lower than the global rate (51.9), but higher than in other regions except for the African Region (219.4). There has been a reduction in malaria incidence in the Region since 2010, although the trend has slowed since 2015. In terms of receiving global investment in malaria programmes and research for malaria control, the Region stands last alongside the Western Pacific Region – receiving less than 5% of global investment in 2017 *(182)*.

The Region has made substantial progress toward malaria elimination and there are now 14 countries free of malaria in the Region. Morocco and the United Arab Emirates were certified as malaria-free in 2007 and 2010, respectively, and Egypt and Oman are eligible for certification of malaria-free status with zero local reported cases for 3 years.

The Islamic Republic of Iran and Saudi Arabia are close to eliminating malaria, and the Islamic Republic of Iran reported zero indigenous cases in 2018. The other endemic countries (Afghanistan, Djibouti, Pakistan, Somalia, Sudan and Yemen) are at the burden reduction stage *(22)*.

The two primary vector control methods are long-lasting insecticidal nets and the use of indoor residual spraying. In the Region, the operational coverage of long-lasting insecticidal nets has increased from 41 million protected people in 2015 to more than 52 million in 2017. The reported operational coverage of nets for at-risk populations in Afghanistan, Pakistan, Sudan and Yemen was 70%, 21%, 78% and 51%, respectively, which in all cases is less than the target for 2020 of at least 80% of household members in targeted areas using long-lasting insecticidal nets. In the Region, 7.5 million people were protected by indoor residual spraying in 2017, which shows an increase compared to 2015. The proportion of reported malaria cases confirmed either by microscopy or rapid diagnostic test was more than 37% in 2017, which was almost double the proportion (18%) in 2015; however, it is still far from the target of 90% confirmation of reported suspected malaria cases.

Preventing reintroduction of malaria must be the focus of efforts in malaria-free countries of the Region; however, there are barriers to maintaining this status in some countries, including existing conflicts that lead to massive population movement increasing the risk of reintroduction of malaria. Malaria-endemic countries also face challenges, including: weakening health systems; outbreaks of other vector-borne diseases (chikungunya and dengue), which puts further strain on limited human and financial resources; insufficient investment in malaria control programmes; the consequences of climate change, which have resulted in changes in malaria eco-epidemiology with introduction of invasive vectors; and increasing levels and distribution of insecticide resistance *(189)*. A prominent example in this context is the increasing number of malaria cases in Djibouti, which reached alarming levels in 2018–2019 due to the influx of immigrants from neighbouring countries, the presence of invasive *Anopheles stephensi* and an inefficient control programme *(182)*.

The regional malaria action plan 2016–2020 was endorsed by the 62nd Regional Committee for the Eastern Mediterranean in 2015. The Regional Office has also developed a regional plan of action (2019–2023) for implementation of WHO's *Global vector control response 2017–2030* to strengthen vector control through increased capacity, improved surveillance, better coordination and integrated action across sectors and diseases. All endemic countries have updated their national treatment policy and are providing antimalarials free of charge in public health facilities. The quality and coverage of the malaria surveillance system has increased in Pakistan, Somalia and Sudan, following adoption of DHIS2, and WHO continues to support malaria-endemic countries to integrate the standard WHO malaria module into DHIS2 *(182, 190)*.

Outbreaks of suspected dengue were recorded in Saudi Arabia, Sudan and Yemen during 2005–2006. In 2008, dengue affected a southern province in Yemen (Shabwah). In Somalia, infections of a few dengue serotypes were identified in the Mogadishu outbreak in 2011. Pakistan may carry the highest burden of dengue in the Region. Since 2006, dengue epidemics have occurred every year across most cities in Pakistan becoming a major health burden in the country. Understanding the epidemiology, timely detection

and response to outbreaks and estimating the burden of dengue virus in the Region is an ongoing challenge because of inadequate human and vector surveillance, non-reporting of illness syndromes, and poor capacity for laboratory detection of the virus in many countries *(191)*.

5.8.2 Neglected tropical diseases

Neglected tropical diseases are a group of diverse diseases that can be found in various geographic areas (not limited to tropical environments) and are strongly connected to poverty. The neglected tropical diseases currently prevalent in the Eastern Mediterranean Region are dengue, chikungunya, dracunculiasis, echinococcosis, foodborne trematodes, leishmaniasis, leprosy, lymphatic filariasis, mycetoma, onchocerciasis, rabies, scabies and other ectoparasites, schistosomiasis, soil-transmitted helminthiasis, snakebite envenoming, taeniasis/cysticercosis and trachoma. Some neglected tropical diseases that were previously controlled are re-emerging in a few countries (e.g. Djibouti, Iraq, Syrian Arab Republic and Yemen) due to prevailing complex emergency situations.

SDG target 3.3 includes ending epidemics of neglected tropical diseases by 2030. In 2017, the reported number of people in the Region requiring interventions against neglected tropical diseases was about 7.5 million *(192)*. The five neglected tropical diseases that are at the focus in the Region for eradication or elimination as a public health problem are: dracunculiasis (Guinea worm disease), onchocerciasis, schistosomiasis, lymphatic filariasis and trachoma. Nine countries require preventive chemotherapy to control/eliminate onchocerciasis, schistosomiasis, lymphatic filariasis, trachoma and soil-transmitted helminthiasis *(193)*.

Sudan is the only country in the Region which is not certified for elimination of dracunculiasis and lymphatic filariasis as a public health problem. Trachoma is prevalent in Egypt, Pakistan, Sudan and Yemen, where the surgery, antibiotic therapy, facial cleanliness and environmental improvement (SAFE) strategy is being conducted to eliminate the disease. Afghanistan, Egypt, Libya and Somalia are conducting mapping to assess the burden of trachoma to either implement SAFE strategy or to validate elimination. Islamic Republic of Iran, Morocco and Oman have been validated as having eliminated trachoma as a public health problem *(194)*. Iraq, Saudi Arabia and Tunisia are initiating the validation process for elimination.

Schistosomiasis is a public health problem in Egypt, Sudan, Somalia and Yemen, where mass drug administration is being conducted to eliminate the disease. Djibouti, Islamic Republic of Iran, Jordan, Lebanon, Morocco and Tunisia are in the process of either validating interruption of transmission or validating elimination of schistosomiasis as a public health problem. Only two countries in the Region (Sudan and Yemen) have reported onchocerciasis, and currently are conducting mass drug administration to eliminate the disease.

Preventive chemotherapy for school-age children to control soil-transmitted helminthiasis has been implemented in Afghanistan, Egypt, Iraq, Pakistan, Somalia, Sudan, Syrian Arab Republic and Yemen, as well as for refugee populations under the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), reaching 10.8 million school-age children. In 2018, the total number of school-

age children requiring preventive chemotherapy was 43.3 million in the Region. In 2018, Afghanistan and the Syrian Arab Republic implemented preventive chemotherapy for school-age children, reaching more than 75% national coverage *(195)*.

The Region has low prevalence for leprosy compared to other WHO regions. Egypt, Somalia and Sudan are among the 23 global priority countries for leprosy control. During the last decade, trends in the detection of new leprosy cases in the Region are increasing, which can be attributed to enhanced active case detection in priority countries. Mycetoma is currently reported to be prevalent in Sudan, and the country is tackling the disease through active case-finding, early diagnosis, and treatment with currently available tools. Few countries in the Region report echinococcosis, foodborne trematodes and taeniasis/cysticercosis, mainly Iraq, Morocco and the Syrian Arab Republic.

Leishmaniasis is a major public health problem in Afghanistan, Djibouti, Iran (Islamic Republic of), Iraq, Libya, Morocco, Pakistan, Somalia, Sudan, Tunisia and Yemen. The Region has the highest burden of both types of leishmaniasis (cutaneous and visceral) compared to other WHO regions. In 2018, the Region reported 181 696 cases of cutaneous leishmaniasis, accounting for 70% of the global burden. In 2018, the Region reported 3501 cases of visceral leishmaniasis, which was the highest incidence rate per 100 000 population (0.53 per 100 000 population) among WHO regions *(192)*. Treatment through the AmBisome donation programme is available for countries where visceral leishmaniasis is prevalent, and Morocco, Tunisia, Sudan and the northern Syrian Arab Republic are receiving the medicines. Iraq, Libya, Somalia and other areas of the Syrian Arab Republic are awaiting to receive AmBisome through the programme. There is no medicine donation programme for cutaneous leishmaniasis, and global production of medicines for treatment of cutaneous leishmaniasis is inadequate. Most antileishmanial medicines are produced by only a single manufacturer, and there are problems related to quality, low production capacity and lack of an adequate forecast of needs (resulting in long lead times for orders), which regularly cause stock ruptures in endemic countries. Countries endemic for cutaneous leishmaniasis do not have widespread use of other treatment methods (e.g. cryotherapy and thermotherapy), causing significant drawbacks in the case management of cutaneous leishmaniasis.

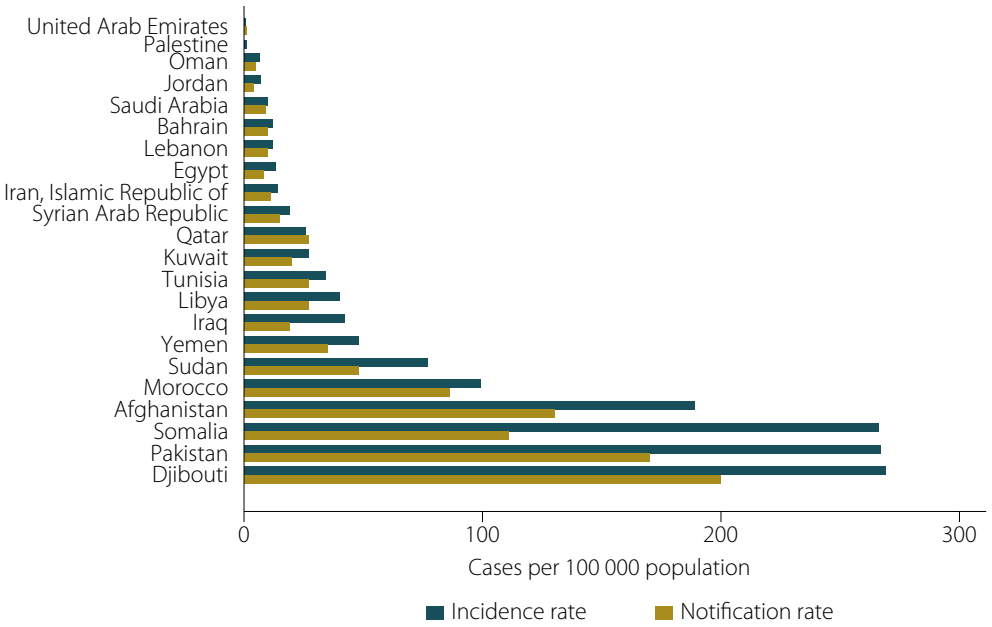
5.8.3 Tuberculosis

In 2018, about 10 million people worldwide were estimated to have developed TB and 1.5 million people lost their lives, including 250 000 people living with HIV/AIDS. Drug-resistant TB remains a global public health crisis; in 2018, about half a million people worldwide had drug-resistant TB and only one in three accessed treatment. In 2018, the incidence of TB in the Eastern Mediterranean Region was 115 per 100 000 population, which was lower than the global estimated incidence of 132 per 100 000 population and the third highest among WHO regions. In the Region during 2018, a total of 537 761 TB cases were notified out of a total estimated 810 000 cases, representing a treatment coverage (notified/estimated incidence) rate of 65%.

Five countries carry 91% of the TB burden in the Region, namely Pakistan (69%), Afghanistan (9%), Somalia (5%), Morocco (4%) and Sudan (4%). The incidence and case notification rates vary greatly in the Region: four countries have low incidence rates of

less than 10 per 100 000 population; 14 have rates between 10 and 100 per 100 000 population; and four countries have incidence rates above 100 per 100 000 population (Afghanistan, Djibouti, Pakistan and Somalia) (Fig. 56). In the Region, 38 000 multidrug-resistant TB cases were estimated in 2018 and only 12% (4566) had started treatment (out of total estimated) *(196)*. Five countries carry 95% of the drug-resistant TB burden in the Region, namely Pakistan (72%), Somalia (10%), Afghanistan (8%), Iraq (3%) and Sudan (3%).

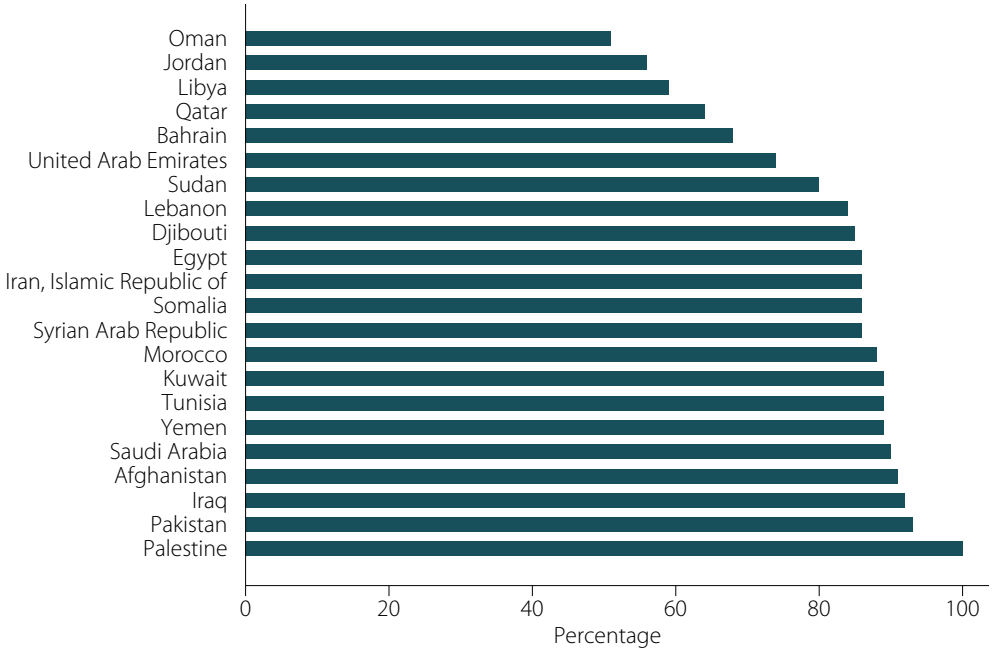
Fig. 56. *TB incidence and notification rates per 100 000 population, 2018*



Source: WHO (2020) (9); WHO (2019) (196).

Over the past two decades, the Region has made significant progress in response to the TB epidemic. The TB mortality rate declined by 42% between 2000 and 2018, from a best estimate of 19 per 100 000 population in 2000 and 11 per 100 000 in 2018. The Region achieved 91% treatment success rate among drug-susceptible TB patients (2017) and 65% among drug-resistant TB patients (2016), which is the highest rate among all WHO regions. At country level, the TB treatment success rate of new and relapse TB cases notified varies from 51% in Oman to 100% in Palestine (Fig. 57).

Fig. 57. *TB treatment success rate of new and relapse TB cases notified (%), 2017*



Source: WHO (2020) (9); WHO (2019) (197).

During 2018, five countries were responsible for 93% of missing cases, namely Pakistan (71%), Afghanistan (8%), Somalia (8%), Iraq (3%) and Sudan (3%). New diagnostic tools such as Gene-Xpert and line probe assay are increasingly available in the Region, which are expected to improve the diagnosis of drug-resistant TB.

Most countries have either updated or are in the process of updating their national strategic plans in line with the SDGs and WHO's End TB Strategy, and to accommodate the 2018 Political Declaration of the United Nations General Assembly High-level Meeting on TB. Discussions have started and technical support is being provided to countries to adopt the *Multisectoral accountability framework to accelerate progress to end tuberculosis by 2030* for use in their local context *(198)*. Countries in the Region with low disease burden are beginning to plan and target TB elimination. In all countries, focal staff have been trained on multidrug-resistant TB and latent TB infection management policies and guidelines.

The major challenges to ending TB in the Region include suboptimal political commitment, finding the missing one third of drug-susceptible TB cases and over 80% of drug-resistant TB cases, and prolonged humanitarian emergencies in several countries. In 2018, only 18% of available funds for TB came from domestic sources, 30% came from international sources (mostly the Global Fund), and 52% of TB requirements in the Region remained unfunded. Underreporting and questionable quality of TB time series data by non-public health sector providers, including the private sector, is also an important challenge that must be addressed in order to reach the targets set out in the End TB Strategy.

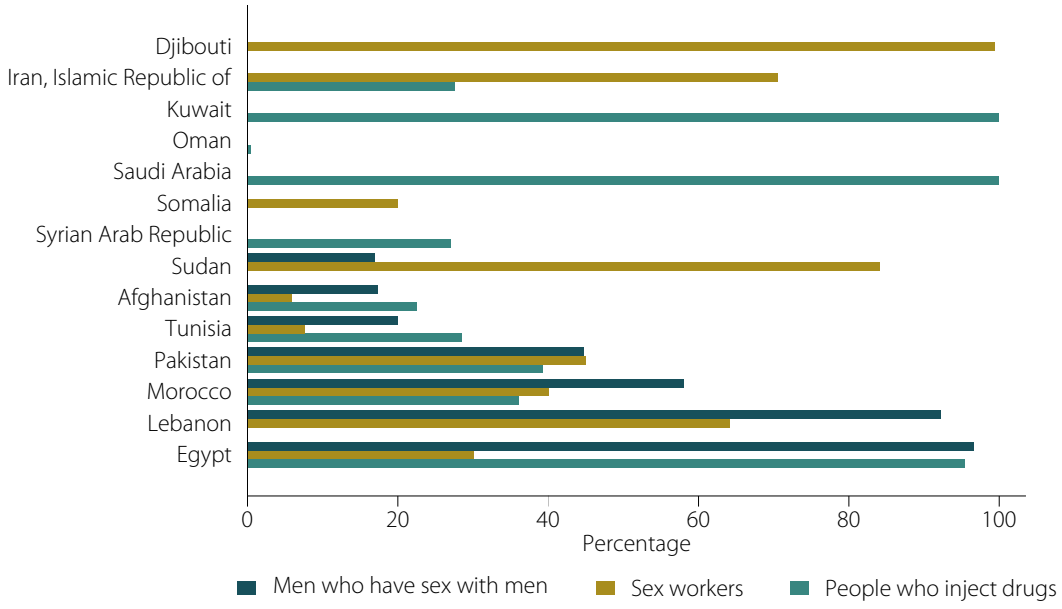
Member States are strongly advised to adopt the multisectoral accountability framework and to start preparations to compile their first report to the United Nations General Assembly in 2020. To achieve the regional targets, notification must increase from 65% to 90% of all estimated cases and from 12% to 80% for multidrug-resistant TB by 2020. The Region also has to sustain the current high level of treatment success rate of 91%. However, the multidrug-resistant TB treatment success rate of 65% needs urgent attention to reach 70% and above. Specialized technical and financial support is needed to ensure implementation of TB control activities in countries going through complex emergencies *(199)*.

5.8.4 HIV and AIDS

In the Eastern Mediterranean Region the prevalence of HIV is low, however, the HIV epidemic continues to grow. By the end of 2018, the number of people living with HIV in the Region reached 400 000, with 41 000 new HIV infections occurring during the year. The number of deaths among people living with HIV reached 15 000 in 2018. Among all WHO regions, the Eastern Mediterranean is experiencing the fastest growing HIV epidemic with a 32% increase in the number of new infections and a 63% increase in the number of AIDS-related deaths since 2010.

Only 32% of people living with HIV in the Region have been diagnosed, indicating limited access to HIV testing. Key population groups (people who inject drugs, men who have sex with men, sex workers, transgender people and prisoners) are particularly at risk of contracting HIV in the Region, with over 95% of new infections occurring among these groups. Limited data are available in the Region on people who have received an HIV test in the past 12 months and know the results (Fig. 58).

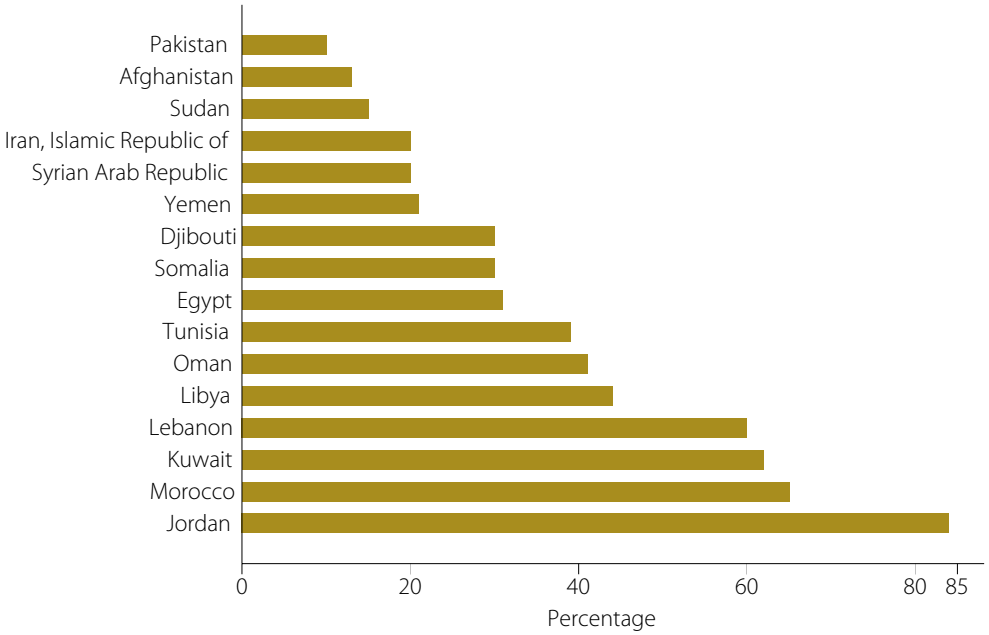
Fig. 58. *Key populations at higher risk who have received an HIV test in the past 12 months and know their results (%), 2011–2018*



Source: WHO (2020) (9).

By the end of 2018, 82 000 people in the Region were receiving antiretroviral therapy (ART) and coverage of ART stood at 21%, with particularly low coverage in higher burden countries such as Pakistan (10%) and Sudan (15%) (Fig. 59). The low ART coverage in the Region can be largely attributed to limited coverage of HIV testing services, inefficient case detection, late diagnosis, poor linkage to treatment services and attrition from treatment after initiation of ART *(22)*. To improve access to treatment, the first and most important responses are to expand the coverage of targeted HIV testing services, improve linkage to care and treatment, and adapt service delivery models to the needs of the key affected populations *(200)*.

Fig. 59. *Adults and children currently receiving ART among all people living with HIV (%), 2018*



Source: UNAIDS (2019) (201).

In May 2019, Pakistan experienced an HIV outbreak when a high number of children tested positive for HIV. An investigation uncovered widespread unsafe injection practices and weak blood safety precautions and regulations. By late December 2019, more than 1204 HIV cases had been identified including 956 children under 15 years old. Based on the outbreak investigation findings, the response teams in consultation with local stakeholders and partners developed a plan for both immediate and long-term actions. An ART treatment centre was established in Larkana to ensure the immediate linkage of the newly diagnosed HIV cases to care and treatment.

5.8.5 Viral hepatitis

In 2016, the overall prevalence of hepatitis B surface antigen (HBsAg) was 3.3% in the Eastern Mediterranean Region, accounting for an estimated 21 million people chronically infected with hepatitis B. In 2015, the cumulated incidence of chronic hepatitis B

(measured as the prevalence of HBsAg among children under 5 years) was 1.6% in the Region, surpassing the global incidence rate (1.3%) and higher than that of other WHO regions except the African Region *(202)*. In the Region, an estimated 85% of all hepatitis B cases live in five countries: Pakistan, Somalia, Sudan, Yemen and Egypt. Since 2016, counties have been stepping up their efforts to strengthen vaccination programmes for hepatitis *(203)*. By the end of 2018, the median coverage of the hepatitis B third dose was 82% in the Region *(204)*. The number of countries implementing the hepatitis B birth dose reached 18 in 2018, and regional coverage of hepatitis B birth dose increased from 27% in 2016 to 33% in 2018; however, this coverage remains far below the global target.

The Eastern Mediterranean Region has the highest prevalence of hepatitis C virus in the world at 2.3%, which accounts for around 15 million chronically infected people. The incidence of hepatitis C in the Region is 62.5 per 100 000 population, which is almost three times higher than the global rate (23.7) and higher than all other WHO regions *(202)*. Unsafe health care procedures, including unsafe blood transfusion and unsafe injection, are the leading causes of hepatitis C infection in the Region. The proportion of unsafe health injections is 14% in the Region, which is the highest among all WHO regions. Injecting drug use features as the second most common mode of transmission of hepatitis C infection. In the Region, there are more than half a million people who inject drugs, about half of whom are infected with hepatitis C *(202)*.

There are examples of best practice in response to viral hepatitis epidemics the Region. Egypt continues to be a global success story in hepatitis C treatment, with almost 60 million people screened and nearly 3.5 million people treated by the end of 2019. In addition, both Egypt and Pakistan have succeeded in reducing the price of direct-acting antivirals to less than 0.1% of the global price, enabling rapid scale-up of treatment *(205)*. Progress has been noted in other areas, including the development of national strategic plans for the prevention and control of viral hepatitis in 12 countries. However, progress is slow and countries face common challenges including: weak strategic information data to guide hepatitis response planning and monitoring; lack of coordination between stakeholders; limited allocation of national resources; lack of donor funding; and the high cost of diagnostics and treatment. These challenges are hindering rapid scale-up of testing and treatment for viral hepatitis in the Region.

5.9 Antimicrobial resistance

Antimicrobial resistance – the development of resistance to antimicrobials in microorganisms (bacteria, viruses, fungi and parasites) – has emerged as a major global issue with serious health and economic impacts. Estimates suggest that a continued rise in antimicrobial resistance up to 2050 could lead to 10 million people dying every year and a reduction of 2–3.5% in GDP *(206)*. It is estimated that antimicrobial resistance could cost up to US$ 100 trillion globally if the growth of resistance is not slowed immediately.

Misuse and overuse of antimicrobial medicines, lack of awareness of the magnitude of antimicrobial resistance, absence of robust antimicrobial resistance surveillance systems, and inadequate infection prevention and control programmes are among the main factors contributing to the growth of antimicrobial resistance globally. The other issue is common use of antimicrobial drugs to increase food production. An analysis by the

Organisation for Economic Co-operation and Development has projected that between 2010 and 2030 antimicrobial consumption in food animal production will climb by 67% *(207)*.

The situation of antimicrobial resistance in the Region is very concerning considering the challenges, including: inadequate infrastructure to regulate prescription and use of antibiotics; limited local data and evidence on the magnitude of the problem; inadequate awareness and understanding about the problem at all levels, from the public to policy-making level; and absence of national surveillance systems to track antimicrobial resistance in most countries.

At policy level, the response to antimicrobial resistance in the Region dates back to 2002, when the Regional Committee passed resolution EM/RC49/R.10 urging Member States to establish a national intersectoral task force, under ministry of health leadership, to contain antimicrobial resistance. The growing problem of antimicrobial resistance, and the necessity of developing surveillance systems and ensuring the rational use of antimicrobials, were also highlighted in resolution EM/RC60/R.1 in 2013. However, planning for concrete interventions is still required to provide a tangible response to the problem in the Region *(208)*.

In October 2017, the 64th session of the Regional Committee adopted resolution EM/RC64/R.5 on antimicrobial resistance in the Eastern Mediterranean Region. The resolution urged Member States to: a) develop and endorse national action plans for antimicrobial resistance and allocate adequate resources for their implementation; b) establish a multisectoral high-level coordinating mechanism; c) develop and enforce policies and regulations to prevent purchase of antimicrobials without prescription; d) establish antimicrobial resistance surveillance at the national level and join the Global Antimicrobial Resistance Surveillance System (GLASS); e) establish national infection prevention and control programmes in line with resolution EM/RC57/R.6; and f) establish antimicrobial stewardship programmes in the human and animal sectors.

5.9.1 Development of national action plans on antimicrobial resistance

Much progress was made in 2019 on the antimicrobial resistance agenda in the Region. Fifteen out of the 22 countries developed and formally endorsed national action plans on antimicrobial resistance. Four additional countries have completed their plans, pending formal approvals, and the remaining four countries are in the process of development. All national plans were developed in alignment with WHO's *Global action plan on antimicrobial resistance* (2015) and reflect the political commitment of the countries. The majority of countries developed their national action plans in collaboration with all sectors (health, animal and environment) to reflect the One Health approach to antimicrobial resistance. The level of implementation of these plans varies greatly among countries.

Seventeen countries in the Region have established multisectoral coordination groups in the form of national antimicrobial resistance committees: Afghanistan, Bahrain, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Libya, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia and United Arab Emirates. There are variations in the structure, membership, roles and responsibilities of these structures

across the countries of the Region. In 2019, WHO supported Morocco to conduct a national consultation to operationalize effective governance coordination mechanisms on antimicrobial resistance.

5.9.2 Surveillance of antimicrobial resistance, use and consumption

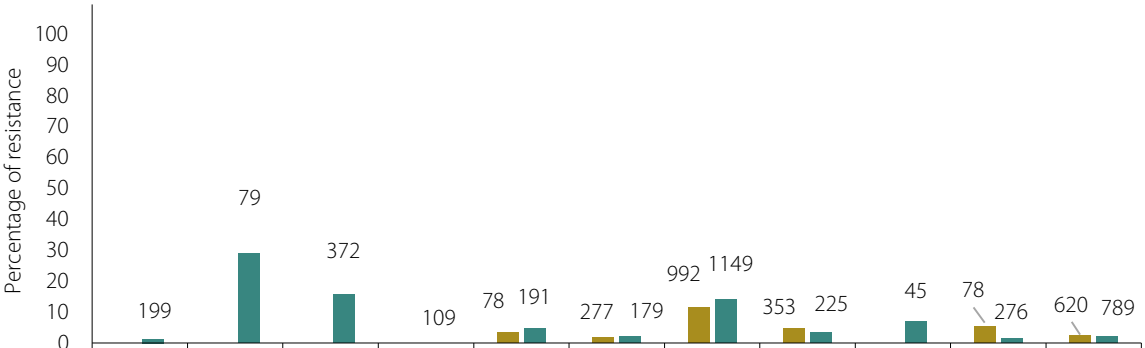
WHO launched the Global Antimicrobial Resistance Surveillance System (GLASS) in 2015 as the first worldwide platform for data sharing on antimicrobial resistance. GLASS enables countries to collect, analyse and share standardized and validated data on antimicrobial resistance. The system combines patient, laboratory and epidemiological data to picture the situation of antimicrobial resistance among populations. Eighteen countries in the Region (Afghanistan, Bahrain, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Lebanon, Libya, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen) are enrolled to GLASS. Fifteen of those countries (excepting Libya, Palestine and Qatar) reported data to the GLASS data call in May–July 2019.

The Islamic Republic of Iran, Jordan, Pakistan and Tunisia have begun the first phase of establishing national antimicrobial resistance surveillance systems. WHO has supported their national reference laboratories for antimicrobial resistance to set up proper laboratory quality management systems, according to international standards. Onsite assessments have been conducted for national reference laboratories for antimicrobial resistance in seven countries: Bahrain, Egypt, Jordan, Islamic Republic of Iran, Pakistan, Sudan and Tunisia. The assessments showed that the laboratories' technical workforce are skilled and competent; however, there is a shortage of workforce. There is also a need to define accreditation processes to ensure the quality of the laboratories. Gaps were highlighted in internal quality control practices, as essential quality control reference strains are missing onsite. In addition, baseline review of laboratory infrastructure identified deficits in equipment maintenance and calibration in the assessed low- and middle-income countries.

In general, challenges identified for implementation of national antimicrobial resistance surveillance include: lack of or limited microbiology laboratory infrastructure and capacities for detecting resistance at national and/or facility level; lack of qualified laboratory staff; lack of or limited external quality assurance programmes; and lack of necessary laboratory supplies. In countries affected by conflicts and crises, laboratory capacities are further weakened and no microbiology capacity exists at either national or hospital level. In these countries, clinical specimens were rarely sent to hospital laboratories (except in severe cases), no laboratory supplies were made available, and physicians relied on providing antibiotics to admitted patients to compensate for the lack of diagnostic services.

Regional data reported to GLASS in 2018–2019 showed an extremely high resistance profile of urgent threat pathogens; for example, carbapenem-resistant *Acinetobacter* and carbapenem-resistant *Enterobacterae*. Regional data also show carbapenem-resistant *Escherichia coli* (Fig. 60) and carbapenem-resistant *Klebsiella pneumoniae* (Fig. 61). These pathogens are high-threat based on their clinical and economic impact and transmissibility. In addition, carbapenems are considered as last-resort antibiotics to treat these infections.

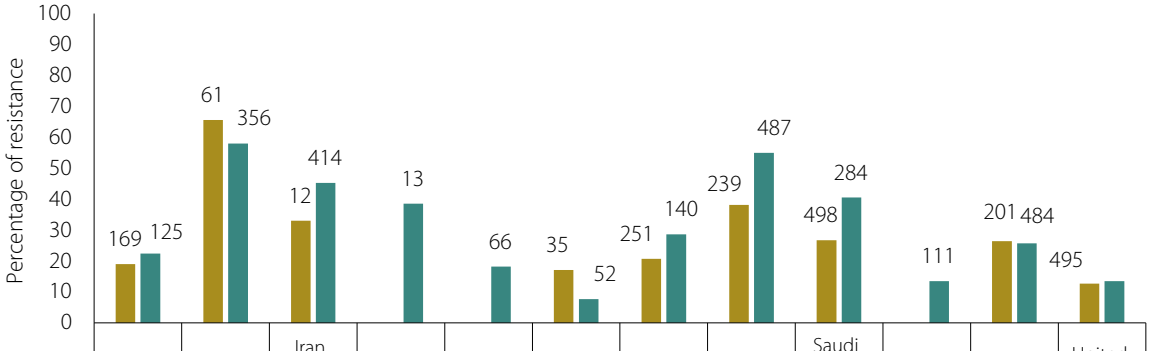
Fig. 60. *Carbapenem-resistant Escherichia coli among blood isolates, 2018–2019*



	Bahrain	Egypt	Iran, Islamic Republic of	Jordan	Lebanon	Oman	Pakistan	Saudi Arabia	Sudan	Tunisia	United Arab Emirates
2018					3.8	1.4	11	4		5.1	2.1
2019	2	30.4	16.7	0	5.2	1.7	13.6	3.6	6.7	1.4	1.9

Note: Number of isolates tested are shown on the graph; percentage of resistance is shown in the table.
Source: GLASS database (2019) (209).

Fig. 61. *Carbapenem-resistant Klebsiella pneumoniae among blood isolates, 2018–2019*



	Bahrain	Egypt	Iran, Islamic Republic of	Iraq	Jordan	Lebanon	Oman	Pakistan	Saudi Arabia	Sudan	Tunisia	United Arab Emirates
2018	19	65.6	33			17.1	20.7	38.1	26.7		26.4	12.7
2019	22.4	58.0	45.2	38.5	18.2	7.7	28.6	55.0	40.5	13.5	25.7	13.5

Note: Number of isolates tested are shown on the graph; percentage of resistance is shown in the table.
Source: GLASS database (2019) (209).

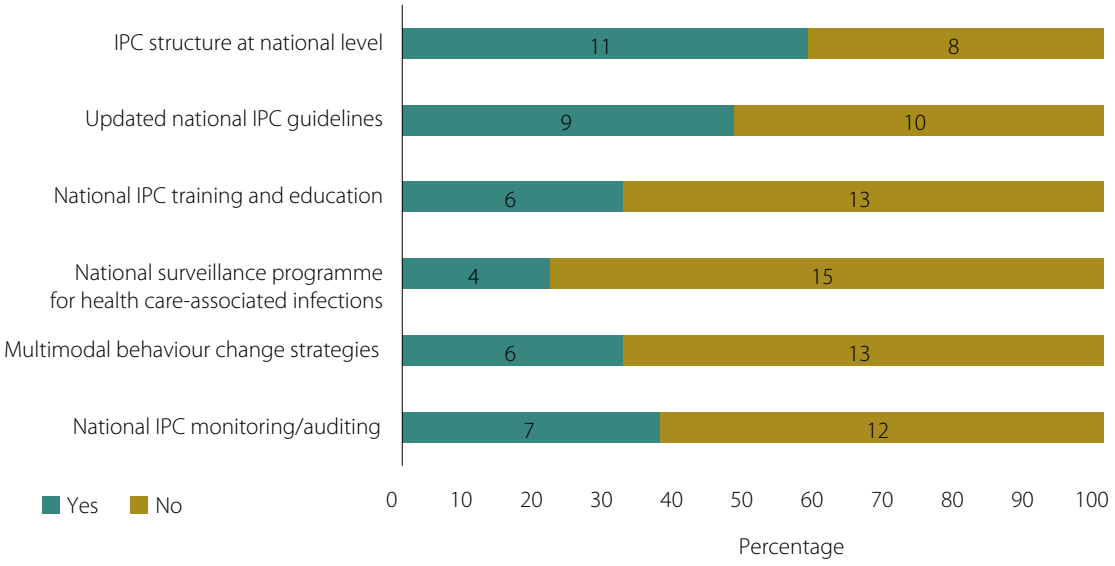
Seven countries (Iraq, Jordan, Lebanon, Pakistan, Sudan, Tunisia and United Arab Emirates) have conducted point prevalence surveys on antimicrobial use, including 137 tertiary or secondary care hospitals. Preliminary results showed that between 35% and 78% of hospitalized patients had received antimicrobials during the survey period, indicating a high proportion of antimicrobial use in the Region. The surveys identified quality improvement projects such as improving correctness and completeness of

patient antimicrobial data, the need for standardized antimicrobial treatment guidelines, and the need for diagnostic and antimicrobial stewardship. Survey results are helping the countries to develop appropriate plans of action to address overuse and misuse of antimicrobials in health care facilities.

5.9.3 Infection prevention and control programmes

National and facility-level IPC programmes are very limited in the Eastern Mediterranean Region. Data on the status of the national IPC programmes were collected for 19 countries (Afghanistan, Bahrain, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen) through personal interviews with national IPC focal points, using the WHO IPC Assessment Framework tool. The results showed that 11 out of 19 countries had a specialized IPC structure at the national level, nine countries had up-to-date national IPC guidelines, six countries had national IPC training programmes, four countries implemented national surveillance programmes for health care-associated infections, six countries were implementing various aspects of multimodal behaviour change strategies, and seven countries have national IPC auditing activities (Fig. 62).

Fig. 62. *Status of IPC programmes in 19 countries of the Region, 2019*



*Source: WHO global survey on IPC and hand hygiene (2019), regional data (*https://www.who.int/infection-prevention/campaigns/ipc-global-survey-2019/en/).

5.9.4 Antimicrobial stewardship and awareness programmes

In 2019, several countries in the Region generated evidence on antimicrobial resistance and on antibiotic use and consumption. These countries will need to utilize the evidence to design and implement targeted stewardship programmes. Many challenges exist in the Region that hinder the successful implementation of such programmes including: lack of or limited numbers of infectious disease consultants and/or clinical pharmacists

essential for managing programmes; lack of technical capacities at the national (health ministry) level to coordinate programmes; and lack of information technology capacity to monitor the impact of activities.

In 2019, WHO provided technical support to Jordan as the first country in the Region to design and implement national and facility-level antibiotic stewardship programmes. This was done in collaboration with international and regional experts (infectious disease physicians and clinical pharmacists) who reviewed the antimicrobial resistance data generated by Jordan and advised on the future implementation of stewardship activities. Priority interventions focused on surgical prophylaxis stewardship programmes, diagnostic stewardship and shortening the duration of treatment of community-acquired pneumonia.

Efforts are being made to increase awareness of antimicrobial resistance in the Region through World Antibiotic Awareness Week, a global event to raise awareness of antibiotic resistance and encourage best practices among the general public, health care workers and policy-makers to avoid the further emergence and spread of antimicrobial resistance. In 2019, key campaign strategies included flyers and social media messages, as well as a video discussing the problem of antibiotic resistance which was broadcast during the week. In addition, WHO has supported regional representation in the International Federation of Medical Students' Associations campaign to promote the importance of good antibiotic use among medical students. The Regional Office has also developed a Tailoring Antimicrobial Resistance Programme to support countries to address drivers of antimicrobial resistance and promote behaviour change in antibiotic use.

5.10 Environment, climate change and health

5.10.1 Environment and health

Environmental risk factors such as air, water and soil pollution, lack of sanitation and inadequate hygiene, chemical exposures, climate change and radiation contribute to more than 100 diseases and injuries. The burden is particularly high among children: it is estimated that 26% of childhood deaths and 25% of the total disease burden in children under 5 could be prevented through reduction of environmental risk factors. Air pollution alone is responsible for about 100 premature deaths in children per 100 000 population *(22)*. In the Eastern Mediterranean Region, the top five causes of environment-related deaths are heart disease, stroke, unintentional injuries, respiratory infections and diarrhoeal diseases, which target the most vulnerable people who are children and the elderly *(210)*.

Air pollution is affecting almost everyone in the world. In 2016, 91% of the world's population did not breathe clean air, and more than half of the urban population were exposed to outdoor air pollution levels at least 2.5 times above the safety standard set by WHO. It has been estimated that indoor and outdoor air pollution together caused an estimated 7 million deaths in 2016, one in eight deaths, of which 4.2 million premature deaths were due to outdoor air pollution. Inadequate access to clean fuel and clean

cooking technology is the main source of indoor air pollution. Globally, access to clean fuel and technologies for cooking has made slow progress to reach 59% in 2016, which is only a 10% improvement compared to 2000. Over 3 billion people are not using clean fuel and non-polluting stoves, which led to an estimated 3.8 million deaths from NCDs (including heart disease, stroke and cancer) and acute lower respiratory infections in 2016 due to household air pollution.

Over 98% of the urban population in the Region live in places with unsafe air to breathe with regular exposure to high loads of pollutants (even 12 times higher than WHO-recommended safe levels) in the form of soil dust particles, smoke emitted by forest fires, ozone and human-made emissions from almost unregulated large urban centres. Annual mean concentration of fine particulate matter in urban areas is higher in the Region than the global rate and the second highest among all WHO regions. This causes about 500 000 premature annual deaths and other health burdens that disproportionately affect the poor, women, children and the elderly. Age-standardized mortality rate attributed to household or ambient air pollution is higher in the Region than the global rate and the third highest among WHO regions (Table 9 and Fig. 63) *(148, 210, 211)*.

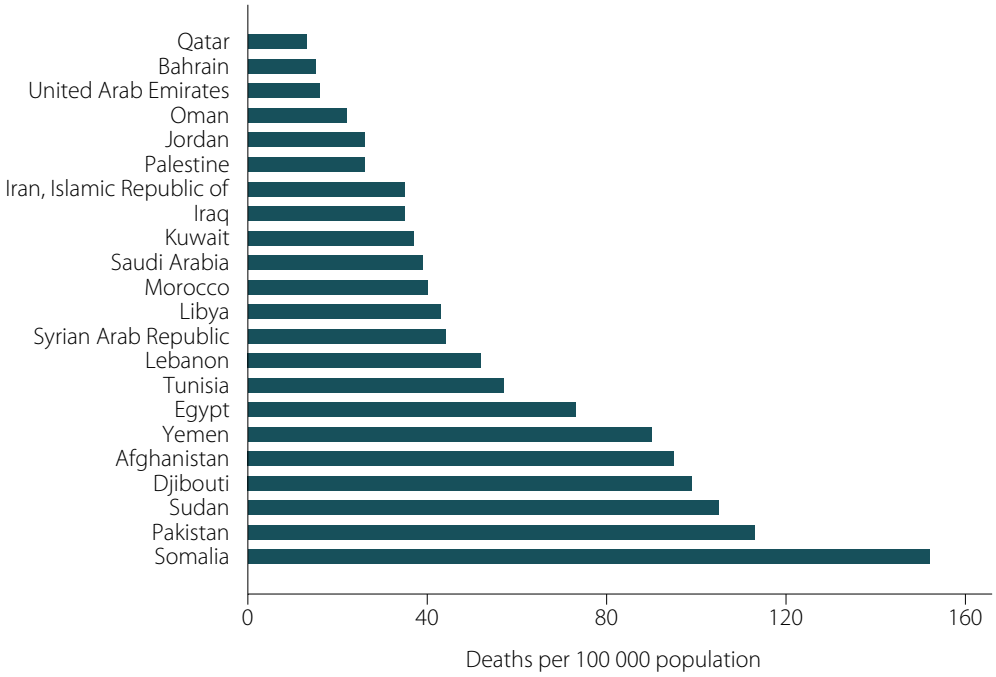
More than half of the world's population is exposed to unsafe water, sanitation and hygiene (WASH) services that cause 800 000 deaths each year *(212)*. In the Region, the WASH-related mortality rate is lower than the global rate and is the third lowest among WHO regions (Table 9). Mortality rate due to unsafe WASH is more than 10 per 100 000 population in Afghanistan, Sudan, Pakistan, Djibouti, as high as 86.6 per 100 000 population in Somalia, and zero in all GCC countries (Fig. 64). The other environmental factor causing health burdens is unintentional exposure to toxic substances, which mostly takes a toll among children aged under 5 years old and the elderly. The Region has the second highest mortality due to unintentional poisoning among all WHO regions (Table 9). Globally, men are more exposed to unintentional poisoning; however, this is not the case in the Eastern Mediterranean Region where the male to female ratio for unintentional poisoning is 0.68 *(10)*.

Table 9. *Regional and global cause-specific mortality rates due to environmental risk factors, 2016*

	Age-standardized mortality rate attributed to household or ambient air pollution (per 100 000 population)	Mortality rate attributed to exposure to unsafe WASH services (per 100 000 population)	Mortality rate from unintentional poisoning (per 100 000 population)
Regional	125.0	10.6	1.5
Global	114.1	11.7	1.4

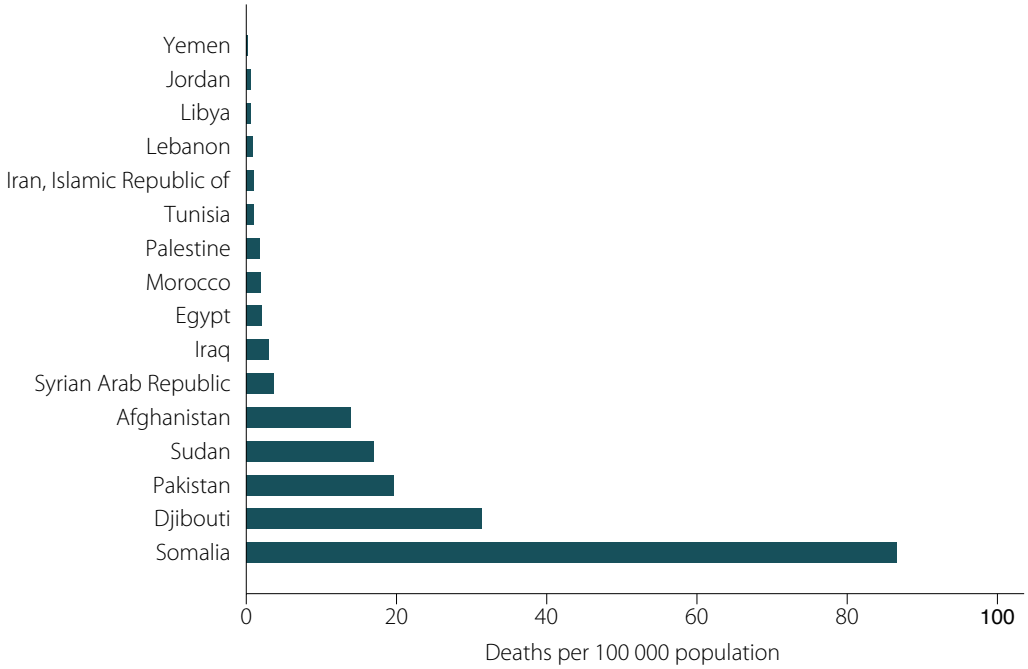
Source: WHO (2019) (10).

Fig. 63. *Mortality rate attributed to household and ambient air pollution, 2016*



Source: WHO (2020) (9).

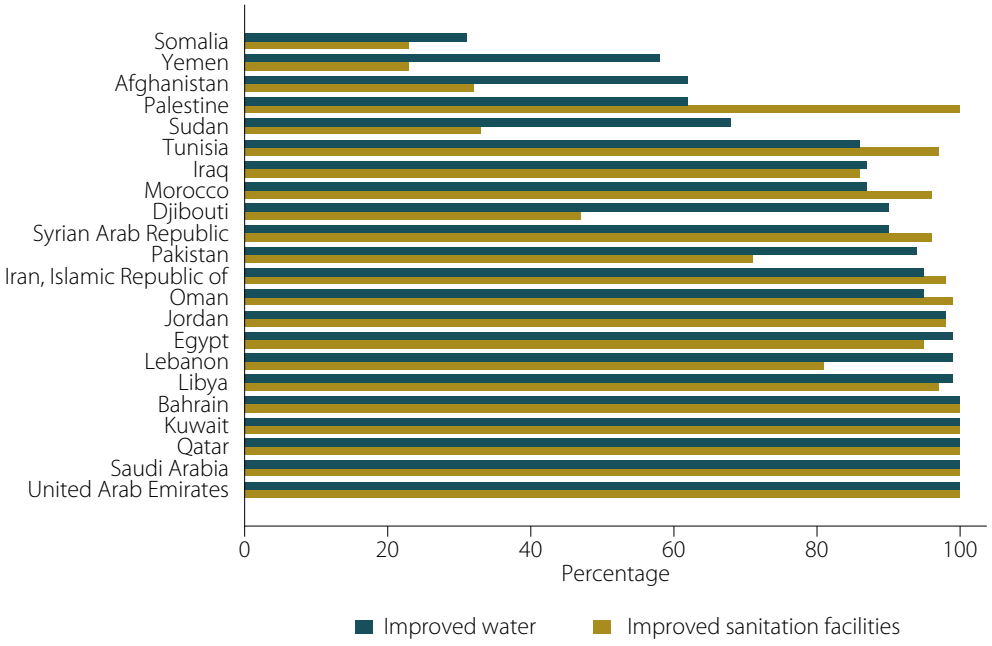
Fig. 64. *Mortality rate attributed to unsafe WASH services, 2017*



Source: WHO (2019) (10).

Increasing access to clean drinking water and sanitation services is the key intervention for controlling cholera and waterborne diseases. In the Region, low-income countries in particular (such as Afghanistan, Djibouti, Somalia, Sudan and Yemen) are suffering from limited access to safe drinking water and sanitation services (Fig. 65).

Fig. 65. *Access to improved drinking water and sanitation facilities (%), 2018*



Source: WHO (2020) (9).

5.10.2 Climate change and health

Climate change has both direct and indirect effects on human health. There is clear evidence that extreme temperatures are associated with increased human mortality and morbidity, and that heavy rainfall may lead to emergence of waterborne or vector-borne diseases in places where they were not previously endemic. Indirect health effects related to the deterioration of air, soil and water quality may include increased exposure to allergens, air pollution and infectious diseases, which all significantly contribute to the increased frequency of respiratory diseases. Additionally, other activities related to industry, transportation and urbanization, among others, can interact with and exacerbate the harmful effects of climate change especially as related to air quality. These changes will most likely impact agriculture and the food supply and may eventually lead to a change in diet and malnutrition in the Eastern Mediterranean Region.

Projections suggest that the Eastern Mediterranean Region will be the second region most affected by climate change, including a shortage in renewable water supply which is estimated to reach a 50% gap by 2050. The synergy of natural disasters, rapid urbanization, water scarcity and climate change is a serious challenge for policy and planning. Recent wars and conflicts in the Region have led to an increasing number

of refugees residing in overcrowded settlements with poor hygiene which, together with weakening of sanitation infrastructures, might generate favourable conditions for cholera and other waterborne disease outbreaks. Flushing caused by heavy rains may transport waste to large rivers or coastal lagoons, and eventually to human populations. Failing sewage infrastructure, alongside such changes, can increase waterborne infectious diseases *(213)*.

In 2017, the Regional Committee endorsed the framework for action on climate change and health in the Eastern Mediterranean Region 2017–2021 *(214)*, which was aligned with the WHO-led strategy on health and environment for Arab states (2017–2030). In this context, eight countries have developed national action plans to implement the regional strategy and its related framework for action. Furthermore, eight Member States have updated their national health and climate profiles, while 82 cities in 16 countries of the Region report air quality data through the WHO burden of disease database. The regional plan of action to implement the road map for an enhanced global response to the adverse health effects of air pollution (2017–2021) is ongoing, and air quality monitoring and reporting has increased. The number of cities in the Region reporting ambient air quality monitoring data through the WHO Global Urban Ambient Air Pollution Database has increased by 25% *(22)*. Status reports on water supply and sanitation, including in-depth monitoring of SDG 6 targets, have also commenced in five Member States. The regional food safety plan of action (2017–2022), which aims at strengthening food safety systems based on the "fork to plate" approach, is a further regional platform to address the effects of environmental changes *(211)*.

6. Other priority areas for action in the Region

6.1 Migration and refugees

Evidence on the health status of migrants and refugees in the Eastern Mediterranean Region is limited. Migrants and refugees are at risk, as are host populations, of acquiring infectious diseases and developing longer term conditions such as NCDs and mental disorders. In addition, refugees may already be suffering from conditions that require ongoing treatment, and as a result of conflict they are more susceptible to psychological problems. Migrants tend to be healthy, but depending on their employment status, and where they transition and their destination, they may acquire occupational injuries and/or infectious diseases. Working in low-paid jobs or on insecure, temporary or illegal contracts can lead to migrants' social exclusion, limited access to health services and vulnerability to high levels of stress (and eventually depression), as well as early onset of NCDs such as CVDs. Such consequences can be attributed to the absence of proper national laws to protect migrants' rights.

6.1.1 Policy and legislative response to migrant and refugee health

Several countries in the Region have taken legislative and high-level policy measures to promote refugee- and migrant-sensitive health policies in order to provide legal and social protection and interventions to ensure the fundamental rights of refugees and internally displaced persons. In Djibouti, the National Refugee Law adopted by Parliament in 2016 was promulgated in 2017 to ensure refugees' fundamental rights including access to health services. The Jordan Response Plan 2018–2020 has adopted a resilience-based approach to maintain continuity of care by responding to the short-term needs of refugees alongside those of vulnerable Jordanians, and by guaranteeing mid- to long-term response through strengthening of institutional capacities. However, after an influx of funds from the European Union to cover the costs, since 2016 there has been a reduction in funding and cutbacks in packages afforded to Syrians. In Pakistan, the Government in collaboration with UNHCR developed a five-year health strategy for 2014–2018. The strategy mainstreamed the most vulnerable refugees into the national health system to allow their easy access to communicable disease and NCD services provided through primary health care *(215)*. As a general rule, UNHCR negotiates a deal with each country to cover refugees by the national health system, even if countries are not signatories to the 1951 Convention relating to the Status of Refugees and the 1967 Protocol.

The Regional Office is addressing the health status of migrants and refugees through the development of a regional framework to mainstream refugee and migrant health

in all policies (2019–2023). The regional framework is based on resolution WHA70.15 on Promoting the health of refugees and migrants, the Global Compact for Refugees, the Global Compact for Safe, Orderly and Regular Migration, and WHO's *Global action plan to promote the health of refugees and migrants (216, 217)*.

6.1.2 Inclusive health information systems

Two types of migrant workers are present in the Region: regular migrants and irregular migrants. Regular migrants have varying types of access to a country's health care system, based on their employment contracts. On the other hand, irregular migrants must pay out of pocket for health services, which can incur catastrophic expenditure. Refugees are usually able to access health services as they are given a status in the country and as such, what is offered for host communities is offered to the refugee population. Providing accurate information both to service providers and to refugees/migrants can facilitate access to health services. Available evidence suggests that reducing communication and language barriers is the key intervention to improve access to services for refugees and migrants. Countries also need to make health services available for refugee and migrant populations without stigma and discrimination.

In order to develop informed policy and response, health systems need reliable surveillance and information systems to collect required data on refugees and migrants. Fourteen countries in the Region are collecting data disaggregated by nationality. However, data disaggregation depends on the strength of a country's health information system, and data collection must be followed by data analysis and dissemination. In addition, unclear definitions of refugees and migrants within national health information systems makes stratification challenging.

There have been efforts in the Region to enhance health monitoring and information systems to collect reliable data on health status and service provision to refugees *(215)*. In Afghanistan**,** the Ministry of Public Health launched a monitoring and reporting system, in collaboration with WHO and the International Organization for Migration (IOM), to track mass population movements and register attacks on and closure of health facilities in order to facilitate access of displaced populations to existing health facilities in conflict-affected areas. In the Syrian Arab Republic, WHO has strengthened and expanded the disease surveillance and response system for early detection and control of highly contagious childhood diseases, such as polio and measles; however, the system does not disaggregate data by residency.

6.1.3 UHC and financial protection for migrants and refugees

To achieve UHC, countries of the Region need to provide equitable access to quality affordable essential health services, medicines and vaccines alongside financial support and protection for refugees and migrants, similar to the host community. To ensure financial protection in Sudan, a high-level agreement was made to include urban refugees in the national insurance scheme. The refugees have been included in the UHC scheme and UNHCR is covering the cost, which is higher on average than for the host community. In the Islamic Republic of Iran, the Government's universal public health insurance initiative offers all registered refugees the possibility to enrol and benefit from a comprehensive health insurance package similar to that available to Iranians. In

Afghanistan, the basic package of health services ensures access of the whole population to essential health services, including migrants, returnees and internally displaced persons (regardless of their documentation status).

In Sudan, WHO supported the Federal Ministry of Health's response to acute watery diarrhoea in cholera treatment centres in states hosting refugees from South Sudan, treating over 13 000 cases. In addition, the Ministry, supported by WHO, UNHCR and health partners, conducted a preventative oral cholera vaccination campaign covering approximately 140 000 South Sudanese refugees. In Lebanon, the Ministry of Public Health, with the support of international nongovernmental organizations and relevant United Nations agencies, provides affordable primary health care, mental health services and free vaccination for every person residing in Lebanon. Displaced Syrians can access primary health care services through mobile medical units which provide consultations, dispense medication free of charge and refer patients back to primary health care centres. In Morocco in 2003, the Ministry of Public Health allowed migrants to receive free services for communicable disease control programmes and in 2008, this free access was expanded to all services provided at primary health care centres. The same is happening in the Islamic Republic of Iran and Pakistan, where access to health care is free for Afghani refugees.

6.1.4 Protecting the health and well-being of women, children and adolescents

Protecting and improving the health and well-being of women, children and adolescents remains a priority in planning health services for refugees and internally displaced persons. In Jordan, the Government provides a free-of-charge essential service package to eligible refugees, including counselling, antenatal care, family planning and vaccinations; however, deliveries are not included. In Lebanon, the health sector supports the efforts of the Ministry of Education and Higher Education/Ministry of Public Health/WHO school health programme to improve adolescent and youth health. In Pakistan, UNHCR, in line with the Convention on the Rights of the Child, has put focus on promoting gender equality and preventing gender-based violence through community-based initiatives. The Refugee-Affected and Hosting Areas programme supports capacity-building for community midwives in Afghan refugee villages *(215)*.

6.1.5 Addressing NCDs and mental health, with a focus on community-based initiatives

Providing humanitarian assistance and long-term public health interventions to reduce mortality and morbidity through addressing NCDs is another key measure to respond to refugees' health needs. In 2017, WHO together with the Afghan Red Cross began to strengthen the response to NCDs among internally displaced persons and returnees by supplying essential medicines and enhancing the capacity of frontline workers in management of NCDs. In Lebanon**,** the Ministry of Public Health with WHO support, has initiated the NCDs screening protocol to detect risk of CVDs and provide treatment when needed. In Somalia, the Federal Ministry of Health in collaboration with IOM is deploying a mobile and rapid response team adaptable for all aspects of the development, humanitarian, transition and recovery phases among migrants, internally displaced persons and populations on-the-move *(215)*.

Promoting continuity of care for refugees and migrants through community-based initiatives is an efficient approach to reach large number of refugees. In this context, there have been prominent examples in the Region particularly in the field of mental health. In Egypt, a community-based psychosocial workers network in partnership with UNHCR provides culturally relevant psychosocial and mental health support to Syrian refugees. In Iraq, mental health is being integrated into the primary health care services of refugee camps through building the capacity of non-specialized health staff and community workers, with a focus on assessing and managing priority mental health conditions and establishing referral pathways between mental health and psychosocial support actors and primary health care units in camps. In the Syrian Arab Republic, WHO has supported the integration and scale up of mental health and psychosocial support into primary health care, specifically through training health care staff and community health workers on basic mental health interventions. Over 400 primary health care and community centres throughout the Syrian Arab Republic are now offering integrated mental health and psychosocial support services. In Palestine, collaborative ongoing efforts between WHO and UNRWA support health service provision for Palestinian refugees, particularly the integration of mental health services into primary health care within the framework of the family practice approach *(215)*.

6.2 Healthy settings and urban planning

Community-based initiatives are divided into four categories: healthy villages; healthy cities; health promoting schools; healthy markets; health workplaces; and gender in health and development. The common goal of these approaches is to create political, physical and economic policies and multisectoral plans of action for all relevant stakeholders and different segments of the community which will produce a positive impact on the overall environment and quality of life. These community-based initiatives have been piloted and implemented in various forms in most countries of the Eastern Mediterranean Region. Despite successful implementation in some countries, the main challenge has been ensuring sustainability and commitment in order to scale up and expand implementation *(153)*.

Cities in the Region are facing several challenges such as environmental and transportation pollution, communicable diseases, NCDs, drug use, unemployment, inadequate access to clean water and sanitation, violence, sedentary lifestyles, mental illness, refugees and crowding. These challenges are aggravated by conflicts and political unrest. Urban health and healthy cities are the two main frameworks for developing health initiatives at city level. Healthy cities and health villages in the Region are based on multisectoral and community-based interventions under a common vision for health and well-being.

The Region has two decades of experience in successful community-based initiatives that strengthen community involvement, ownership and leadership in sustainable community development and health improvement. The healthy cities programme was initiated for the first time in the Islamic Republic of Iran. In 2012, the WHO Regional Office established the Regional Health Cities Network where currently 97 cities joined from Afghanistan, Bahrain, Egypt, the Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Sudan, Tunisia and United Arab Emirates, guided by the WHO Regional Office 80 indicators for implementing the Health Cities Programme *(218)*. The programme has a dynamic website, and any city with the political

commitment to take actions toward a healthy city can apply to join the Network. The programme addresses issues such as improving health services, water supply, sanitation, pollution, housing, promotion of healthy lifestyles, income generation, education, women's issues and children's needs *(219)*.

During the past few years, the healthy cities and villages programme has been revitalized, mainly in GCC countries and the Islamic Republic of Iran *(220)*. In Jordan, the Jordan Noncommunicable Disease Alliance has also begun work on creating healthy cities with a successful implementation in Amman in collaboration with Bloomberg Healthy Cities Network. To move towards sustainable healthy cities in the Region, the local communities need to be involved in assessing needs, identifying priorities, designing, implementing and evaluating related plans and programmes to build local ownership and enhance sustainability *(153)*.

6.3 Role of civil society, nongovernmental organizations and networks

6.3.1 Civil society organizations

The four priorities and functions of civil society are awareness, advocacy, accountability and access. A mapping of civil society organizations in the Region by the Eastern Mediterranean NCD Alliance showed the growth of organizations working in the area of NCDs, with a focus on prevention. However, the overall number of civil society organizations working on NCDs is still very low in the Region.

Civil society plays a vital role in raising awareness among a variety of audiences, including the general public, marginalized populations and even government stakeholders. Some prominent examples in the Region exemplify this diversity in audience, such as community-based programmes in the Islamic Republic of Iran, advocacy by nongovernmental organizations for tobacco cessation in Egypt, and breast cancer screening and awareness initiatives in Jordan. Factors for success include multisectoral partnerships, innovative and holistic means of communication, and inclusion of target populations in planning, monitoring and evaluation efforts that allow for continuous improvement.

The mapping of civil society organizations in the Region highlights specific areas where organizations can be particularly successful and influential in advocacy. The increased acceptability of civil society's role in the multicultural context of the Region can be used to convey tailored health promotion messages, especially gender-sensitive messages. For example, civil society organizations play an important role in promoting healthy habits such as physical activity among women in the Region. Civil society organizations can be involved in addressing the health workforce gap or providing NCD prevention and care for displaced populations. They can benefit from the rise of mHealth in the Region by active networking with young people, working through mobile application technologies to meet awareness-raising objectives. Civil society organizations can raise funds through innovative means, such as crowdfunding events. They can mobilize collaboration among multiple stakeholders and institutionalize interventions within partner organizations' frameworks. Civil society organizations motivate society by seeking support from external ambassadors such as members of the clergy. They can facilitate regional knowledge sharing by creating coordinated regional networks.

Civil society plays a pivotal role in increasing access to health care and prevention services, particularly NCD services, through driving systemic change in local communities and pushing for the improvement of policies, legislation and funding through multifaceted engagement, including the provision of financing, delivery of high-quality and patient-friendly health services, offering legal support and mediation between community members and government, and implementing prevention programmes. Examples from the Islamic Republic of Iran, Jordan, Lebanon, Saudi Arabia and United Arab Emirates demonstrate the contribution of civil society organizations in different areas, such as: providing underprivileged women with cardiovascular health services; advocating for reducing tobacco use; minimizing the impact of cancer through financial and moral support; increasing access to cardiopulmonary resuscitation through education; and leveraging mHealth solutions to reach low-income patients. Prominent factors that enhance the success of these programmes include good governance, effective leadership from key community members such as religious leaders, availability of committed volunteers, supportive media and the creation of patient-friendly environments.

Accountability is crucial for tracking progress made by civil society organizations and to drive political and programmatic change. Civil society organizations in the Eastern Mediterranean Region are not active in this area, however, and only a few examples exist. The Network for Consumer Protection in Pakistan practices accountability as both a tool for, and in the process of, advocacy for consumer protection. The Iranian Anti-Tobacco Association has focused on holding decision-makers accountable through its waterpipe initiative. These organizations monitor progress towards agreed targets, challenge governments and demand transparency, as well as empower communities.

Civil society organizations in the Region experience common obstacles in achieving their targets including: lack of funding and expertise; weak collaboration with academia in generating evidence; insufficient assessment and evaluation plans, and limited assimilation of lessons learned; inadequate coordination between different organizations and even competition or duplication of nongovernmental organizations' efforts; problematic relations with government; potential conflict of interest in partnerships with industry and industry interference; limited inclusion by, or resistance from, government; complex bureaucratic or legal systems; and a detrimentally unclear distinction between civil society and government, which underlines the need for independence.

The critical challenge is that many civil society organizations in the Region are not functioning in compliance with government monitoring and accountability frameworks, and thus receive limited political support and recognition. This is also critical in relation to tracking their overall progress against the commitments made in the 2011 Political Declaration of the High-level Meeting on NCDs and the 2014 United Nations Outcome Document. There is a need for greater regional coordination and coalition building and sharing of good practice among civil society organizations *(148)*.

6.3.2 Community engagement and community health workers

Community health workers are often advocates for community engagement and education in health. Community health worker programmes are especially important in the Eastern Mediterranean Region because of high illiteracy rates, poor infrastructure in some areas, and tight-knit communities that in some cases may lack trust for other

government and nongovernmental structures. Strengthening community health worker programmes can be specifically important for improving health in areas such as maternal and child health, mental health and reducing infectious disease burden. In the Region, 13 countries have a form of community health worker programme, some of which have been particularly successful (Afghanistan, Egypt, Islamic Republic of Iran, Jordan, Kuwait, Morocco, Oman, Pakistan, Palestine, Sudan, Syrian Arab Republic, Tunisia and Yemen) *(221)*.

WHO is trying to enhance the capacity of community-based interventions by developing evidence-based tools and guidelines. For example, the Regional Office has developed a training package on promoting the health and development of newborns, infants and children up to 5 years at home for community health promoters *(121)*.

6.4 Social determinants of health and HiAP

In the Eastern Mediterranean Region, WHO continues to support implementation of the 2011 Rio Political Declaration on Social Determinants of Health. Work is ongoing to strengthen country capacities to adopt HiAP, intersectoral action and social participation to address the social determinants of health and gender. This includes regional adaptation, piloting and implementation of WHO's global frameworks to support the integration of gender, equity and human rights in national health policies and planning. The Regional Office actively participates in gender-related United Nations collective efforts and interagency initiatives, including with UNFPA, UN Women and the League of Arab States. There are examples of successful moves in the Region to embrace the HiAP approach in countries, including in Pakistan, Qatar, Saudi Arabia, Sudan and United Arab Emirates.

Several health ministries in the Region have incorporated the social determinants of health in their health agenda; two countries, the Islamic Republic of Iran and Morocco, have become champions in this context. The Social Determinants of Health Secretariat in the Iranian Ministry of Health has been upgraded to become the Department of Social Affairs and has taken responsibility for all health-related SDGs.

The global gender gap report 2017 revealed significant gaps in addressing women's rights in the Region including their economic participation, education, health and sociopolitical empowerment *(222)*. Technical support has continued to foster country efforts to strengthen the health sector's role in responding to gender-based violence, including in Afghanistan and Pakistan. Efforts at country level to address the social determinants of health include: undertaking in-depth assessments in Oman and United Arab Emirates; conducting HiAP implementation training in Saudi Arabia and United Arab Emirates (to strengthen capacities to establish a unit in the health ministry under *Vision 2030* and develop a new health transformation plan); developing and reviewing a strategic framework for action on HiAP in Pakistan; and developing a road map for implementing the HiAP approach in Sudan.

Despite these efforts, there has been limited progress in addressing the social determinants of health in the Region. *Vision 2023* advocates for action in non-health sectors and addressing the social determinants of health as a priority. Regional mapping,

assessment tools and a regional framework on the social determinants of health are needed to provide more robust support to countries *(22, 98)*. WHO has responded to the challenge by establishing a Commission on Social Determinants of Health in the Eastern Mediterranean Region. The Commission was jointly convened by the Regional Office for the Eastern Mediterranean, the Alliance for Health Policy and Systems Research, and the Institute of Health Equity at University College London. The Commission aims to establish a comprehensive evidence base of health inequities in the Region, and factors which drive such inequities, and to assess practical ways of addressing these within the context of countries in the Region, including those facing conflicts and emergencies. The Commission will work over a period of one year, from October 2019 to September 2020. A final report will be published by WHO and presented to the Regional Committee. Using the most up-to-date data available, the report will include definitions for the social determinants of health and context-specific examples in the Region, as well as examples of where previous social determinants of health reviews have led to actions to mitigate and reduce inequities.

Conclusion

The Millennium Development Goals and subsequent SDGs ushered in new opportunities to significantly improve the state of health and well-being in the world. Many countries have increased their life expectancy amid complex and recurring challenges such as poverty, inequality, climate change and protracted humanitarian crises. WHO's GPW 13 (2019–2023) provides further opportunities to consolidate efforts by WHO and Member States to advance the 2030 Sustainable Development Agenda by working towards achieving the triple billion targets.

In the Eastern Mediterranean Region, advancing UHC was identified as a strategic priority in *Vision 2023*. UHC was also reaffirmed in a meeting in 2018 in Salalah, Oman, where health ministers signed the UHC2030 International Health Partnership's Global Compact, confirming their commitment to achieve UHC through a whole-of-government and whole-of-society approach. The ministers endorsed the Salalah Declaration on UHC, providing a road map for strengthening health systems in countries of the Region. The 2018 Global Conference on Primary Health Care in Astana, Kazakhstan, re-emphasized the important role of primary health care in progress towards UHC and achievement of health for all. The need to define country-specific essential health services packages, and ensuring their effective delivery and high quality, is a strategic starting point to advance UHC in the Region. WHO initiated an inclusive consultative process to identify concrete, evidence-based priority actions for countries, which are now part of the framework for action on advancing UHC in the Region.

Promoting health and well-being across the life course is a top priority for the Region. Key strategic areas include promoting the health of women before, during and after pregnancy, and the health of newborns, children, adolescents and older people. The Eastern Mediterranean Region, alongside the African Region, has the highest neonatal mortality rate in the world, and therefore it is critical to implement interventions to address the main causes of newborn deaths such as prematurity, pneumonia, interpartum-related complications and neonatal sepsis. WHO is also supporting countries to adopt an integrated sexual and reproductive health and rights package in national policies, programmes and practices. Work is ongoing to reorganize and reposition mental health services delivery for both men and women in conflict-affected areas, and to tackle the increasing prevalence of substance use disorders. Another area of focus is addressing the social determinants of health through a multisectoral approach and advocating for HiAP. A flagship approach, HiAP aims to ensure synergies at all levels of government and across all sectors, not only ministries of health, to incorporate population health and health equity in public policy. HiAP will remain instrumental in guiding countries to advance towards UHC.

Communicable diseases continue to cause significant morbidity and mortality in the Region, much of which is preventable. The dislocation of health service delivery due to conflicts, massive population displacement, environmental disasters and climate change have resulted in the re-emergence of infectious diseases as important threats,

with many devastating epidemics. WHO's work in the Region focuses on strengthening primary health care as an opportunity to prevent and control communicable diseases. The focus is on health systems strengthening, including surveillance, laboratory services and service delivery, in order to achieve better integration of services at various levels of health care.

In 2018, global leaders agreed to redouble efforts to tackle the challenge of NCDs at the third High-level Meeting of the United Nations General Assembly on Noncommunicable Diseases. Countries renewed their commitment to reduce premature deaths from NCDs by one third through prevention and treatment, and to promote mental health and well-being (SDG target 3.4). Work with countries in the Region focuses on identifying innovative actions to accelerate progress towards achieving SDG target 3.4 by 2030. These actions aim at reducing tobacco use, reducing harmful use of alcohol, promoting healthy diet and promoting physical activity.

In the Region, avoidable environmental risks cause more than 850 000 deaths per year. In line with the regional framework for action on climate change and health 2017–2021, countries are updating their national health and climate profiles. The regional plan of action to implement the road map for an enhanced global response to the adverse health effects of air pollution (2017–2021) is ongoing, and air quality monitoring and reporting has increased. There has also been a 25% increase in the number of regional cities reporting their ambient air quality monitoring data through the WHO Global Urban Ambient Air Pollution Database. This progress has led to refinement of estimates of the burden of disease due to air pollution in all countries of the Region.

Despite the gains made in improving health, several challenges remain in the Region – in particular, the emergencies that are occurring on an unprecedented scale. These emergencies have led to the destruction and dislocation of health systems and increased population movement. Attacks on health care continue to pose challenges in health service delivery, making the Eastern Mediterranean the most dangerous region for health workers among all WHO regions. Interventions to develop and strengthen preparedness and response plans are crucial if the goal of UHC is to be reached. In addition, interventions in countries in conflict must include efforts to secure service provision, facilitate institution building, coordinate national and international stakeholders and define integrated essential health services packages, which may be contracted or delivered by the health ministry or purchased abroad.

The new demands for data to monitor progress towards UHC – and the triple billion targets in particular – put pressure on existing national health information systems to produce relevant and timely data. Information systems must ensure adequate data capture flows with the analytical ability to provide predictable actions for effective response. Addressing these challenges involves conducting comprehensive health information system assessments, developing national health information system strategies, and improving national capacity in death certification and analysis, ICD coding and (where appropriate) use of relevant platforms to enhance the reporting of routine data. Additional efforts involve working closely with countries to develop national household survey plans, streamline processes and ensure that key information is available to countries in a timely manner.

The 2030 Agenda for Sustainable Development is not only a key milestone in global public health, but also calls for strategies that address health challenges by benefiting all sectors of society. Pursuing the 2030 Agenda will allow the effects of achievements in health to saturate each and every population. Despite the complex humanitarian crises in the Region, the way forward is clear. All populations must benefit from UHC – that is, health for all by all – so that everyone in the Eastern Mediterranean Region can enjoy a better quality of life.

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Country profiles

Monitoring progress on health and selected SDGs

Health and the SDGs
2019

Afghanistan

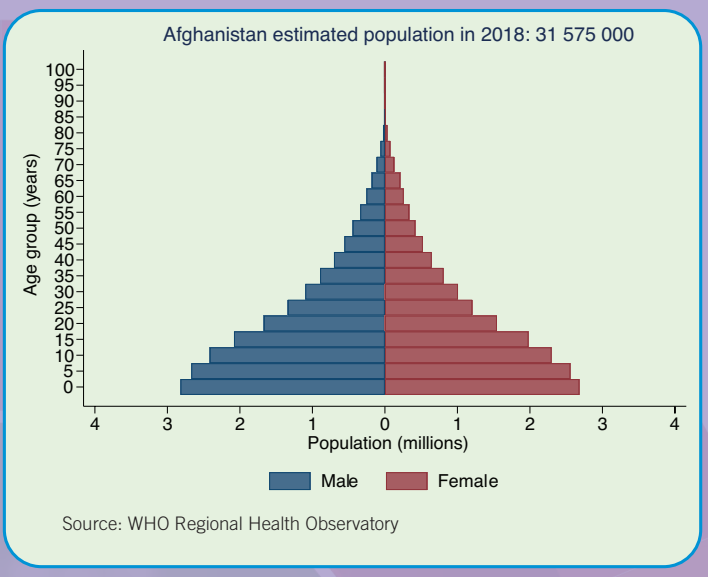
Universal health coverage

UHC service coverage index (2017)	37
Primary health care facilities per 10 000 population (2017)	0.8
Hospital beds per 10 000 population (2017)	3.9
Demand for family planning satisfied with modern methods (%) (2017)	44.9
Antenatal care visits (4+ visits) (2018)	20.9
Measles immunization coverage among 1-year olds (%) (2018)	82
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	91
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	87
Out-of-pocket expenditure as percentage of current health expenditure (2016)	77.4
Domestic general government health expenditure as % of general government expenditure (2016)	2.0

Selected determinants of health

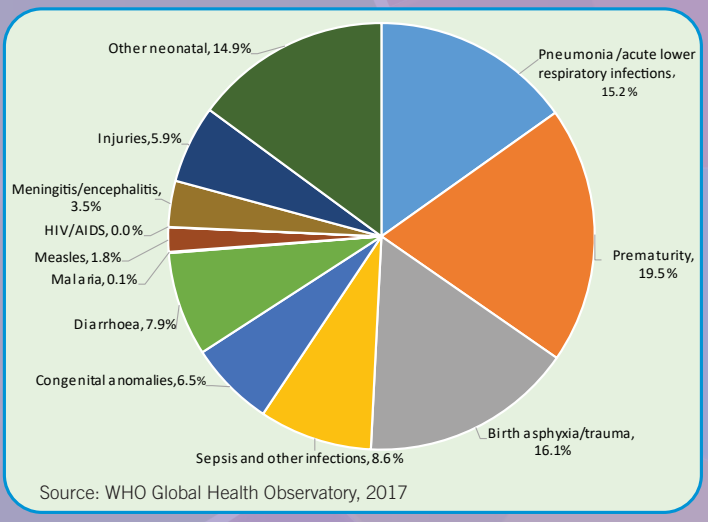
Population living in urban areas (%) (2018)	24
Annual GDP growth (%) (2018)	1.0
Population growth rate (%) (2017)	3.3
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2015)	61.5

Estimated population in 2018



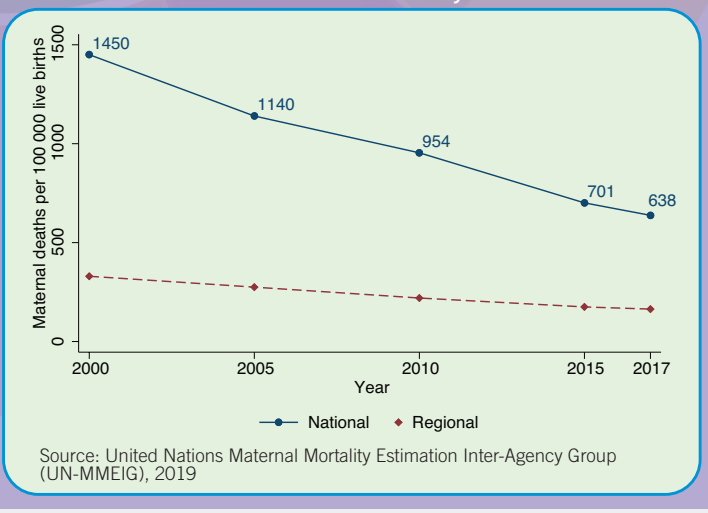
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line	%	...
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	35.3
	Female %	39.0

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	36.6
wasted	%	9.5
overweight	%	5.4
(2018)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2017)	Total %	54
	Male %	68
	Female %	39
Net primary school enrolment ratio per 100 school-age children (2017)	Total ratio	56
	Male ratio	66
	Female ratio	46

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	33

6 CLEAN WATER AND SANITATION

Access to improved drinking water	%	62
Access to improved sanitation facilities (World Health Statistics, 2017)	%	32

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	1.5
	Male %	1.0
	Female %	2.4

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	53.2
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2011–2015)	37.3

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	61.0	64.5	62.7
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	638
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	39
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	52
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2015 estimate)	...	...	68
Tobacco use among persons 15+ years (%)	...	...	...
Overweight (18+ years) (%) (2016)	...	...	23.0
Obesity (18+ years) (%) (2016)	...	...	5.5
Raised blood pressure among persons 18+ years (%) (2014)	...	...	30.6
Raised blood glucose among persons 18+ years (%) (2015)	...	...	11.9
Raised cholesterol among persons 18+ years (%)	...	...	...
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	...	...	29.8
Cancer incidence per 100 000 (2018)	...	...	100.2

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Afghanistan

Voluntary National Review

Completed in 2017: https://sustainabledevelopment.un.org/content/documents/16277Afghanistan.pdf

National Focal Point for the 2030 Agenda

Mr Mohammad Nabi Sroosh, Director General of Policy and Results Based Management, Ministry of Economy

National Focal Point in Ministry of Public Health for health-related SDGs

Diwa Samad, Deputy Minister for Policy and Planning
Dr Abdul Qadir Qadir, Director General of Policy and Planning, Ministry of Public Health
Dr Saidajan Yousifzai, Senior Planning Advisor, Ministry of Public Health

Setting national targets for SDG 3+

A process was undertaken to nationalize the SDGs including SDG 3+ in 2016, taking into account country context. Nationalization of SDG targets and indicators resulted in the Afghanistan Sustainable Development Goals (A-SDGs). Through an inclusive and consultative process, the Ministry of Economy conducted trainings, meetings and seminars with relevant government ministries, the private sector, civil society, academia, nongovernmental organizations (NGOs), development partners and United Nations agencies until agreement on national targets was reached.

Incorporating SDG 3 targets in health policy, strategy and planning

The National Health Strategy 2016–2020 was formulated based on the Afghanistan National Peace and Development Framework, the SDGs and other related international initiatives, as well as the National Health Policy 2015–2020. The High Council of Ministers oversees and supervises the nationalization, alignment and implementation process of the A-SDGs. In addition, the Ministry of Public Health is fully committed to aligning, adopting and complying with other key global initiatives such as the Global Strategy for Women's, Children's and Adolescents' Health 2016–2030, and Family Planning 2020.

Partnerships for advancing the 2030 Agenda

The Government of Afghanistan is working in close coordination with development partners, private sector, civil society organizations, international communities, academia, media and all relevant stakeholders to advance the 2030 Agenda. An Executive Committee on the SDGs has been established. Among other functions, it will provide a "high level platform for direct and sustained engagement between the various government stakeholders, the private sector, civil society organizations and the international community", as noted in the Voluntary National Review.

Partnerships for advancing the health-related SDGs

One major partnership for advancing health in Afghanistan is the System Enhancement for Health Action in Transition project, now called Sehatmandi. It includes financing the implementation of the Basic Package of Health Services and Essential Package of Hospital Services, as well as enhancing the stewardship function of the Ministry of Public Health with the support of the European Union, USAID, World Bank, Afghanistan Reconstruction Trust Fund, and a number of national and international NGOs as implementing partners. In addition to this partnership, six technical committees within the Ministry of Public Health are supporting efforts to reach the SDG targets: Medical Council, National Health Innovation Committee, Accreditation Steering Committee, Strategic Health Coordination Committee, Health Sector Strengthening Coordination and the Country Coordination Mechanism. Several meetings, workshops and conferences on health and the SDGs were conducted by the Ministry of Public Health and supported by United Nations agencies and other partners. Major donors, NGOs, professional associations, private sector and all technical agencies are part of these forums and support the Ministry of Public Health in achieving its national health targets.

Efforts to accelerate action on the health-related SDGs

Since the beginning of 2016, the Ministry of Economy has worked closely with line ministries and departments to nationalize the SDG targets and indicators. In mid-2017, the SDGs Executive Committee was formed under the leadership of the Chief Executive Office of Afghanistan to ensure the highest political commitment and coordinate the nationalization of SDG targets across the various sectors. The SDGs Executive Committee comprises four technical working groups on: security and governance; agriculture and rural development; health, education, environment and social protection; and infrastructure and economy. The Executive Committee and technical working groups held regular meetings, workshops and advisory conferences to finalize the national targets and indicators. These targets and indicators, along with the SDG alignment framework, were presented and endorsed by the High Council of Ministers on 17 September 2018. The mechanism for alignment of the A-SDGs covers all aspects of implementation, such as setting targets, indicators, roles and responsibilities of stakeholders, planning activities and budgeting for programmes and projects.

Good planning, engagement of key stakeholders and political commitment at the highest level were key to success. The process ensured that projects and activities under national priority programmes are aligned with the A-SDGs.

Health and the SDGs
2019

Bahrain

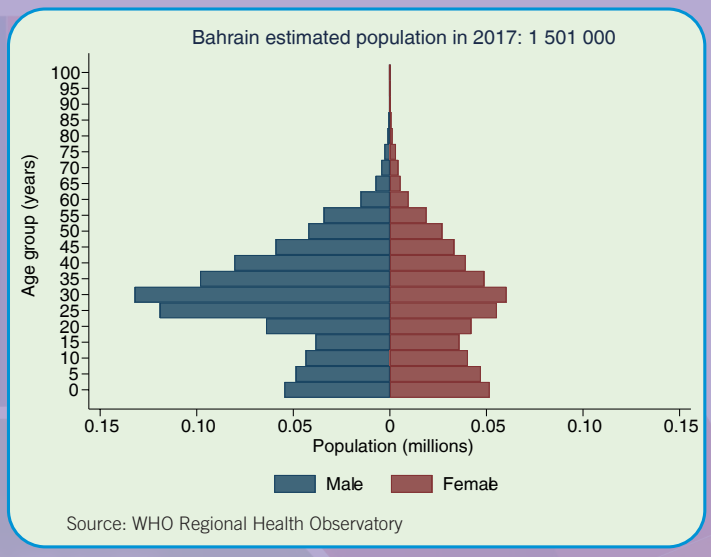
Universal health coverage

UHC service coverage index (2017)	77
Primary health care facilities per 10 000 population (2017)	0.2
Hospital beds per 10 000 population (2017)	17.2
Demand for family planning satisfied with modern methods (%) (2017)	61.6
Antenatal care visits (4+ visits) (%) (2017)	99.1
Measles immunization coverage among 1-year olds (%) (2018)	100
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	68
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	100
Out-of-pocket expenditure as percentage of current health expenditure (2016)	28.0
Domestic general government health expenditure as % of general government expenditure (2016)	8.4

Selected determinants of health

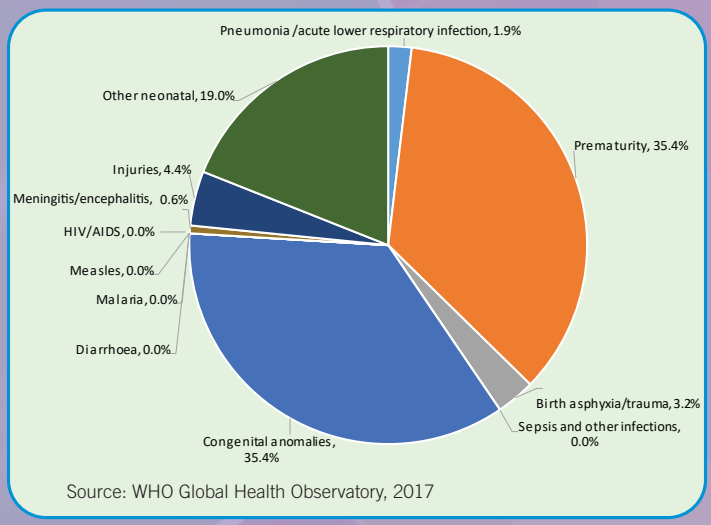
Population living in urban areas (%) (2018)	100
Annual GDP growth (%) (2018)	1.8
Population growth rate (%) (2017)	5.4
Children aged <5 years with pneumonia symptoms taken to a health care provider (%)	...

Estimated population in 2017



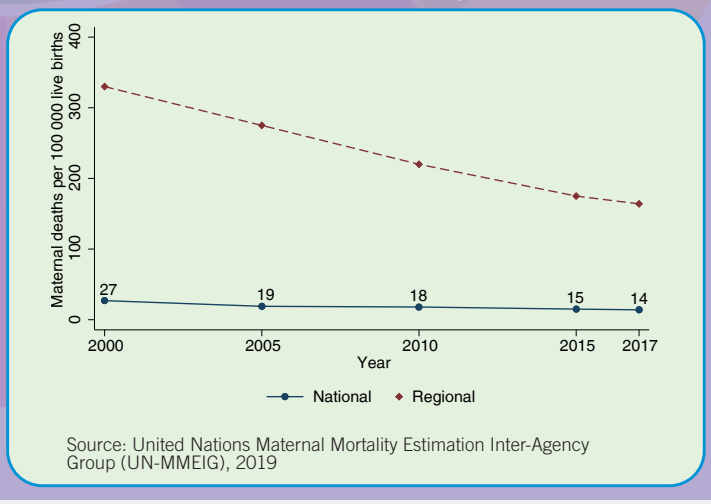
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2011)	%	...
Proportion of employed population below the international poverty line (ILO estimate, 2016)	Male %	...
	Female %	...

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	5.6
wasted	%	3.2
overweight	%	4.9
(2017)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2012)	Total %	...
	Male %	...
	Female %	...
Net primary school enrolment ratio per 100 school-age children (2012)	Total ratio	...
	Male ratio	...
	Female ratio	...

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2017)	%	100
Access to improved sanitation facilities (World Health Statistics, 2017)	%	100

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	1.0
	Male %	0.3
	Female %	3.7

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	69.0
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	0.3

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	78.6	79.6	79.1
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	14
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	3
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	6
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	7
Tobacco use among persons 15+ years (%) (2018)	31.5	4.2	21.9
Overweight (18+ years) (%) (2016)	…	…	65.8
Obesity (18+ years) (%) (2016)	…	…	29.8
Raised blood pressure among persons 18+ years (%) (2014)	…	…	21.4
Raised blood glucose among persons 18+ years (%) (2015)	…	…	11.5
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	11.3
Cancer incidence per 100 000 (2018)	…	…	105.2

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in

Bahrain

Health and the SDGs
2019

Djibouti

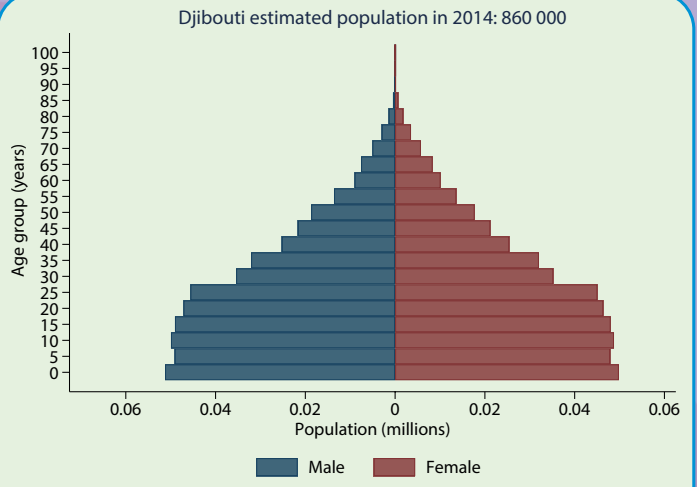
Universal health coverage

UHC service coverage index (2017)	47
Primary health care facilities per 10 000 population (2013)	0.6
Hospital beds per 10 000 population (2013)	14.0
Demand for family planning satisfied with modern methods (%) (2017)	44.9
Antenatal care visits (4+ visits) (%)	...
Measles immunization coverage among 1-year olds (%) (2018)	86
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	85
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	84
Out-of-pocket expenditure as percentage of current health expenditure (2016)	25.8
Domestic general government health expenditure as % of general government expenditure (2016)	3.1

Selected determinants of health

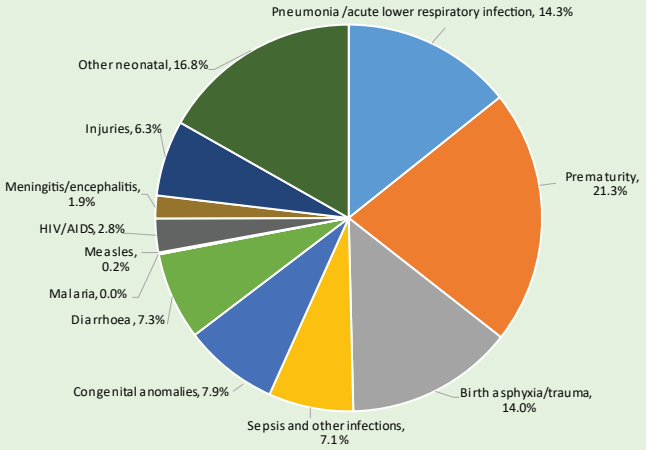
Population living in urban areas (%)	...
Annual GDP growth (%) (2018)	6.0
Population growth rate (%) (2012)	...
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2012)	94.4

Estimated population in 2014



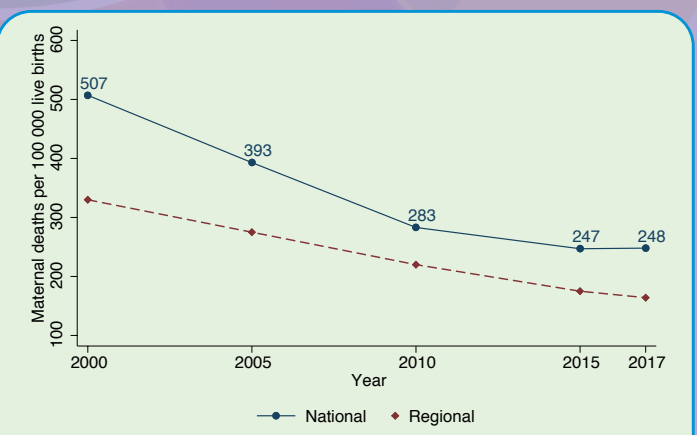
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Regional Health Observatory

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2011)	%	...
Proportion of employed population below the international poverty line (ILO estimate, 2016)	Male %	...
	Female %	...

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	33.5
wasted	%	17.8
overweight	%	8.1
(2013)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2012)	Total %	...
	Male %	...
	Female %	...
Net primary school enrolment ratio per 100 school-age children (2014)	Total ratio	59
	Male ratio	63
	Female ratio	55

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	13

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2015)	%	90
Access to improved sanitation facilities (World Health Statistics, 2015)	%	47

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	11.1
	Male %	10.3
	Female %	11.9

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	40.4
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	2

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	62.2	65.5	63.8
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	248
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	32
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	52
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	62
Tobacco use among persons 15+ years (%) (2018)	18.6	1.1	9.9
Overweight (18+ years) (%) (2016)	...	...	38.6
Obesity (18+ years) (%) (2016)	...	...	13.5
Raised blood pressure among persons 18+ years (%) (2014)	...	...	26.8
Raised blood glucose among persons 18+ years (%) (2015)	...	...	8.1
Raised cholesterol among persons 18+ years (%)	...	...	...
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	...	...	19.6
Cancer incidence per 100 000 (2018)	...	...	87.9

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Djibouti

Voluntary National Review

N/A

National Focal Point for the 2030 Agenda

Mariam Hamadou, Director of Economy and Planning at Ministry of Economy and Finance

National Focal Point in Ministry of Health for health-related SDGs

Madame Fatouma Ali Abdallah, Director of Studies, Planning and International Cooperation

Setting national targets for SDG 3+

In 2016, the Government of Djibouti and the United Nations organized a workshop to disseminate the SDGs and to adopt a methodology to align the SDGs with the Accelerated Growth Strategy for Employment Promotion (SCAPE 2015–2019), which is the five-year operational plan for Djibouti's Vision 2035. The mid-term review of SCAPE 2015–2019 was used as an opportunity to integrate the SDGs into the plan and to strengthen coordination, monitoring and evaluation. This was formally presented at a national workshop in December 2018. In addition, a framework for dialogue between the Government of Djibouti and United Nations agencies is in place to coordinate the United Nations contribution to meeting the SDG targets through the United Nations Development Assistance Framework (UNDAF) 2018–2022.

Incorporating SDG 3 targets in health policy, strategy and planning

The SDG 3 targets are incorporated in the National Health Development Plan (NHDP) 2019–2023 in the strategic priorities section and as part of the indicators framework. The NHDP 2019–2023 was developed during a national workshop with all health sector stakeholders and involved the identification of bottlenecks in SDG 3+ implementation, key strategies to accelerate the progress and indicators for progress monitoring.

Partnerships for advancing the 2030 Agenda

The Government has created a Framework of Dialogue for Aid Coordination under the leadership of the Ministry of Economy and Finance as part of the implementation of SCAPE 2015–2019. It involves international development partners from all sectors; they are divided into groups and subgroups according to the axes of development in SCAPE. In 2017, the United Nations Country Team (UNCT) developed the UNDAF for next five years ensuring that it included the 2030 Agenda and SDG targets. The SDG 3 targets formed the basis for identifying priorities and setting targets and indicators for the health sector. Monthly UNCT meetings include the coordination and monitoring of progress towards the 2030 Agenda and SDG targets.

Partnerships for advancing the health-related SDGs

In 2009, the Ministry of Health signed the International Health Partnership (IHP+) Global Compact in the context of working towards the Millennium Development Goals for health. As part of these efforts, the Ministry of Health created the Health Partners Group to strengthen the coordination of health interventions and the effectiveness of development aid for health. This partnership is still ongoing and will be used as a partnership for the health-related SDGs during the implementation of the new NHDP. In addition, in September 2018, the Government of Djibouti signed the UHC 2030 Global Compact for progress towards UHC.

Country success story

The Universal Health Insurance Law was enacted in 2014 to ensure basic medical coverage for all people living in Djibouti, via two arrangements: the Compulsory Health Insurance scheme and the Social Assistance Programme for Health.This law guarantees a universal package of health services for the entire population. The Compulsory Health Insurance scheme covers all those who have the capacity to contribute, while the Social Assistance Programme for Health covers the poorest sections of the population who do not have the financial capacity to make health insurance contributions. It is estimated that around 300 000 individuals (32% of the total population) are currently being covered by the Social Assistance Programme for Health, through the National Social Security Fund. Social Assistance Programme for Health is composed of basic care services such as consultations, radiology, essential medicines and delivery (including caesarean section), while the second package comprises curative care and all prescribed medical exams by specialist doctors.

Health and the SDGs 2019

Egypt

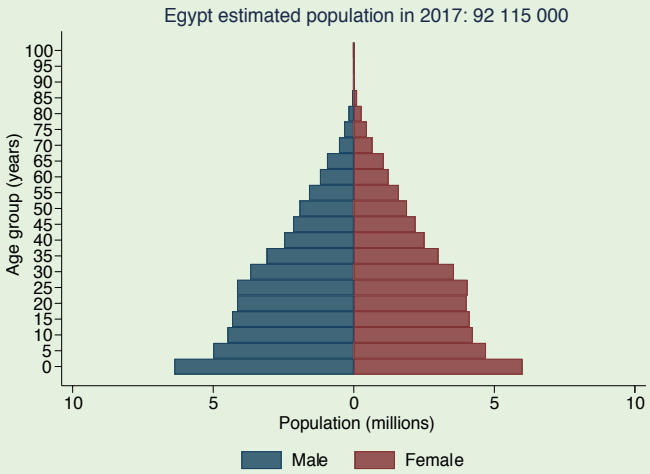
Universal health coverage

UHC service coverage index (2017)	68
Primary health care facilities per 10 000 population (2015)	0.6
Hospital beds per 10 000 population (2015)	14.3
Demand for family planning satisfied with modern methods (%) (2017)	81.0
Antenatal care visits (4+ visits) (%) (2015)	87.8
Measles immunization coverage among 1-year olds (%) (2018)	94
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	86
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	95
Out-of-pocket expenditure as percentage of current health expenditure (2016)	62.0
Domestic general government health expenditure as % of general government expenditure (2016)	4.2

Selected determinants of health

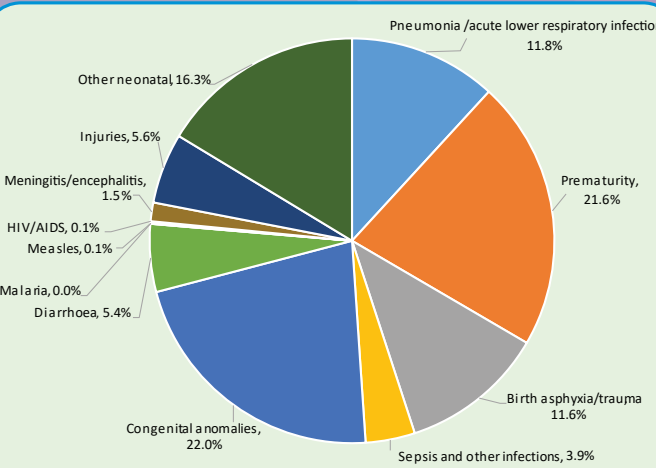
Population living in urban areas (%) (2018)	42
Annual GDP growth (%) (2018)	5.3
Population growth rate (%) (2015)	2.4
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2014)	68.1

Estimated population in 2017



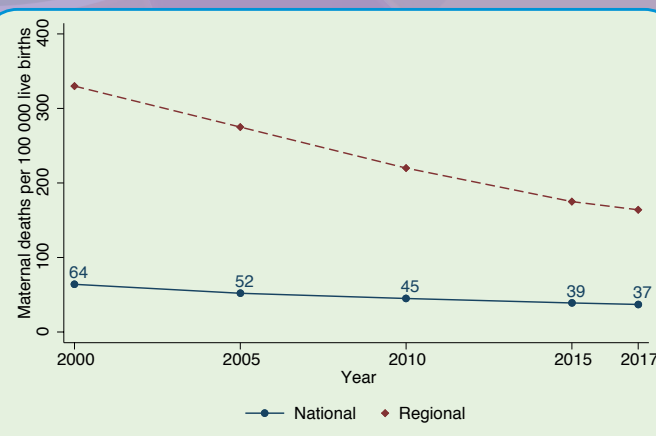
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2014)	%	26.4
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.4
	Female %	0.4

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	22.3
wasted	%	9.5
overweight	%	20.4
(2014)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2015)	Total %	93
	Male %	...
	Female %	...
Net primary school enrolment ratio per 100 school-age children (2015)	Total ratio	53
	Male ratio	52
	Female ratio	48

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2015)	%	99
Access to improved sanitation facilities (World Health Statistics, 2015)	%	95

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	11.4
	Male %	7.6
	Female %	23.2

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	79.3
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	0.6

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	68.2	73.0	70.5
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	37
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	12
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	19
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	22
Tobacco use among persons 15+ years (%) (2018)	44.2	0.2	22.2
Overweight (18+ years) (%) (2016)	…	…	63.5
Obesity (18+ years) (%) (2016)	…	…	32.0
Raised blood pressure among persons 18+ years (%) (2014)	…	…	25.0
Raised blood glucose among persons 18+ years (%) (2015)	…	…	17.9
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	27.7
Cancer incidence per 100 000 (2018)	…	…	156.9

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Egypt

Voluntary National Review

Completed in 2018: https://sustainabledevelopment.un.org/content/documents/20269EGY_VNR_2018_final_with_Hyperlink_9720185b45d.pdf

National Focal Point for the 2030 Agenda

Minister Dr Hala El Said, Ministry of Planning, Monitoring and Administrative Reform

National Focal Point in Ministry of Health and Population for health-related SDGs

Minister's Technical Office

Setting national targets for SDG 3+

In 2019, Egypt's Ministry of Health and Population developed the Sustainable Development Strategy: Egypt Vision 2030 (SDS), which includes a health pillar (available at: https://www.arabdevelopmentportal.com/sites/default/files/publication/sds_egypt_vision_2030.pdf).

The indicators used for monitoring progress toward achieving Egypt's SDS goals were derived from WHO core health indicators, SDG indicators and regional core indicators according to the *Eastern Mediterranean Region: framework for health information systems and core indicators for monitoring health situation and health system performance 2018*. The regional core indicators focus on assessing three main components: health determinants and risks; health status; and health systems response.

Incorporating SDG 3 targets in health policy, strategy and planning

Through Ministerial Decree No. 34 of 2019, issued by the Ministry of Health and Population, a team was established to monitor progress of the SDG targets and indicators on a quarterly basis. Collaboration with the Ministry of Planning, Monitoring and Administrative Reform is in place to build the team's capacities to monitor progress on the indicators.

Actions addressing these national targets have been organized under seven pillars:

- universal health insurance;
- development of service provision in secondary and tertiary health care facilities;
- building capacity of the health workforce;
- presidential initiatives including: hepatitis and NCD screening; child health screening for anaemia, stunting and obesity; breast cancer screening; and national food regulations;
- promotion of local manufacture of oncology medications and technology transfer of manufacturing;
- data collection and analysis such as the Demographic and Health Survey 2019–2020 through collaboration with UNFPA and the Central Agency for Public Mobilization and Statistics;
- expansion of the family planning programme.

Partnerships for advancing the 2030 Agenda

Under Egypt's SDS 2030, a national, inter-ministerial committee was established to track its implementation and monitor progress on the SDGs. This has been done in alignment with other responsible ministries to support the monitoring of related programmes and policies, in close collaboration with relevant United Nations agencies.

Partnerships for advancing the health-related SDGs

The WHO Country Office in Egypt has taken a proactive role as the co-chair of the Health Development Partners Group (which includes formal and informal information sharing, coordination meetings and actions) and as an active member of the United Nations monitoring and evaluation task force working on harmonization of SDS 2030 within the United Nations and national monitoring systems. These actions direct the country's efforts towards advancing the 2030 Agenda for Sustainable Development.

Country success story

The prevalence of hepatitis C in Egypt is one of the highest in the world. Over the past five years, Egypt has made extensive efforts to control hepatitis C in line with SDG target 3.3. In October 2014, the country began treating people living with the disease. In two years, around 835 000 patients were treated before the country started active screening.

Over the next two years, around 7 million people were tested and 1 million cases identified and linked to treatment. In October 2018, Egypt launched the six-month presidential initiative, 100 Million Healthier Lives, which involved nationwide screening aiming to reach around 50 million people. By May 2019, around 2.2 million people had been diagnosed and registered for treatment.

Health and the SDGs
2019

Islamic Republic of Iran

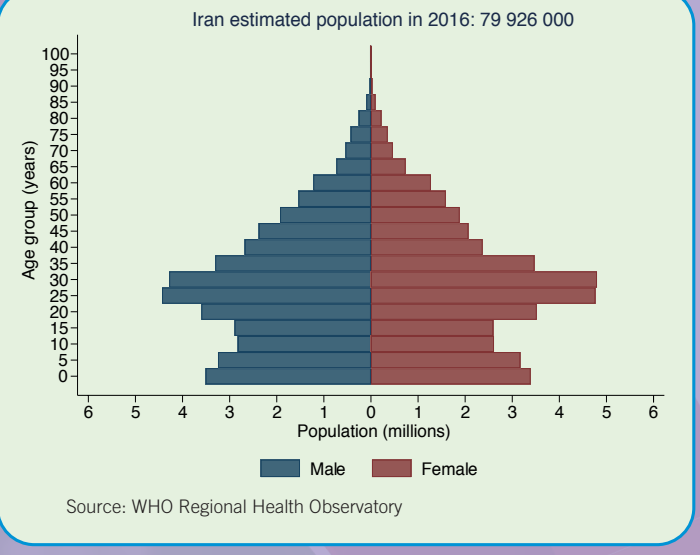
Universal health coverage

UHC service coverage index (2017)	72
Primary health care facilities per 10 000 population (2018)	3.5
Hospital beds per 10 000 population (2018)	16.2
Demand for family planning satisfied with modern methods (%) (2017)	77.3
Antenatal care visits (4+ visits) (%) (2015)	96.3
Measles immunization coverage among 1-year olds (%) (2018)	99
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	86
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	99
Out-of-pocket expenditure as percentage of current health expenditure (2016)	38.8
Domestic general government health expenditure as % of general government expenditure (2016)	22.6

Selected determinants of health

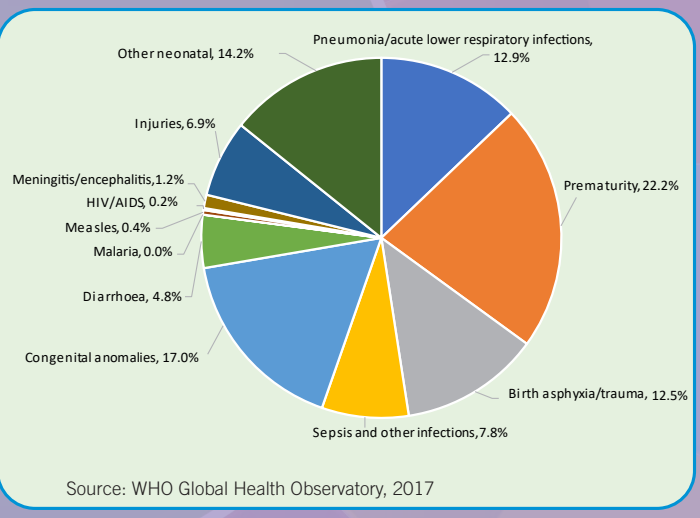
Population living in urban areas (%) (2018)	74
Annual GDP growth (%) (2017)	3.8
Population growth rate (%) (2016)	1.2
Children aged <5 years with pneumonia symptoms taken to a healt hcare provider (%) (2010)	75.9

Estimated population in 2016



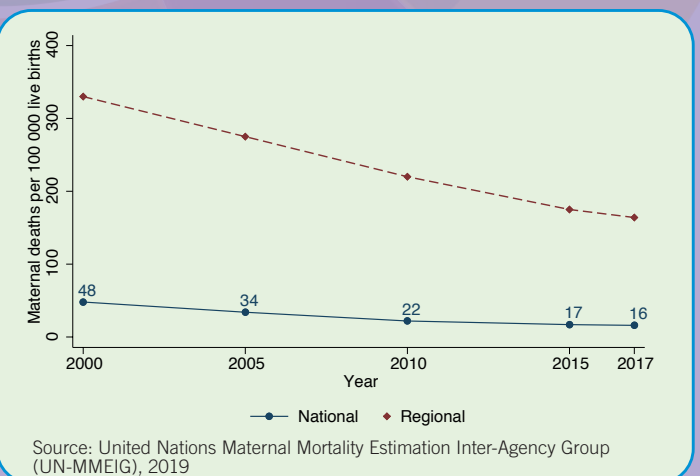
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2017)	%	0.2
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.0
	Female %	0.0

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	4.8
wasted	%	4.3
overweight	%	2.9
(2017)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2016)	Total %	97
	Male %	97
	Female %	96
Net primary school enrolment ratio per 100 school-age children (2016)	Total ratio	99
	Male ratio	99
	Female ratio	99

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2018)	%	95
Access to improved sanitation facilities (World Health Statistics, 2018)	%	98

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	12.0
	Male %	10.1
	Female %	20.1

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	35.1
	Urban	…

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	<0.1

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	74.6	76.9	75.7
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	16
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	9
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	13
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	15
Tobacco use among persons 15+ years (%) (2018)	19.3	0.7	10.0
Overweight (18+ years) (%) (2016)	...	...	61.6
Obesity (18+ years) (%) (2016)	...	...	25.8
Raised blood pressure among persons 18+ years (%) (2014)	...	...	19.7
Raised blood glucose among persons 18+ years (%) (2015)	...	...	12.1
Raised cholesterol among persons 18+ years (%)	...	...	...
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	...	...	14.8
Cancer incidence per 100 000 (2018)	...	...	141.6

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in
Islamic Republic of Iran

Voluntary National Review

Completed in 2017: https://sustainabledevelopment.un.org/content/documents/14994Iran.pdf

National Focal Point for the 2030 Agenda

Director General for International Environmental and Sustainable Development Affairs

National Focal Point in Ministry of Health and Medical Education for health-related SDGs

Dr Hamid Bohloli, Head of Policy Department of International Health and SDGs at Secretariat of the Supreme Council for Health and Food Security (SCHFS)

Dr Elham Ahmadnezhad, Head of Health Observatory at National Institute for Health Research

Setting national targets for SDG 3+

(Updated data are not yet available)

Incorporating SDG 3 targets in health policy, strategy and planning

To ensure that SDG 3 is incorporated in health policy, strategy and planning, the Islamic Republic of Iran has put tracking the health-related SDG targets high on the agenda of the SCHFS. The SCHFS is the country's highest intersectoral forum for health policy-making based on the Health in All Policies approach. This authority has three layers of decision-making: the policy meeting chaired by the President, the permanent commission and the technical working groups. Its core function is to systematically analyse challenges threatening population health, while setting the agenda and identifying policy alternatives. This intersectoral governance mechanism facilitates collaboration between all health and non-health sectors to address the health-related SDGs including UHC, accelerate the process and improve the quality of intersectoral policy-making.

The Secretariat of the SCHFS is situated in the Ministry of Health and Medical Education under the direct supervision of the Minister. The SCHFS comprises four policy departments: health governance, health care sector, society and health, and international health and SDGs. It is designed to facilitate inter- and intrasectoral collaboration in the policy-making processes for achievement of the health-related SDGs. All technical deputies in the Ministry of Health and Medical Education are responsible for contributing towards achieving SDG 3 in line with the sixth five-year national development plan (2016–2021). Their policy-making processes are supervised by the Secretariat of the SCHFS based on the SDG 3 criteria. Benchmarking and trend analysis of health-related SDGs is conducted by the Ministry of Health and Medical Education with technical support from WHO.

Partnerships for advancing the 2030 Agenda

In response to the adoption of the 2030 Agenda and in line with its recommended actions to implement the SDGs at national level, the Government undertook a process of reviewing and reforming relevant existing institutions in 2015. The first and crucial step was the rearrangement of the inter-ministerial coordination mechanism. For this purpose, the National Committee for Sustainable Development (established in 1994) was transformed into the main body for coordinating and reporting all measures, policies and programmes related to the implementation of the SDGs at the national level. A range of stakeholders including the Sustainable Development Steering Council, the Parliament, local governments and communities, academia, municipalities, civil society and the private sector participated in developing the first Voluntary National Review.

Partnerships for advancing the health-related SDGs

To advance the health-related SDGs at the national level, the following initiatives and actions have been undertaken.

A policy department for international health and SDGs has been established in the Secretariat of the SCHFS. The department is responsible for collecting, aggregating, analysing and reporting on SDG 3 and other health-related SDGs via multiple intersectoral working groups including: nutrition and food security, environmental determinants of health, health tax, elders, HIV, physical activity, health of civil servants, noncommunicable diseases, early childhood development, women's health, UHC and protection of people's right to health. To promote and maintain partnerships for advancing the health-related SDGs, an intersectoral platform for monitoring core health indicators is being established in the Secretariat of the SCHFS.

Another initiative is the formation of health secretariats in non-health sectors whose policies might have health implications and impact on population health. The aim of this initiative is to avoid any negative health impact and improve population health and health equity via steering their sectoral policies in line with health sector national policy objectives, with special focus on the health-related SDGs.

Further initiatives headed by the SCHFS include active participation in other intersectoral supreme councils (such as the Supreme Council for Education) and systematic training of managers of other governmental bodies responsible for health-related SDGs.

Country success story or an example of efforts to accelerate action on the health-related SDGs

Not available

Health and the SDGs 2019

Iraq

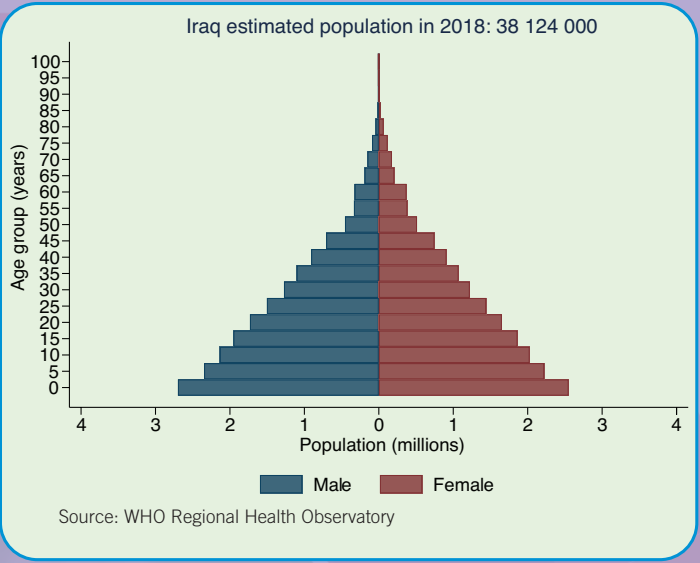
Universal health coverage

UHC service coverage index (2017)	61
Primary health care facilities per 10 000 population (2017)	0.7
Hospital beds per 10 000 population (2017)	13.2
Demand for family planning satisfied with modern methods (%) (2017)	61.8
Antenatal care visits (4+ visits) (%) (2018)	35.0
Measles immunization coverage among 1-year olds (%) (2018)	83
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	92
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	84
Out-of-pocket expenditure as percentage of current health expenditure (2016)	78.5
Domestic general government health expenditure as % of general government expenditure (2016)	1.7

Selected determinants of health

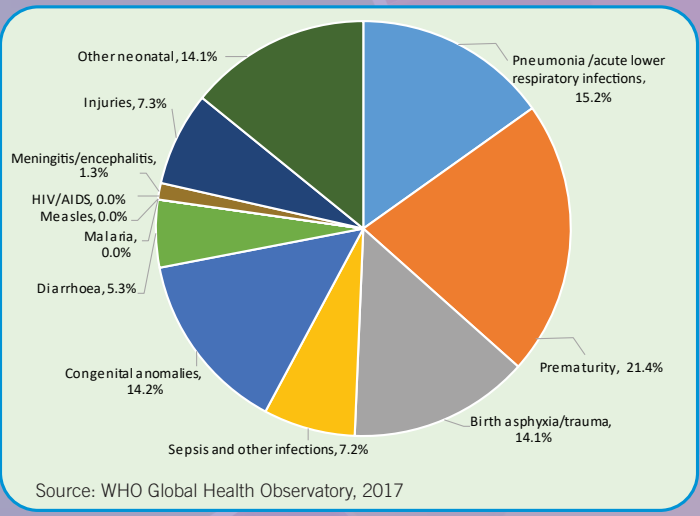
Population living in urban areas (%) (2018)	70
Annual GDP growth (%) (2018)	0.6
Population growth rate (%) (2018)	2.5
Children aged <5 years with pneumonia symptoms taken to a health care provider (%)	74.4

Estimated population in 2018



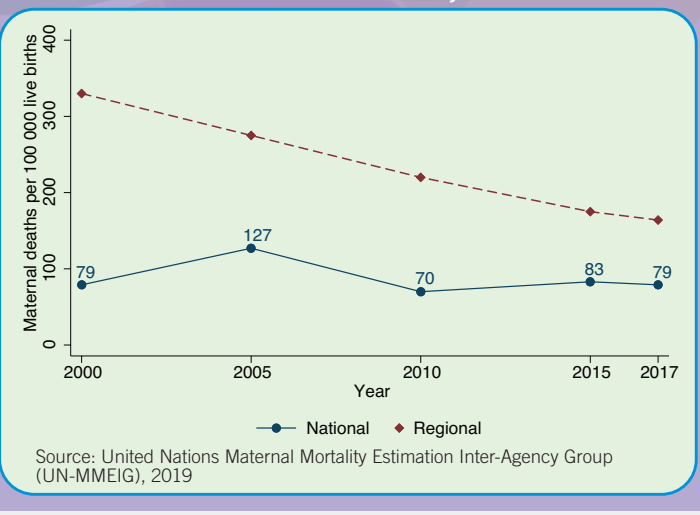
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2014)	%	17.0
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.4
	Female %	0.3

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	9.9
wasted	%	2.5
overweight	%	6.6
(2018)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2013)	Total %	...
	Male %	78
	Female %	...
Net primary school enrolment ratio per 100 school-age children (2014)	Total ratio	92
	Male ratio	94
	Female ratio	83

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2015)	%	87
Access to improved sanitation facilities (World Health Statistics, 2015)	%	86

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	7.9
	Male %	7.1
	Female %	12.4

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	57.7
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	86.3

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	67.5	72.2	69.8
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	79
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	17
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	19
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	30
Tobacco use among persons 15+ years (%) (2018)	...	...	...
Overweight (18+ years) (%) (2016)	...	...	64.6
Obesity (18+ years) (%) (2016)	...	...	30.4
Raised blood pressure among persons 18+ years (%) (2014)	...	...	25.2
Raised blood glucose among persons 18+ years (%) (2015)	...	...	17.4
Raised cholesterol among persons 18+ years (%)	...	...	...
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	...	...	21.3
Cancer incidence per 100 000 (2018)	...	...	105.5

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Iraq

Voluntary National Review

Completed in 2019: https://sustainabledevelopment.un.org/content/documents/23789Iraq_VNR_2019_final_EN_HS.pdf

National Focal Point for the 2030 Agenda

Dr Nouri Sabah Al Dolaimi, Minister of Planning and Head of National SDG Committee

National Focal Point in Ministry of Health and Environment for health-related SDGs

Dr Faris Allami, Director General, Public Health, Ministry of Health and Environment

Setting national targets for SDG 3+

The Ministry of Health and Environment, with support from WHO and key partners, has agreed six strategic directions to address the enormous challenges in the health system and achieve SDG 3 targets.

- Strengthening the key components of the health system by focusing on reforming health care financing, increasing access to medicines and technologies, improving the health information system, developing health workforce capacities, ensuring provision of essential health care services at primary health care level, and strengthening health governance.
- Establishing transparent and accountable administrative procedures for Ministry of Health and Environment institutions, controlling corruption, and addressing the negative effects of decentralization policies and delegation of authorities.
- Expanding and reforming hospital services.
- Developing a comprehensive plan for the reconstruction of health infrastructure, giving priority to the liberated and terror-affected provinces.
- Regulating the pharmaceutical sector and strengthening regulatory systems for medicines, including drug selection, registration, monitoring and post-marketing follow-up, and updating of drug supply, storage and distribution policies and systems.
- Addressing gaps in preventive services and key health challenges.

Incorporating SDG 3 targets in health policy, strategy and planning

Iraq is committed to achieving the SDG 3 targets and UHC. Specifically, the country is aiming to achieve SDG 3 before 2030 by focusing on two major initiatives.

- Agreeing on essential packages of preventive, curative and rehabilitative services to be continuously available and of high quality to all citizens. The basic package should be finalized by the end of 2019.
- Developing the health insurance system. A draft law has already been prepared by Parliament. The Ministry of Health and Environment intends to submit a concurrent proposal for the imposition of taxes on the salaries of state employees, retirees and private sector employees.

At the same time, Iraq believes that reform of the health system cannot be completed without encouraging private sector investment in solidarity and integration with the public sector.

Partnerships for advancing the 2030 Agenda

Inter-ministerial collaboration is a key facet of Iraq's efforts to achieve the 2030 Agenda. A higher committee, headed by the Ministry of Planning and comprising all ministries, is supported by nine working groups to tackle the SDGs and associated programmatic and intersectoral work. The United Nations Country Team (UNCT) has established an SDG focal point, led by UNDP. Other development partners (e.g. the European Union, USAID) and civil society organizations are supporting national efforts to achieve the SDGs. Recently, the UNCT established working groups to align all individual targets with four major strategic objectives, which are also aligned with the national plans and priorities.

Partnerships for advancing the health-related SDGs

The Ministry of Health and Environment is collaborating with other ministries to achieve the health-related SDGs. United Nations organizations including WHO, UNICEF, UNFPA, UN Women and UNDP are supporting the Ministry according to their mandates and expertise. Major partnerships are promoting intersectoral collaboration, community participation and placing primary health care concepts at the centre.

Examples of efforts to accelerate action on the health-related SDGs

Limited government investment in health is a major challenge to achieving the SDG targets and places a financial burden on citizens. Efforts are being made by the Ministry of Health and Environment to increase health sector funding through four main directions.

- The Government and House of Representatives are reviewing development priorities and associated budgets for 2019 and 2020 to ensure that they align with relevant targets to be achieved at the national level.
- Finding additional sources of funding including new donors/parters.
- Studying innovative sources of health funding such as tax increases on harmful products such as tobacco, alcohol and unhealthy foods. The Ministry of Health and Environment is preparing an integrated action plan to raise taxes on tobacco in cooperation with WHO, World Bank and the Ministry of Finance.
- Getting "more health for the money" which means that the scarce resources available to the health sector are used rationally and cost-effectively.

This new approach to managing the 2019-onwards budgets will help Iraq progress towards achieving UHC. The Ministry of Health and Environment aims to establish a special unit to address health economics and health technology assessment, as well as to train public health professionals in the proper management and operation of budgets to achieve "value for money".

Health and the SDGs
2019

Jordan

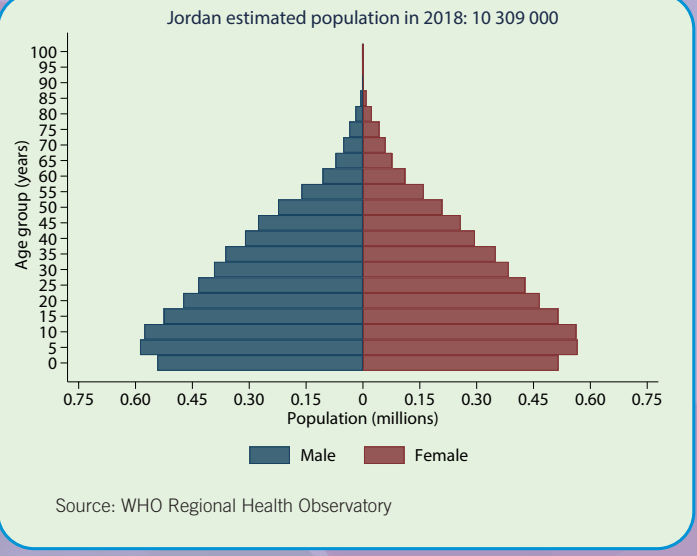
Universal health coverage

UHC service coverage index (2017)	76
Primary health care facilities per 10 000 population (2018)	7.0
Hospital beds per 10 000 population (2018)	14.0
Demand for family planning satisfied with modern methods (%) (2017)	61.9
Antenatal care visits (4+ visits) (%) (2018)	83.2
Measles immunization coverage among 1-year olds (%) (2018)	92
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	56
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	96
Out-of-pocket expenditure as percentage of current health expenditure (2016)	28.0
Domestic general government health expenditure as % of general government expenditure (2016)	12.0

Selected determinants of health

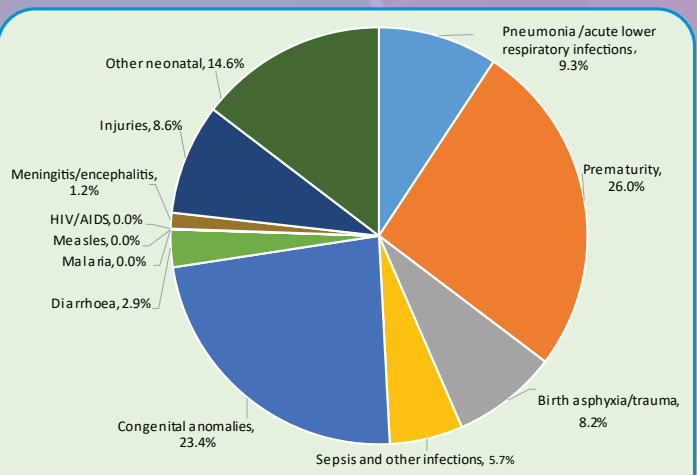
Population living in urban areas (%) (2018)	90
Annual GDP growth (%) (2018)	1.9
Population growth rate (%) (2018)	2.4
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2015)	77.2

Estimated population in 2018



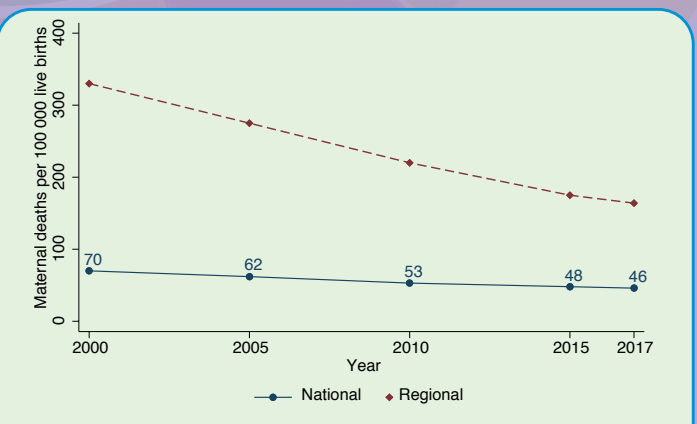
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2018)	%	18.6
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.2
	Female %	0.1

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	7.7
wasted	%	2.4
overweight	%	4.4
(2013)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2018)	Total %	95
	Male %	97
	Female %	93
Net primary school enrolment ratio per 100 school-age children (2018)	Total ratio	100
	Male ratio	100
	Female ratio	100

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2018)	%	98
Access to improved sanitation facilities (World Health Statistics, 2018)	%	98

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	15.0
	Male %	13.2
	Female %	22.9

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	32.1
	Urban	…

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	<0.1

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	72.7	76.0	74.3
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	46
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	10
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	15
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	17
Tobacco use among persons 15+ years (%) (2015)	65.5	10.2	38.4
Overweight (18+ years) (%) (2016)	…	…	69.6
Obesity (18+ years) (%) (2016)	…	…	35.5
Raised blood pressure among persons 18+ years (%) (2014)	…	…	21.0
Raised blood glucose among persons 18+ years (%) (2015)	…	…	16.8
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	19.2
Cancer incidence per 100 000 (2018)	…	…	157.8

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Jordan

Voluntary National Review

Completed in 2017: https://sustainabledevelopment.un.org/content/documents/16289Jordan.pdf

National Focal Point for the 2030 Agenda

Mr Mutasim M.D. Zaid Al-Kilani, Head of Sustainable Development Division, Ministry of Planning and International Cooperation

National Focal Point in Ministry of Health for health-related SDGs

Dr Niemat Barawi

Setting national targets for SDG 3+

Parliamentarians play a key legislative and oversight role to strengthen health system response and improve equitable access to available, affordable, quality health care services with dignity and without discrimination. Effective participation and regulatory oversight is essential to ensure effective and efficient use of domestic resources and promote accountability. The WHO Country Office in Jordan organized a high-level policy dialogue in August 2017 to engage parliamentarians and civil society in efforts to advance UHC and achieve the SDG targets in the country. Key recommendations from the workshop were to promote the role of parliamentarians in advancing UHC and achieving the SDGs, engaging with different stakeholders and enhancing health equity. In addition, WHO Jordan engaged in the development of the Health Sector Reform Action Plan 2018–2022 and supported a desk review of UHC and public–private partnership in Jordan.

Incorporating SDG 3 targets in health policy, strategy and planning

The National Strategy for the Health Sector in Jordan 2018–2022 is derived from the Jordan National Vision and Strategy 2025, and is aligned with the 2030 Agenda. It focuses on good governance of the health sector, patient-centred services, service provision and financial protection to achieve UHC. The indicators in the strategy were aligned with the indicators of the executive development programmes.

Partnerships for advancing the 2030 Agenda

The United Nations Sustainable Development Group promotes strategic collaboration among the United Nations Country Team (UNCT) members to support the implementation of the 2030 Agenda in Jordan. The United Nations Sustainable Development Framework (UNSDF) 2018–2022 as a key element in advancing the 2030 Agenda in the country. In addition, Jordan presented its first Voluntary National Review at the High-Level Political Forum on Sustainable Development in July 2017 is part of efforts to encourage national engagement on the SDGs, further strengthen national ownership of the 2030 Agenda and accelerate its implementation.

The process of preparing the voluntary review was led by the Ministry of Planning and International Cooperation, as the focal point for SDG implementation, with support from the UNCT including non-resident agencies. The National Higher Committee on Sustainable Development provided overall strategic guidance and supervision.

Partnerships for advancing the health-related SDGs

In addition to the United Nations Sustainable Development Group and the UNSDF, which support implementation of the 2030 Agenda in general, WHO is leading an initiative to establish a network for advancing the health-related SDGs. The network will include parliamentarians, media, academia, private and public sectors and civil society organizations. Their focus will be on supporting initiatives to transform the health system by identifying key policy enablers needed to accelerate steps towards UHC and the SDGs as well as advocating for a Health in All Policies approach. The Government of Jordan signed the UHC2030 Global Compact during in 2017 to promote a comprehensive and coherent approach for collective commitment to UHC. This ensures coordination and alignment of health system strengthening efforts at global, regional and country levels and appropriate linkages with other sectors.

Example of efforts to accelerate action on the health-related SDGs

Under the patronage of H.E. the Prime Minister Dr Omar Al-Razzaz, the Ministry of Health in collaboration with WHO conducted a consultative meeting in January 2019 with a wide range of stakeholders to agree on pragmatic steps towards reaching comprehensive coverage of all Jordanians specifically, and achieving UHC and health development more broadly. Bringing together other sectors, partners and stakeholders, the Ministry of Health demonstrated leadership for this ambitious and transformative agenda. This leadership was needed not only to generate and sustain support for a range of critical policy systems in the coming months, it was also critical to ensure that ordinary Jordanians will be able to enjoy the benefits of UHC. Building on the momentum of the intense and interactive dialogue, H.E. the Minister of Health identified the next steps for moving forward as strengthening primary health care, redesigning the essential health services package, shifting from passive purchasing to strategic purchasing, and operationalizing the full autonomy of the Civil Insurance Fund from the Ministry of Health.

Health and the SDGs
2019

Kuwait

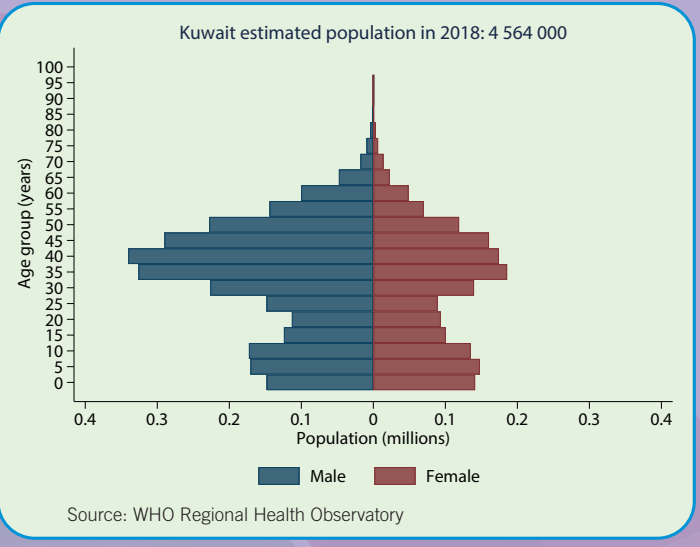
Universal health coverage

UHC service coverage index (2017)	76
Primary health care facilities per 10 000 population (2018)	0.2
Hospital beds per 10 000 population (2018)	19.3
Demand for family planning satisfied with modern methods (%) (2017)	64.6
Antenatal care visits (4+ visits) (%) (2018)	59.8
Measles immunization coverage among 1-year olds (%) (2018)	98
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	89
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	91
Out-of-pocket expenditure as percentage of current health expenditure (2016)	16.1
Domestic general government health expenditure as % of general government expenditure (2016)	6.2

Selected determinants of health

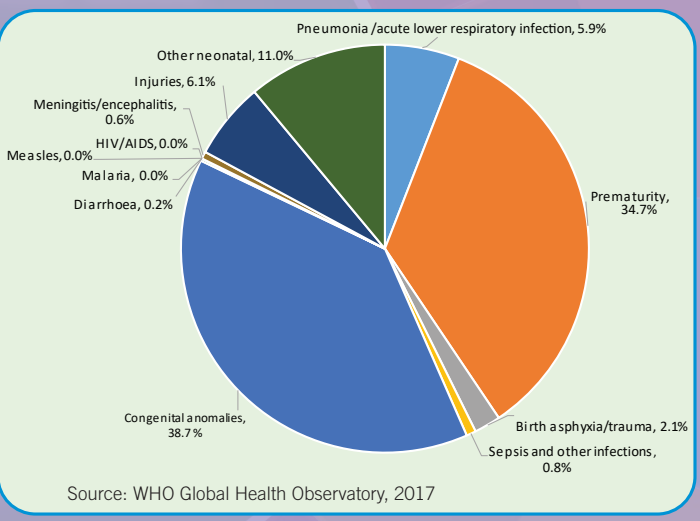
Population living in urban areas (%) (2018)	100
Annual GDP growth (%) (2018)	1.2
Population growth rate (%) (2018)	10.8
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2012)	...

Estimated population in 2018



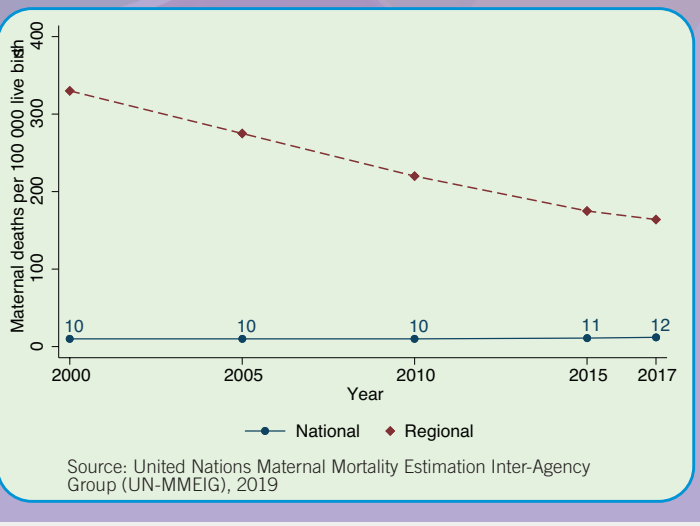
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line	%	...
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.2
	Female %	0.1

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	5.5
wasted	%	2.5
overweight	%	6.4
(2017)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2018)	Total %	100
	Male %	100
	Female %	100
Net primary school enrolment ratio per 100 school-age children (2018)	Total ratio	100
	Male ratio	100
	Female ratio	100

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2018)	%	100
Access to improved sanitation facilities (World Health Statistics, 2018)	%	100

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	2.1
	Male %	1.0
	Female %	4.7

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	57.2
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	0.2

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	73.9	76.0	74.8
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	12
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	4
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	7
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	8
Tobacco use among persons 15+ years (%) (2018)	31.0	1.6	18.5
Overweight (18+ years) (%) (2016)	…	…	73.4
Obesity (18+ years) (%) (2016)	…	…	37.9
Raised blood pressure among persons 18+ years (%) (2014)	…	…	23.6
Raised blood glucose among persons 18+ years (%) (2015)	…	…	19.6
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	17.4
Cancer incidence per 100 000 (2018)	…	…	121.8

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in

Kuwait

Health and the SDGs
2019

Lebanon

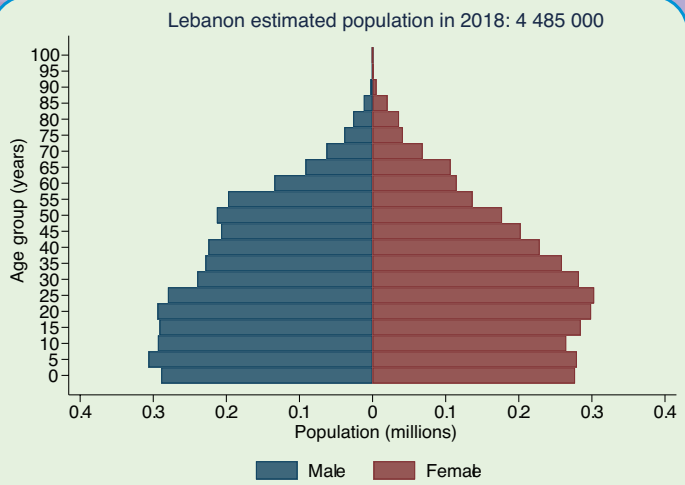
Universal health coverage

UHC service coverage index (2017)	73
Primary health care facilities per 10 000 population (2018)	0.5
Hospital beds per 10 000 population (2018)	27.3
Demand for family planning satisfied with modern methods (%) (2017)	63.8
Antenatal care visits (4+ visits) (%) (2018)	90.0
Measles immunization coverage among 1-year olds (%) (2018)	92
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	84
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	94
Out-of-pocket expenditure as percentage of current health expenditure (2016)	32.1
Domestic general government health expenditure as % of general government expenditure (2016)	14.3

Selected determinants of health

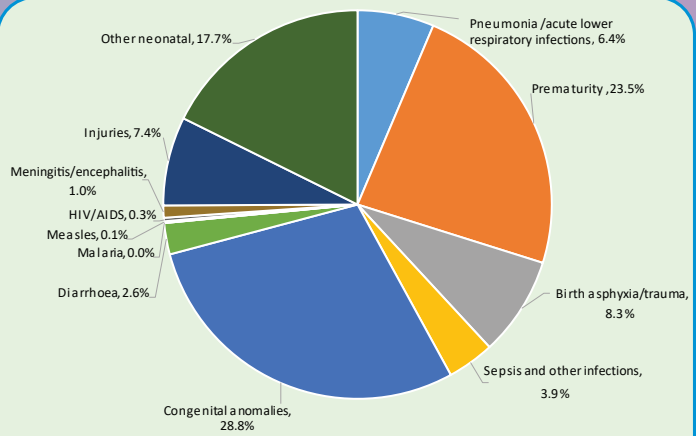
Population living in urban areas (%)	...
Annual GDP growth (%) (2018)	0.2
Population growth rate (%) (2018)	1.4
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2000)	73.6

Estimated population in 2018



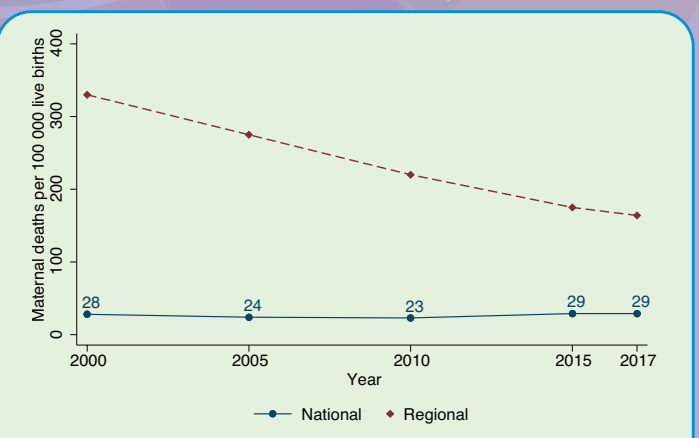
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line	%	...
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.1
	Female %	0.1

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	7.3
wasted	%	6.6
overweight	%	16.7
(2015)		

4 QUALITY EDUCATION

Literacy rate (15–24 years)	Total %	...
	Male %	...
	Female %	...
Net primary school enrolment ratio per 100 school-age children (2013)	Total ratio	93
	Male ratio	97
	Female ratio	90

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory)	%	...

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2015)	%	99
Access to improved sanitation facilities (World Health Statistics, 2015)	%	81

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	6.2
	Male %	5.0
	Female %	9.9

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	30.7
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	3.3

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	75.1	77.7	76.3
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	29
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	5
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	7
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	8
Tobacco use among persons 15+ years (%) (2018)	32.6	17.6	25.1
Overweight (18+ years) (%) (2016)	…	…	67.9
Obesity (18+ years) (%) (2016)	…	…	32.0
Raised blood pressure among persons 18+ years (%) (2014)	…	…	20.7
Raised blood glucose among persons 18+ years (%) (2015)	…	…	13.4
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	17.9
Cancer incidence per 100 000 (2018)	…	…	242.8

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Lebanon

Voluntary National Review

Completed in 2018: https://sustainabledevelopment.un.org/content/documents/19624LebanonVNR2018.pdf

National Focal Point for the 2030 Agenda

H.E. Minister Nazem El-Khoury, Minister of Environment

National Focal Point in Ministry of Public Health for health-related SDGs

Mrs Hilda Harb, Head of Statistics Department, Ministry of Public Health

Setting national targets for SDG 3+

Following discussions by the United Nations Country Team (UNCT) on accelerating efforts for SDG 3+, a meeting was held with all United Nations agencies to initiate the process. Subsequently, bilateral meetings on each accelerator are taking place to map current initiatives and jointly accelerate work towards SDG 3+.

Partnerships for advancing the 2030 Agenda

The Ministry of Public Health has recently developed a medium-term Health Strategic Plan (2016–2020) coupled with a detailed five-year National Health Strategy, which define the main priorities in line with the SDGs. The Ministry has also developed a five-year strategic plan for the health response to the Syrian refugee crisis. In addition, detailed strategic documents defining the main areas of intervention and action plans have been elaborated for thematic issues including mental health, immunization, substance use, and surveillance and early warning systems. The Health Strategic Plan is available at http://www.moph.gov.lb/en/view/11666/strategic plan-2016–2020.

Partnerships for advancing the health-related SDGs

WHO, in coordination with the UNCT, is supporting the Lebanese Government in updating existing strategies or developing new ones in line with SDGs. On behalf of the UNCT, UNDP is coordinating SDG-related activities, including a mapping of existing strategies to align them with the SDGs. In addition, a communication strategy for sensitizing key stakeholders and civil society organizations on the SDGs has been developed with the support of the UNCT.

Partnerships for advancing the health-related SDGs

Several important partnerships exist to support reaching the health-related SDGs. The World Bank is supporting the piloting and expansion of a project on UHC and primary health care. WHO, UNICEF, UNHCR and UNFPA are jointly supporting the National Maternal and Child Health Observatory. UNICEF, WHO, UNHCR and the European Union have developed an initiative aiming at reaching the most vulnerable Syrian refugees and host communities with maternal and child health services. In addition, WHO is coordinating communications activities, supported by the UNCT, related to SDG 3.

Country success story or an example of efforts to accelerate action on the health-related SDGs

Not available

Health and the SDGs
2019

Libya

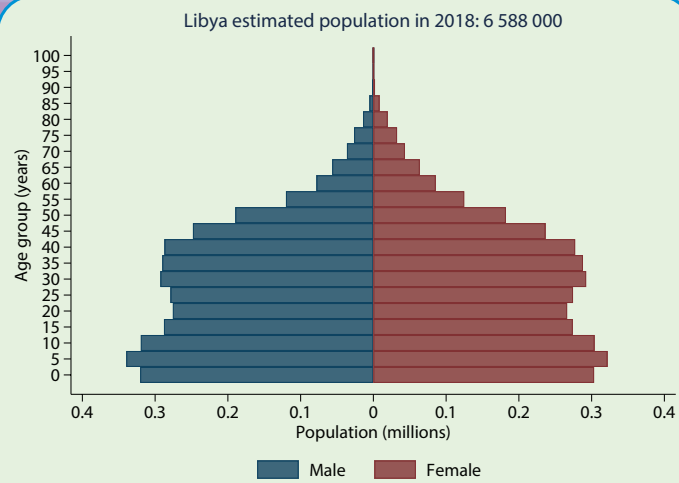
Universal health coverage

UHC service coverage index (2017)	64
Primary health care facilities per 10 000 population (2017)	2.1
Hospital beds per 10 000 population (2017)	32.0
Demand for family planning satisfied with modern methods (%) (2017)	47.0
Antenatal care visits (4+ visits) (%) (2014)	66.3
Measles immunization coverage among 1-year olds (%) (2018)	97
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	59
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	97
Out-of-pocket expenditure as percentage of current health expenditure (2016)	...
Domestic general government health expenditure as % of general government expenditure (2016)	...

Selected determinants of health

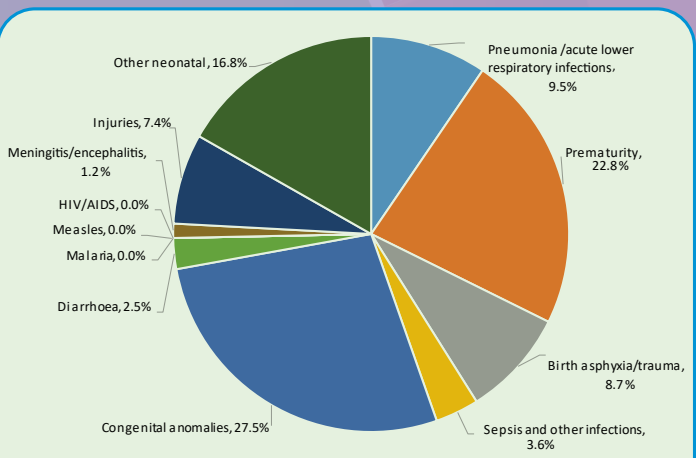
Population living in urban areas (%) (2018)	85
Annual GDP growth (%) (2018)	7.8
Population growth rate (%) (2018)	3.0
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2000)	...

Estimated population in 2018



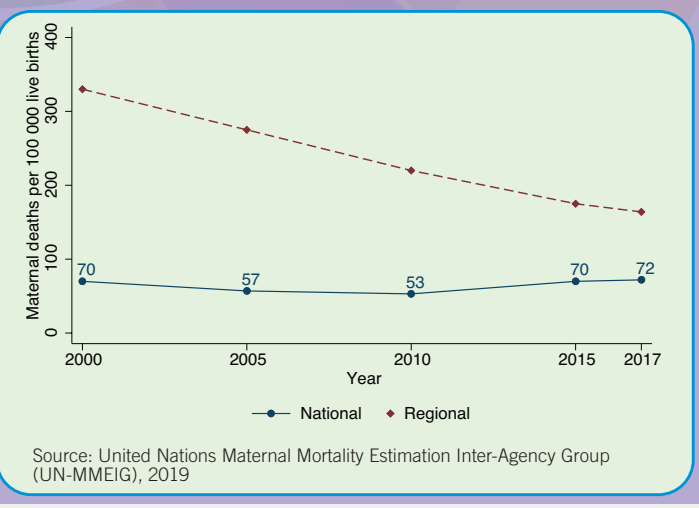
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2015)	%	11.8
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.1
	Female %	0.1

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	21.0
wasted	%	6.5
overweight	%	22.0
(2015)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2015)	Total %	100
	Male %	92
	Female %	83
Net primary school enrolment ratio per 100 school-age children (2016)	Total ratio	98
	Male ratio	99
	Female ratio	98

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory)	%	...

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2015)	%	62
Access to improved sanitation facilities (World Health Statistics, 2015)	%	97

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	17.3
	Male %	15.0
	Female %	24.5

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	44.2
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	28.7

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	69.0	75.0	71.9
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	72
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	7
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	11
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	12
Tobacco use among persons 15+ years (%) (2018)	…	…	…
Overweight (18+ years) (%) (2016)	…	…	66.8
Obesity (18+ years) (%) (2016)	…	…	32.5
Raised blood pressure among persons 18+ years (%) (2014)	…	…	23.7
Raised blood glucose among persons 18+ years (%) (2015)	…	…	15.9
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	20.1
Cancer incidence per 100 000 (2018)	…	…	120.3

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Libya

Voluntary National Review

N/A

National Focal Point for the 2030 Agenda

Mr Esam Garba, Ministry of Planning

National Focal Point in Ministry of Health for health-related SDGs

Mohamed Ibrahim Saleh Daganee, Director Health Information Center, Ministry of Health

Setting national targets for SDG 3+

Currently Libya does not have agreed national targets for SDG 3+. However, efforts are being made by the Ministry of Health to convene a meeting to agree on national targets.

Incorporating SDG 3 targets in health policy, strategy and planning

The National Center for Health Reforms, with support from WHO, has prepared a draft national health policy which incorporates SDG 3 targets. Based on the broad principles of the national health policy, a national health strategy and costed implementation plan will be prepared. The Ministry of Health will ensure that the strategy and planning documents incorporate nationalized SDG 3 targets.

Partnerships for advancing the 2030 Agenda

United Nations agencies are actively supporting Libya and the Libyan people at this critical time, particularly on the humanitarian front. Meanwhile, development work is gaining momentum. Recently, a multi-agency taskforce was formed and researched the development needs in four sectors: water, energy, education and health. The taskforce aims to identify existing information sources and focus on information gaps, so that analytical work is pursued and fed into sector development programmes. In this regard, the SDGs were a cross-cutting theme. WHO took the lead in representing the health sector and promoting SDG 3 and its targets and indicators. Capacity-building for Libya's Ministry of Health is in progress and needs to continue over the immediate to medium term.

Partnerships for advancing the health-related SDGs

A number of international nongovernmental organizations working in Libya can contribute to attaining the SDGs. The World Bank has been engaged in health sector development and is planning to bring additional resources and partner with WHO and other stakeholders to increase access to essential health services and narrow the gaps in UHC.

Country success story or an example of efforts to accelerate action on the health-related SDGs

Not available

Health and the SDGs
2019

Morocco

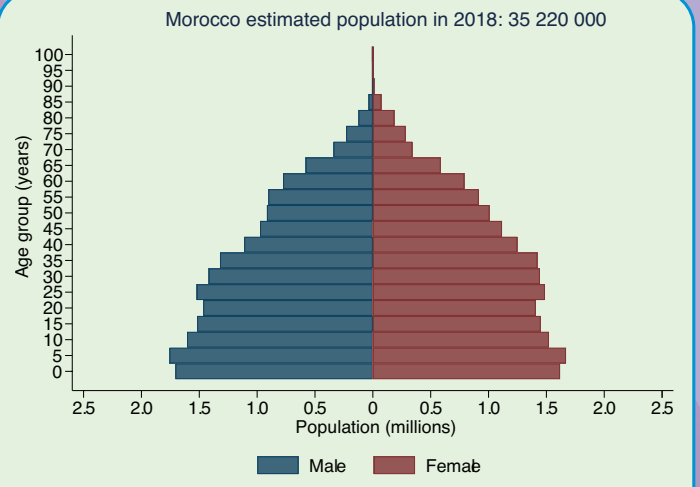
Universal health coverage

UHC service coverage index (2017)	70
Primary health care facilities per 10 000 population (2017)	0.8
Hospital beds per 10 000 population (2017)	10
Demand for family planning satisfied with modern methods (%) (2017)	78.5
Antenatal care visits (4+ visits) (%) (2018)	60.9
Measles immunization coverage among 1-year olds (%) (2018)	100
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	88
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	99
Out-of-pocket expenditure as percentage of current health expenditure (2016)	48.6
Domestic general government health expenditure as % of general government expenditure (2016)	9.1

Selected determinants of health

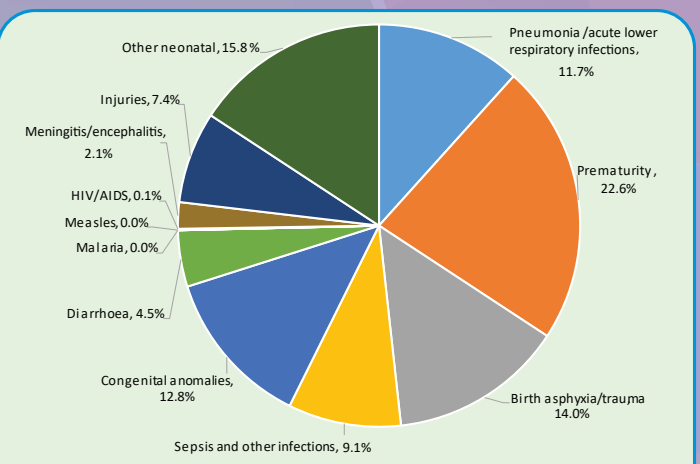
Population living in urban areas (%) (2018)	62
Annual GDP growth (%) (2018)	3.0
Population growth rate (%) (2017)	1.1
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2015)	70.1

Estimated population in 2018



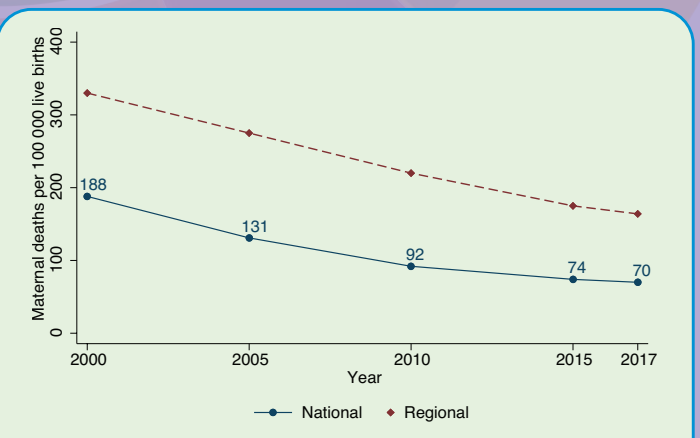
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2014)	%	2.2
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.3
	Female %	0.4

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	15.1
wasted	%	4.7
overweight	%	10.8
(2018)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2016)	Total %	89
	Male %	93
	Female %	86
Net primary school enrolment ratio per 100 school-age children (2017)	Total ratio	82
	Male ratio	82
	Female ratio	81

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	94

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2018)	%	87
Access to improved sanitation facilities (World Health Statistics, 2018)	%	96

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	9.0
	Male %	8.6
	Female %	10.4

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	31.0
	Urban	…

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	<0.1

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	74.8	77.0	76.0
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	70
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	14
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	20
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	23
Tobacco use among persons 15+ years (%) (2018)	37.7	0.5	18.6
Overweight (18+ years) (%) (2016)	…	…	60.4
Obesity (18+ years) (%) (2016)	…	…	26.1
Raised blood pressure among persons 18+ years (%) (2014)	…	…	26.1
Raised blood glucose among persons 18+ years (%) (2015)	…	…	13.7
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	12.4
Cancer incidence per 100 000 (2018)	…	…	139.6

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Morocco

Voluntary National Review

Completed in 2016:
https://sustainabledevelopment.un.org/memberstates/morocco

National Focal Point for the 2030 Agenda

Ministry of Foreign Affairs and International Cooperation, and High Commission of Planning

National Focal Point in Ministry of Health for health-related SDGs

Abdelilah El Marnissi, Head of Division of Planning and Studies

Setting national targets for SDG 3+

N/A

Incorporating SDG 3 targets in health policy, strategy and planning

Efforts towards advancing the 2030 Agenda in Morocco are being led by the Ministry of Foreign Affairs and International Cooperation, and the High Commission of Planning. The process of nationalizing the SDG targets is ongoing through a consultative process including not only ministries and public institutions, but all other stakeholders. The first national consultation was held in 2016 to sensitize both public institutions and nongovernmental organizations on the 2030 Agenda. The second national consultation was held in May 2019 to review the status of implementation of the SDGs.

The National Health Plan 2025 was formulated in consideration of the SDGs and in particular SDG 3 on health and well-being. The Ministry of Health has developed a first version of an action plan to achieve the targets of the health-related SDGs which will require updating based on new available data. In addition, many plans and strategies have been established taking into account the health targets. For example, the National Child Policy 2030, the national strategy for the prevention and control of noncommunicable diseases (NCDs) and the national strategy to end preventable maternal and neonatal mortality and morbidity. Furthermore, UHC is one of the major priorities of the Government Programme 2016–2021 and the National Health Plan 2025. The objective is to improve access to health care services and extend health insurance to other populations such as self-employed people and liberal professions to achieve the goal of 90% coverage of the population.

Partnerships for advancing the 2030 Agenda

To achieve the SDGs by 2030, Morocco needs to establish key international and national partnerships to mobilize funds and technical assistance to accelerate progress on the targets. In 2019, the High Commission of Planning signed a partnership agreement with 10 United Nations agencies that supports monitoring and reporting on the SDGs.

Partnerships for advancing the health-related SDGs

To achieve the health-related SDG targets, the Ministry of Health needs to establish partnerships with stakeholders in order to promote Health in All Policies and mobilize more resources for the health sector. Eleven ministries, as well as civil society actors and the private sector, have signed a charter for the prevention and control of NCDs, committing to adopt the vision, objectives and mechanisms for implementing the national strategy. In addition, in June 2019, the Ministry of Health in collaboration with WHO, the European Union, the World Bank and the African Development Bank organized a national conference on health financing and the first Country Dialogue on three accelerators identified in the Global Action Plan for Healthy Lives and Well-being for All: community and civil society engagement; determinants of health; and data and digital health.

Country success story or an example of efforts to accelerate action on the health-related SDGs

Not available

Health and the SDGs 2019

Oman

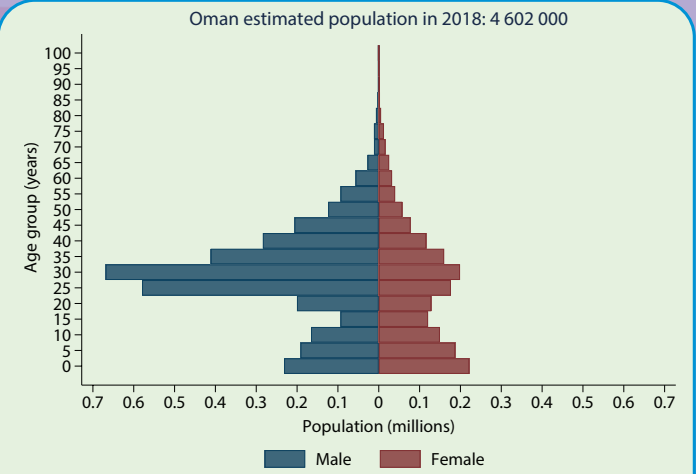
Universal health coverage

UHC service coverage index (2017)	69
Primary health care facilities per 10 000 population (2018)	0.5
Hospital beds per 10 000 population (2018)	14.8
Demand for family planning satisfied with modern methods (%) (2017)	38.0
Antenatal care visits (4+ visits) (%) (2018)	76.3
Measles immunization coverage among 1-year olds (%) (2018)	99
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	51
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	99
Out-of-pocket expenditure as percentage of current health expenditure (2016)	5.9
Domestic general government health expenditure as % of general government expenditure (2016)	7.6

Selected determinants of health

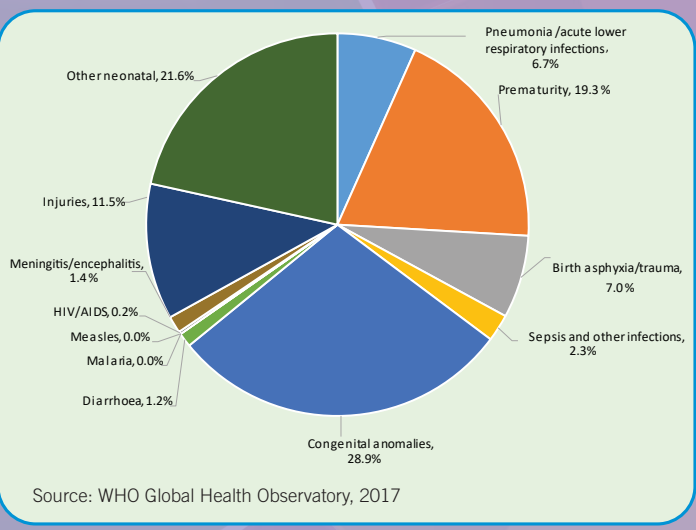
Population living in urban areas (%)	...
Annual GDP growth (%) (2018)	2.1
Population growth rate (%) (2018)	2.9
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2015)	56.3

Estimated population in 2018



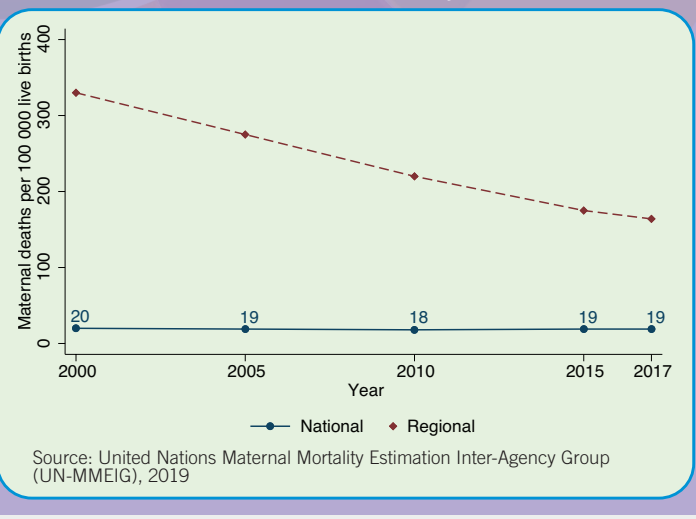
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2014)	%	0.0
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.1
	Female %	0.0

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	11.4
wasted	%	9.3
overweight	%	3.1
(2018)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2018)	Total %	97
	Male %	97
	Female %	98
Net primary school enrolment ratio per 100 school-age children (2018)	Total ratio	98
	Male ratio	99
	Female ratio	98

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2016)	%	95
Access to improved sanitation facilities (World Health Statistics, 2016)	%	99

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	3.1
	Male %	1.6
	Female %	13.2

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	38.2
	Urban	…

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	0

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	75.3	79.5	77.0
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	19
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	5
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	10
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	11
Tobacco use among persons 15+ years (%) (2018)	12.8	0.3	9.1
Overweight (18+ years) (%) (2016)	…	…	62.6
Obesity (18+ years) (%) (2016)	…	…	27.0
Raised blood pressure among persons 18+ years (%) (2014)	…	…	24.8
Raised blood glucose among persons 18+ years (%) (2015)	…	…	13.5
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	17.8
Cancer incidence per 100 000 (2018)	…	…	103.3

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Oman

Voluntary National Review

Completed in 2019: https://sustainabledevelopment.un.org/content/documents/23489Sultanate_of_Oman_National_Voluntary_Report__2019_Arabic_Spreads.pdf

National Focal Point for the 2030 Agenda

Supreme Council for Planning

National Focal Point in Ministry of Health for health-related SDGs

Dr Omar Al-Farsi, Director of Information and Statistics Department
Dr Medhat Kamal El-Said, Expert in Epidemiology and Public Health

Setting national targets for SDG 3+

A high-level committee, led by the Supreme Council for Planning and with members from different sectors, was established to agree on national targets for all SDGs in Oman. The first Voluntary National Review confirmed the country's commitment to achieving the SDGs in all three dimensions – economic, social and environment – within the specified time frame.

A Ministry of Health committee meets annually to review progress on the indicators. Health-related SDG indicators are published annually in the Annual Health Report (https://www.moh.gov.om/en/web/statistics/annual-reports), and facts and figures about UHC in Oman were published in 2019.

Incorporating SDG 3 targets in health policy, strategy and planning

The Health Vision 2050, developed in 2012 and published in 2014, describes the current health system in Oman and provides a long-term vision for health development. This Vision is operationalized in five-year plans. The Ninth Five Year Plan (2016–2020) is the most recent national health policy and strategy, and is in line with the SDGs and UHC. The Health Vision 2050 is available at:

https://www.moh.gov.om/documents/16506/119833Health+Vision+2050/7b6f40f3-8f93-4397-9fde-34e04026b829

Partnerships for advancing the 2030 Agenda

There are four United Nations agencies in Oman (FAO, UNFPA, UNICEF and WHO) which work closely together to support the Government in meeting SDG targets.

The Oman Human Rights Commission organized a multisectoral workshop on the Sustainable Development Goals: Human Rights Perspective on 10–12 April 2017. It was facilitated by two experts from the United Nations Economic and Social Commission for Western Asia.

Partnerships for advancing the health-related SDGs

A number of national committees work to achieve the targets of the health-related SDGs, such as the national maternal mortality committee, the national multisectoral noncommunicable diseases (NCDs) committee and the national multisectoral committee on narcotics and psychotropic substances. Numerous international, regional and national meetings provide opportunities to advocate and build national capacity on the SDGs. For example, the Statistical Centre for the Cooperation Council for the Arab Countries of the Gulf, based in Oman, organized a workshop on concepts and procedures in Gulf Cooperation Council countries for preparing health and SDG indicators on 14–15 February 2016. In June 2017, the Ministry of Health presented a poster on Health Indicators and the SDGs in Oman and the Arab Region at an international conference held at the American University of Beirut, Lebanon. In addition, the Ministry of Health presented on Sustainable Development Goals from a Health Perspective in the Ministry of Education on 18 April 2017. WHO organizes an annual workshop on strategic planning and the SDGs are usually discussed with directors at the Ministry of Health.

Country success stories

A vector control campaign was conducted to address a dengue outbreak in Muscat. The campaign involved 1200 public health personnel, the largest such gathering of health personnel in Oman. Mosquito breeding sites were eradicated in Muscat Governorate through insecticide spraying and community mobilization. These efforts led to the reduction of *Aedes aegypti* density, prevention of spread of the vector to other parts of Oman, and control of dengue fever cases.

In 2017, a national supplementary immunization activity for measles-mumps-rubella (MMR) was conducted, using an injectable MMR vaccine and a combination of communication and community engagement strategies. The activity targeted adults aged 20–35 years and achieved >90% national and subnational vaccination coverage, including 88% coverage of the expatriate working population who comprised 62% of the target population. This campaign contributed to WHO recognizing the elimination of measles and rubella in Oman in 2019.

Al-Shifa, developed by the Ministry of Health, is a comprehensive health care information management system for managing health facility management information including electronic medical records, assets, inventories and human resources. The system has been installed in more than 220 health care facilities of varying sizes and capabilities, including non-Ministry of Health facilities. A fully integrated and easily accessible electronic medical record provides a 360 degree view of patient history and clinical information needed at point-of-care. An e-document for birth and death registration facilitates the documentation and reporting of vital events with the computerized Central Birth and Death Registration of the Royal Oman Police. This access to comprehensive information in one location will improve quality of data for monitoring mortality trends.

Health and the SDGs
2019

Pakistan

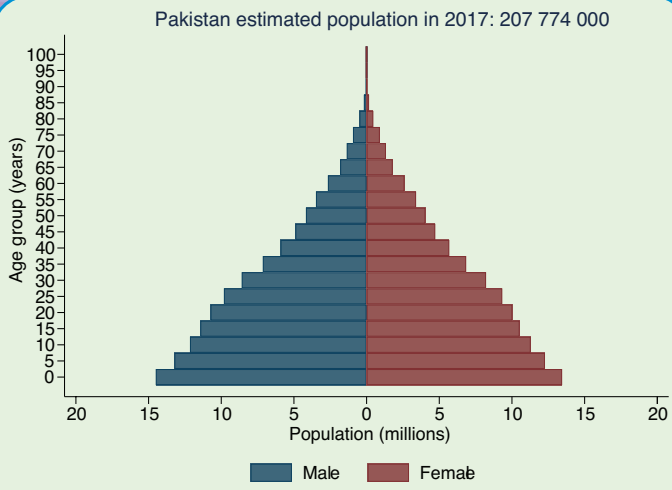
Universal health coverage

UHC service coverage index (2017)	45
Primary health care facilities per 10 000 population (2018)	0.5
Hospital beds per 10 000 population (2018)	6.3
Demand for family planning satisfied with modern methods (%) (2017)	51.7
Antenatal care visits (4+ visits) (%) (2018)	51.4
Measles immunization coverage among 1-year olds (%) (2018)	66
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	93
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	72
Out-of-pocket expenditure as percentage of current health expenditure (2016)	65.2
Domestic general government health expenditure as % of general government expenditure (2016)	3.9

Selected determinants of health

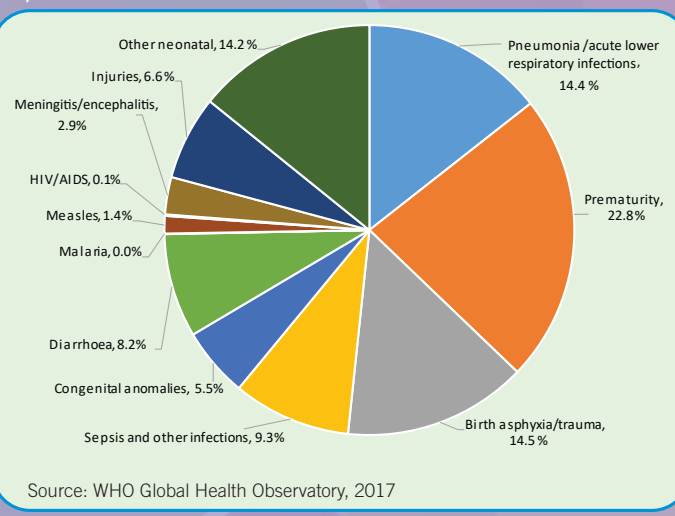
Population living in urban areas (%) (2018)	36
Annual GDP growth (%) (2018)	5.4
Population growth rate (%) (2017)	2.4
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2015)	64.4

Estimated population in 2017



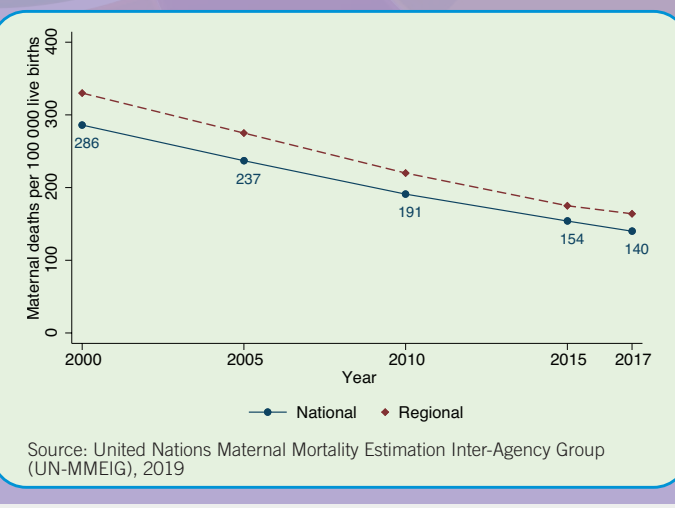
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2018)	%	3.6
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	2.6
	Female %	3.2

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	40.2
wasted	%	17.7
overweight	%	9.5
(2018)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2015)	Total %	57
	Male %	68
	Female %	45
Net primary school enrolment ratio per 100 school-age children (2015)	Total ratio	57
	Male ratio	60
	Female ratio	53

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	44

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2018)	%	94
Access to improved sanitation facilities (World Health Statistics, 2018)	%	71

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	3.0
	Male %	2.4
	Female %	5.1

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	55.2
	Urban	…

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	6.9

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	66.0	70.0	66.5
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	140
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	44
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	61
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	75
Tobacco use among persons 15+ years (%) (2018)	29.5	2.3	16.2
Overweight (18+ years) (%) (2016)	…	…	28.4
Obesity (18+ years) (%) (2016)	…	…	8.6
Raised blood pressure among persons 18+ years (%) (2014)	…	…	30.5
Raised blood glucose among persons 18+ years (%) (2015)	…	…	12.4
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	24.7
Cancer incidence per 100 000 (2018)	…	…	114.0

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Pakistan

Voluntary National Review

Completed in 2019: https://sustainabledevelopment.un.org/content/documents/23381VNR_2019_Pakistan.pdf

National Focal Point for the 2030 Agenda

Mr Shahid Naeem, Secretary and Chief SDGs Secretariat, Ministry of Planning, Development and Reforms

National Focal Point in Ministry of National Health Services, Regulations and Coordination for health-related SDGs

Dr Anjum Javed, Director (Programs), Ministry of National Health Services, Regulations and Coordination, Islamabad

Setting national targets for SDG 3+

In 2016, the SDGs were integrated in the national development agenda through a unanimous parliamentary resolution that constitutionally emphasizes meeting of SDG targets by all sectors including health by 2030. With the support of WHO, the Ministry of National Health Services, Regulations and Coordination and provincial health departments in collaboration with the Ministry of Planning, Development and Reforms and provincial planning departments led an exercise to localize targets and indicators, which was completed and launched in 2018. The UHC service coverage index was developed as part of this exercise. In addition, WHO's global tool SCORE for health data was launched to improve monitoring and strengthen the health management information system in alignment with SDG 3+.

Incorporating SDG 3 targets in health policy, strategy and planning

The National Health Vision Pakistan 2016–2025 (NHVP) reflects true alignment to the SDGs as separate and cross-cutting pillars. It presents a national directive for health that is in harmony with the country's Vision 2025, and concurrently addresses international health priorities while being based on provincial realities within the framework of the post-18th Amendment. In the context of devolution, provincial health strategies are being appraised with SDG targets in mind and aligned with the NVHP. The monitoring and evaluation mechanism for the NHVP is directed towards SDG implementation and reporting through multisectoral collaboration.

Given that delivery of quality health care services is a provincial responsibility, priority actions and operational plans/strategies emanating from the Vision document are well aligned with provincial needs, expectations and priorities. The 10-year Punjab Health Sector Strategy was launched in 2019.

The NHVP is available at: http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/pakistan/national_health_vision_2016-25_30-08-2016.pdf.

Partnerships for advancing the 2030 Agenda

A Memorandum of Understanding was signed between the Planning Commission of Pakistan and the United Nations to support the Government in localizing the 2030 Agenda and create an enabling environment for implementation. This national initiative on the SDGs includes activities at national, provincial and district level involving multiple stakeholders and facilitating vertical and horizontal policy coherence.

The United Nations Country Team has set up an SDG task force to harmonize the interagency approach to mainstreaming the 2030 Agenda, to maximize effectiveness and reduce duplication of efforts.

Pakistan is a One-UN country. The current United Nations Sustainable Development Cooperation Framework (2018–2022) is based on the SDGs. This medium-term strategic planning document pursues the national priorities enshrined in Pakistan's Vision 2025, and localization of the SDGs framed by the 2030 Agenda.

Partnerships for advancing the health-related SDGs

The National Health and Population Consortium led by the Ministry of National Health Services, Regulations and Coordination (co-chaired by WHO) is providing direction to partners to streamline support to the health-related SDGs. Furthermore, an inter-ministerial forum for health was established with designated technical focal points for the NHVP in each province. The Government aims to promote cross-sectoral action for advancing health through the concepts of One Health and Health in All Policies (HiAP). WHO supported the Ministry of National Health Services, Regulations and Coordination and provincial health and planning departments in 2016–2017 to advocate for SDG 3 through the launch of national/provincial events. One of the key objectives of these events was to identify synergies and partnerships for building collective commitment and harnessing resources for SDG 3 implementation in Pakistan. Key outcomes of the events were declarations of commitment to work on SDG 3 and integrate targets in policy frameworks. In addition, a National Strategic Framework for Action on HiAP has been developed with the support of the WHO Country Office in Pakistan.

Country success stories

Localization of SDG 3 targets and indicators has established the leadership role of the health sector in implementation and monitoring of SDG 3 in Pakistan, and contributed to multisectoral linkages for achievement of the health-related SDGs. Pakistan is one of the first countries in the Region to reach this milestone.

An SDG 3 application for smartphones has been developed. The app serves as a mechanism for android users to easily access updated SDG 3 targets and indicators for Pakistan, and check the status of progress.

With support from WHO and in collaboration with Imperial College London, a training course for senior managers (across sectors and across Pakistan) was conducted in July 2019. The course was entitled Country Leadership on Health and Well-Being under the 2030 Agenda: Accelerating Progress towards Health-related SDGs in Pakistan.

Health and the SDGs
2019

Palestine

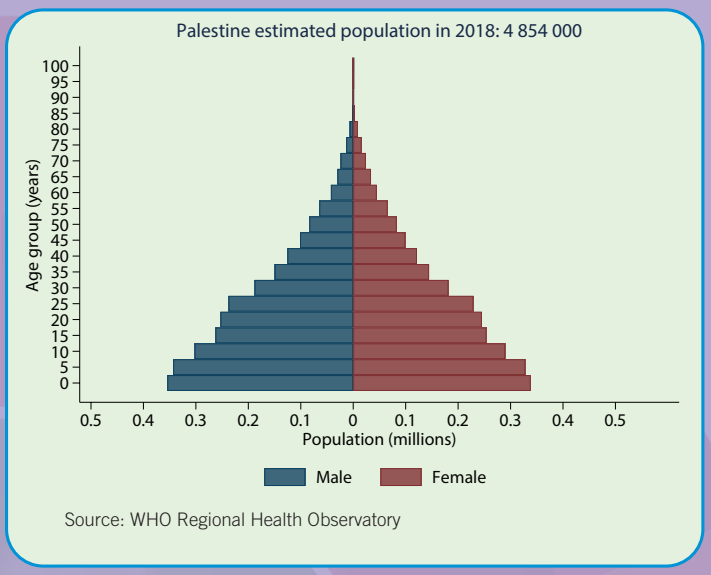
Universal health coverage

UHC service coverage index (2017)	64
Primary health care facilities per 10 000 population (2018)	1.6
Hospital beds per 10 000 population (2018)	13.3
Demand for family planning satisfied with modern methods (%)	...
Antenatal care visits (4+ visits) (%) (2018)	95.5
Measles immunization coverage among 1-year olds (%) (2018)	100
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	100
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	100
Out-of-pocket expenditure as percentage of current health expenditure (2016)	41.9
Domestic general government health expenditure as % of general government expenditure (2016)	13.7

Selected determinants of health

Population living in urban areas (%) (2018)	85
Annual GDP growth (%)	...
Population growth rate (%) (2018)	2.6
Children aged <5 years with pneumonia symptoms taken to a health care provider (%)	...

Estimated population in 2018

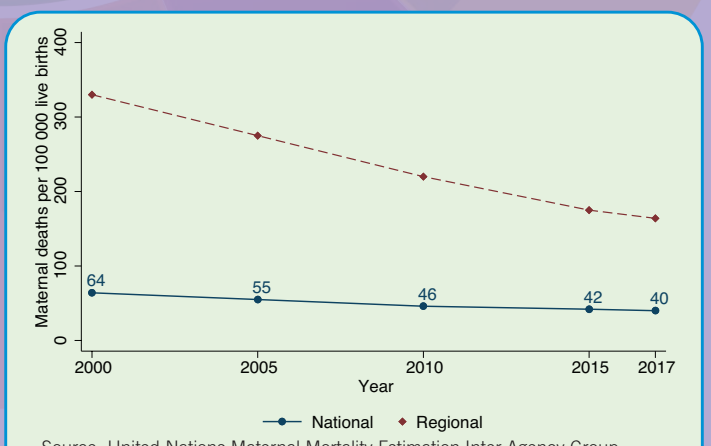


Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)

(Data unavailable)

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2017)	%	29.2
Proportion of employed population below the international poverty line	Male %	...
	Female %	...

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	7.4
wasted	%	1.2
overweight	%	8.2
(2014)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2018)	Total %	99
	Male %	99
	Female %	99
Net primary school enrolment ratio per 100 school-age children (2018)	Total ratio	98
	Male ratio	98
	Female ratio	99

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level	%	...

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2017)	%	62
Access to improved sanitation facilities (World Health Statistics, 2017)	%	100

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	30.2
	Male %	24.2
	Female %	50.9

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3)	Total	...
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population)		...

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2017)	72.3	75.4	73.8
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	40
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	12
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	18
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	21
Tobacco use among persons 15+ years (%)	...	...	...
Overweight (18+ years) (%)	...	...	...
Obesity (18+ years) (%)	...	...	...
Raised blood pressure among persons 18+ years (%)	...	...	...
Raised blood glucose among persons 18+ years (%)	...	...	...
Raised cholesterol among persons 18+ years (%)	...	...	...
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	...	...	21
Cancer incidence per 100 000 (2018)	...	...	158.6

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Palestine

Voluntary National Review

Completed in 2018: https://sustainabledevelopment.un.org/content/documents/20024VNR2018PalestineNEWYORK.pdf

National Focal Point for the 2030 Agenda

Mr Mahmoud Ataya, Policy and Reform Unit, Prime Minister's Office

National Focal Point in Ministry of Health for health-related SDGs

Ms Ola Aker, Director of Health Planning, Ministry of Health

Setting national targets for SDG 3+

Meetings were held to agree on national priorities and targets for SDG 3 during the development of the National Health Strategy 2017–2022, and after through the SDG 3 national working group. The launch of the 2030 Agenda coincided with the preparation process of the national strategies for 2017–2022. This presented a good opportunity to integrate SDG targets into national priorities and to highlight the higher priority targets for the following six years.

UHC is the ultimate goal and main priority for achieving better health for citizens, and is aligned with the "putting citizens first" objective of the Palestinian National Policy Agenda for 2017–2022. Continuous national efforts are being made towards SDG targets on reducing noncommunicable diseases (NCDs), drug abuse and maternal and child mortality, as well as to maintain achievements and good national health indicators in several areas despite threats due to instability, occupation and lack of resources.

Incorporating SDG 3 targets in health policy, strategy and planning

The National Health Strategy 2017–2022 is based on the national vision of a comprehensive and integrated health system that contributes to improving the quality of health services and sustainable enhancement of health status, and the SDGs are considered one of its main pillars. During the preparation of strategy documents, workshops were conducted with stakeholders to get input on how to link the strategic objectives to the SDGs. All strategic objectives of the National Health Strategy 2017–2022 are now fully aligned with SDG 3, and directly linked to targets for UHC, health financing, recruitment of health workforce, reproductive and sexual health services, NCDs and communicable disease control.

Partnerships for advancing the 2030 Agenda

The National SDG Team for coordinating and supporting efforts to implement the 2030 Agenda was established in early 2016 under the leadership of the Prime Minister's Office. This team ensured the SDGs and targets were integrated in national sectoral and cross-sectoral strategies. In addition, a national task force for statistical monitoring of SDG implementation, chaired by the Palestinian Central Bureau of Statistics, was established in 2016. This task force is responsible for provision of statistical indicators to monitor the SDGs and the membership includes main line ministries. Two workshops to build the capacity of the national team and support the implementation of SDGs were held in November 2016 and April 2017, supported by the Executive Secretary of the United Nations Economic and Social Commission for Western Asia.

UNDP leads the joint United Nations SDG task force, which includes resident technical United Nations agencies in the country. In addition, the United Nations Development Assistance Framework and associated Common Country Analysis are based on the principle of "leaving no one behind" and are closely linked to the SDGs.

Partnerships for advancing the health-related SDGs

The Ministry of Health, in partnership with WHO, heads a national working group established in 2016 to support and monitor the implementation of SDG 3. The group includes stakeholders and representatives from related ministries, health service providers and civil society, working together to improve coordination on SDG-related initiatives and plans.

Several national teams and committees are working on specific issues which support the achievement of SDG 3 targets, including the National Committee for Maternal Mortality, the National High Council for Road Safety and the National Committee for Tobacco Control.

Examples of efforts to accelerate action on the health-related SDGs

The National Center for Treatment and Rehabilitation of Addiction is managed by the Ministry of Health, and offers free treatment and rehabilitation services for drug and alcohol abuse. It the first national centre for addiction treatment in Palestine, and will facilitate achieving target 3.5.

The Palestinian Government is committed to achieving UHC by 2030. In this regard, the Ministry of Health has adopted several policies to accelerate UHC, as follows.

- Development of infrastructure and health services through building and expansion of hospitals and primary health care clinics (e.g. establishment of a specialized ophthalmic government hospital, the Hugo Chavez Ophthalmic Hospital) with support from the Government of Venezuela, building two new public hospitals in Hebron Governorate, upgrading several primary health care clinics in different governorates, and development of pediatric heart surgery services in hospitals.
- Expansion of health care services in remote areas and among vulnerable groups. Emergency medical centres have been established in remote areas and those affected by settlers and closure due to the Israeli occupation. Eight centres are functional in different West Bank governorates.
- Implementation of the family practice approach in primary health care services.
- Implementation of quality improvement policies and standards including the Patient Safety Friendly Hospital Initiative, Baby-Friendly Hospital Initiative and ISO standards in laboratories.

Health and the SDGs
2019

Qatar

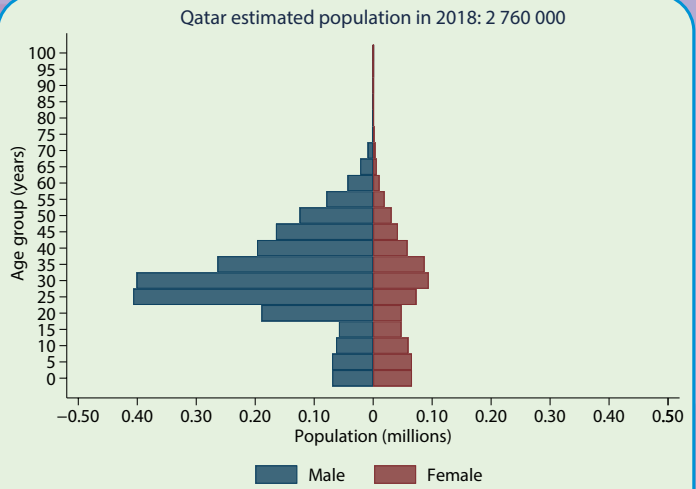
Universal health coverage

UHC service coverage index (2017)	68
Primary health care facilities per 10 000 population (2017)	3.2
Hospital beds per 10 000 population (2017)	12.3
Demand for family planning satisfied with modern methods (%) (2017)	63.9
Antenatal care visits (4+ visits) (%) (2018)	85
Measles immunization coverage among 1-year olds (%) (2018)	99
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	64
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	98
Out-of-pocket expenditure as percentage of current health expenditure (2016)	6.2
Domestic general government health expenditure as % of general government expenditure (2016)	6.3

Selected determinants of health

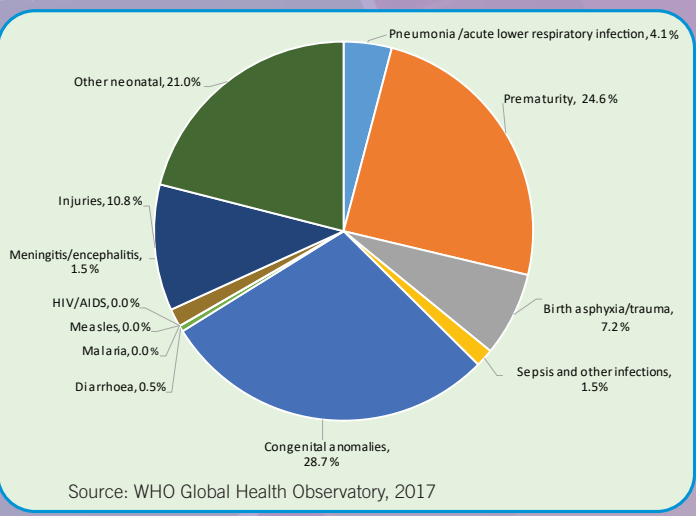
Population living in urban areas (%) (2018)	100
Annual GDP growth (%) (2018)	1.4
Population growth rate (%) (2018)	1.3
Children aged <5 years with pneumonia symptoms taken to a health care provider (%)	...

Estimated population in 2018



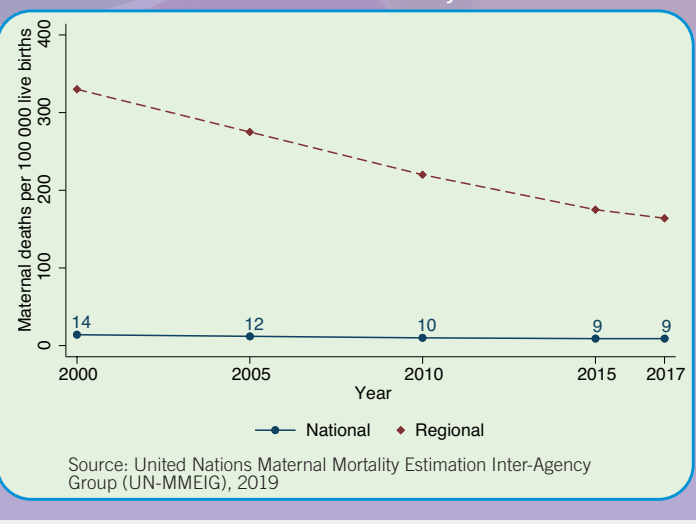
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2017)	%	0.1
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.0
	Female %	0.0

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	2.3
wasted	%	2.8
overweight	%	8.3
(2016)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2017)	Total %	99
	Male %	99
	Female %	99
Net primary school enrolment ratio per 100 school-age children (2017)	Total ratio	96
	Male ratio	96
	Female ratio	97

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2018)	%	100
Access to improved sanitation facilities (World Health Statistics, 2018)	%	100

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	0.1
	Male %	0.1
	Female %	0.7

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	90.3
	Urban	…

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	0

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	79.0	82.5	80.7
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	9
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	4
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	7
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	8
Tobacco use among persons 15+ years (%) (2018)	21.4	0.6	16.4
Overweight (18+ years) (%) (2016)	…	…	71.7
Obesity (18+ years) (%) (2016)	…	…	35.1
Raised blood pressure among persons 18+ years (%) (2014)	…	…	22.4
Raised blood glucose among persons 18+ years (%) (2015)	…	…	18.9
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	15.3
Cancer incidence per 100 000 (2018)	…	…	97.3

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in

Qatar

Health and the SDGs
2019

Saudi Arabia

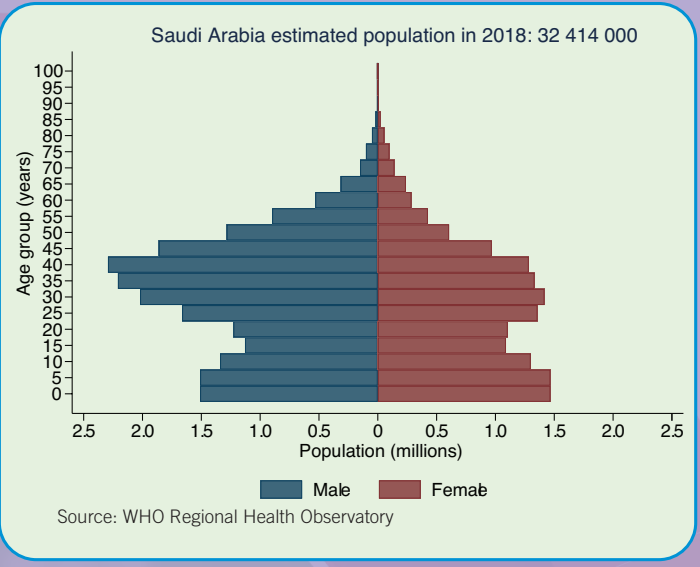
Universal health coverage

UHC service coverage index (2017)	74
Primary health care facilities per 10 000 population (2018)	0.7
Hospital beds per 10 000 population (2018)	22.5
Demand for family planning satisfied with modern methods (%) (2017)	73.2
Antenatal care visits (4+ visits) (%) (2018)	98
Measles immunization coverage among 1-year olds (%) (2018)	96
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	94
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	96
Out-of-pocket expenditure as percentage of current health expenditure (2016)	14.3
Domestic general government health expenditure as % of general government expenditure (2016)	10.1

Selected determinants of health

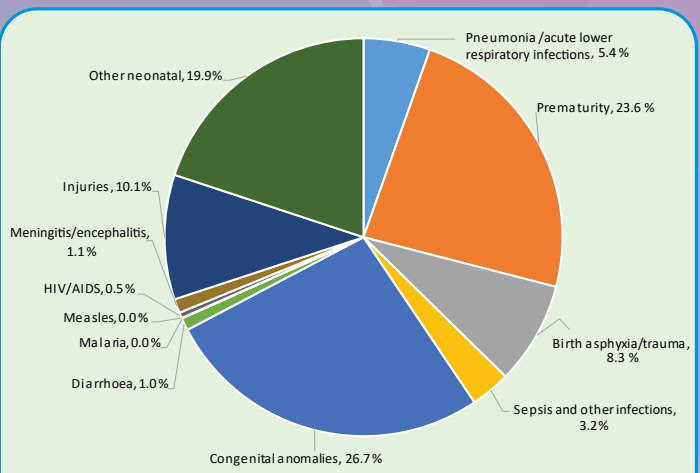
Population living in urban areas (%) (2018)	83
Annual GDP growth (%) (2018)	2.2
Population growth rate (%) (2017)	2.5
Children aged <5 years with pneumonia symptoms taken to a health care provider (%)	...

Estimated population in 2018



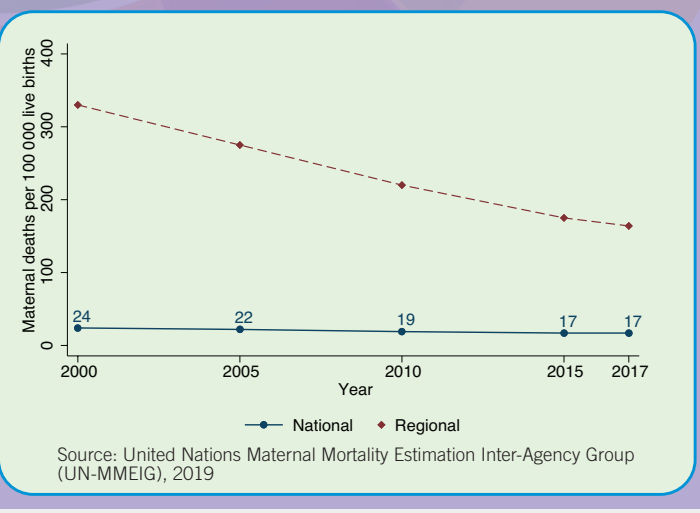
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line	%	...
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.0
	Female %	0.0

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	11.1
wasted	%	4.1
overweight	%	9.1
(2017)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2017)	Total %	99
	Male %	99
	Female %	99
Net primary school enrolment ratio per 100 school-age children (2017)	Total ratio	98
	Male ratio	97
	Female ratio	98

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2015)	%	100
Access to improved sanitation facilities (World Health Statistics, 2015)	%	99

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	5.9
	Male %	2.9
	Female %	21.0

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	78.4
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	0.2

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	73.7	76.0	74.8
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	17
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	4
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	6
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	7
Tobacco use among persons 15+ years (%) (2018)	23.1	0.7	14.1
Overweight (18+ years) (%) (2016)	...	...	69.7
Obesity (18+ years) (%) (2016)	...	...	35.4
Raised blood pressure among persons 18+ years (%) (2014)	...	...	23.3
Raised blood glucose among persons 18+ years (%) (2015)	...	...	17.4
Raised cholesterol among persons 18+ years (%)	...	...	...
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	...	...	16.4
Cancer incidence per 100 000 (2018)	...	...	88.7

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Saudi Arabia

Voluntary National Review

Completed in 2018: https://sustainabledevelopment.un.org/content/documents/20230SDGs_English_Report972018_FINAL.pdf

National Focal Point for the 2030 Agenda

Dr Samir J. Ghazi, Acting Director General, Natural Resources Directorate, Ministry of Economy and Planning

National Focal Point in Ministry of Health for health-related SDGs

Mr Faisal Alshammari, Director General, Statistics and Information Department, Ministry of Health

Setting national targets for SDG 3+

Saudi Arabia is committed to achieving the SDG targets and the Government has made it a top priority. A comprehensive systematic review of the SDGs is conducted annually.

The Saudi Vision 2030 is based on three thematic pillars: a vibrant society, a thriving economy and an ambitious nation. The Vision has 12 operational programmes, including the National Transformation Program (NTP 2020), which are the basis for integration of the SDGs into national planning processes. Vision 2030 in its entirety is compatible with and aligned to the SDG targets (https://vision2030.gov.sa/download/file/fid/417).

Incorporating SDG 3 targets in health policy, strategy and planning

SDG targets are incorporated in the NTP 2020 to fulfil the strategic objectives of Vision 2030. The Ministry of Health is launching several initiatives in line with Vision 2030 and the NTP 2020, including a reform of the health financing system. This reform aims to improve access to quality health services, with specific regard to low-income and poor groups, through increasing investment and public spending on health, reducing out-of-pocket spending and increasing pre-payment and risk-pooling, which may include tax-based financing, compulsory social insurance and other types of health insurance.

Partnerships for advancing the 2030 Agenda

Partnerships exist with international agencies such as WHO, UNICEF, UNFPA, UNDP and the World Bank. Saudi Arabia is benefiting from their expertise, technical facilities and financial contribution to advance the 2030 Agenda.

Partnerships for advancing the health-related SDGs

Considerable inter-ministerial collaboration is ongoing to reach the strategic objectives of the Vision 2030 related to health, involving the Ministry of Health, the Ministry of Finance, the Ministry of Economy and Planning, the Ministry of Labor and Social Affairs as well as the General Authority of Statistics.

Examples of efforts to accelerate action on the health-related SDGs

Two key efforts are being undertaken to accelerate action on the health-related SDGs.

- Health system strengthening: building a strong health system to achieve better access to safe quality health care for the purpose of moving towards UHC.
- Modern health care model initiatives: implementation of people-centred health clusters; expanding primary health care and integration with secondary/tertiary levels and social care, taking into account holistic physical and mental health needs of the population; addressing childhood overweight and obesity; and improving responsiveness to disasters, catastrophes and pandemics.

Health and the SDGs
2019

Somalia

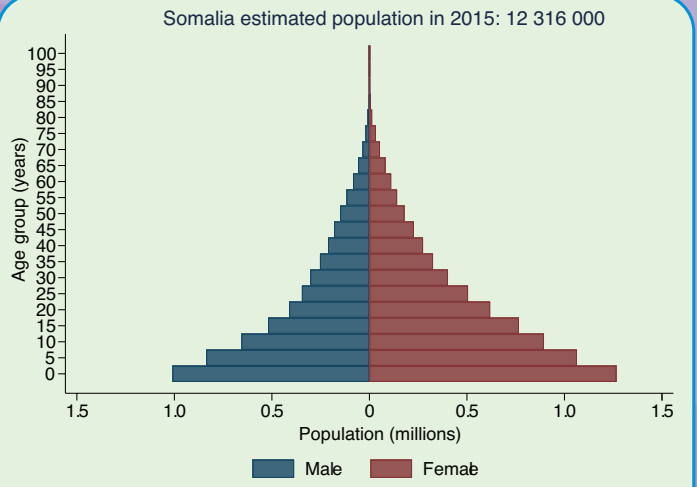
Universal health coverage

UHC service coverage index (2017)	25
Primary health care facilities per 10 000 population (2013)	1.9
Hospital beds per 10 000 population (2013)	8.7
Demand for family planning satisfied with modern methods (%) (2017)	48.3
Antenatal care visits (4+ visits) (%) (2014)	3.3
Measles immunization coverage among 1-year olds (%) (2018)	70
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	86
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	69
Out-of-pocket expenditure as percentage of current health expenditure (2016)	...
Domestic general government health expenditure as % of general government expenditure (2016)	...

Selected determinants of health

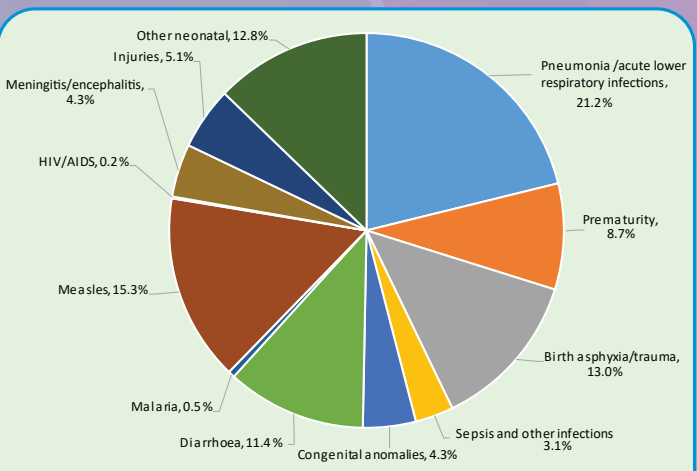
Population living in urban areas (%) (2018)	42
Annual GDP growth (%) (1990)	-1.5
Population growth rate (%) (2014)	2.9
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2015)	13.0

Estimated population in 2015



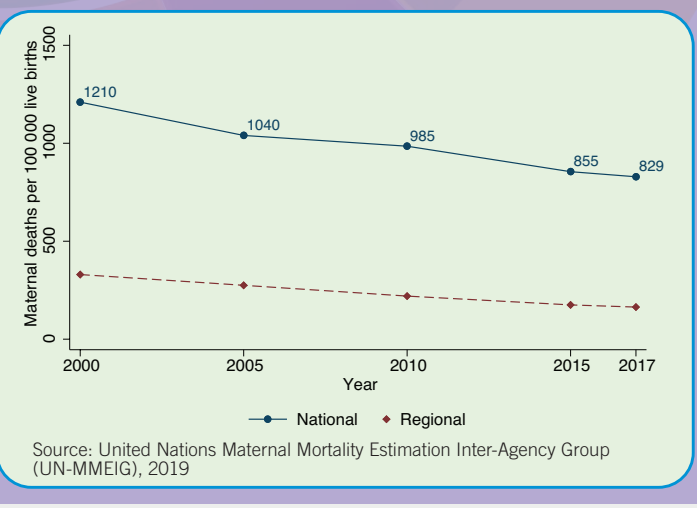
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line	%	...
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	65.0
	Female %	62.8

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	42.1
wasted	%	13.2
overweight	%	...
(2015)		

4 QUALITY EDUCATION

Literacy rate (15–24 years)	Total %	...
	Male %	...
	Female %	...
Net primary school enrolment ratio per 100 school-age children (2014)	Total ratio	17
	Male ratio	18
	Female ratio	17

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	<5

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2015)	%	31
Access to improved sanitation facilities (World Health Statistics, 2015)	%	23

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	14.0
	Male %	13.6
	Female %	15.4

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	29.5
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	28.2

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	55.0	58.4	56.7
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	829
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	39
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	80
Under-five mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	127
Tobacco use among persons 15+ years (%) (2018)	…	…	…
Overweight (18+ years) (%) (2016)	…	…	28.4
Obesity (18+ years) (%) (2016)	…	…	8.3
Raised blood pressure among persons 18+ years (%) (2014)	…	…	32.9
Raised blood glucose among persons 18+ years (%) (2015)	…	…	6.8
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	21.8
Cancer incidence per 100 000 (2018)	…	…	120.8

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Health and the SDGs at a glance in Somalia

Voluntary National Review

Planned for 2020

National Focal Point for the 2030 Agenda

Ministry of Planning, Investment and Economic Development, Federal Government of Somalia

National Focal Point in Federal Ministry of Health for health-related SDGs

Dr Abdullahi Hashi, Director General (Health), Federal Ministry of Health, Federal Government of Somalia

Setting national targets for SDG 3+

In 2018, the Ministry of Health, supported by WHO, conducted a health-related SDGs localization exercise. Data on the health-related SDGs were gathered and shared with stakeholders (Government, donors, United Nations agencies and civil society organizations) in four consultative workshops in Somalia and Nairobi, Kenya, to develop consensus and finalize baselines, milestones and targets. The data will be reviewed and updated on availability of the Somali Health and Demographic Survey and STEPwise survey results in 2019. It is further planned to localize the health-related SDGs to the state level.

Incorporating SDG 3 targets in health policy, strategy and planning

Somalia has developed second-generation Health Sector Strategic Plans for 2017–2021, according to nine health policy directions and the SDG 3 targets. The indicators used in the results framework are aligned with SDG 3 indicators. Under the pillar working groups for the aid architecture, the working group for social and human development includes a sub-working group for health. The sub-working group will monitor implementation of the health plan, SDG 3 and the United Nations Strategic Framework 2017–2020.

Following the health-related SDGs localization exercise, the Ministry of Health led a process to develop a Roadmap towards UHC in Somalia for 2019–2023. Localized data were used to develop the future strategies and interventions for UHC.

Partnerships for advancing the 2030 Agenda

The United Nations and the World Bank supported establishment of the Somalia Development and Reconstruction Facility (SDRF), which is the centrepiece for partnerships between Government and the international community. The United Nations Multi-Partner Trust Fund is one of the funding windows established under the SDRF. The Fund provides a platform for coordinated financing for sustainable reconstruction and development in Somalia with a focus on core state functions and socioeconomic recovery with 12 fully pledged projects and 10 donors, including the Peacebuilding Fund.

In addition, the NGO Consortium is a coordination platform that focuses on enabling an environment for efficient and effective delivery of humanitarian and development support to Somalia.

More recently, Somalia has been selected for Global Financing Facility and International Development Association support from the World Bank. The funding will target health outcomes related to women and children. This is likely to support progress on health-related SDGs in the coming years.

Partnerships for advancing the health-related SDGs

United Nations agencies are developing a Sustainable Development Cooperation Framework for Somalia, which will succeed the United Nations Strategic Framework (2017–2020). United Nations strategic priorities will be fully aligned to the SDGs, including SDG 3+.

Since the end of the Joint Health and Nutrition Program in Somalia in 2017, the main ongoing health partnerships are the Global Fund to Fight AIDS Tuberculosis and Malaria, and Gavi, the Vaccine Alliance. WHO and the International Organization for Migration (IOM) are also partnering to return the Somali diaspora to support the health system and build institutional capacity in the Ministry of Health. Due to the humanitarian emergency in the country, several partnerships (e.g. between IOM and UNICEF) have emerged to target expansion of vaccination coverage and combat the cholera outbreak.

Example of efforts to accelerate action on the health-related SDGs

A Roadmap towards UHC in Somalia (2019–2023) has been developed through a consultative process. It provides strategic guidance on priority health interventions to make progress on the health-related SDGs.

WHO is also developing a new Country Cooperation Strategy for Somalia (2019–2023), which is fully aligned with the health-related SDGs.

Health and the SDGs
2019

Sudan

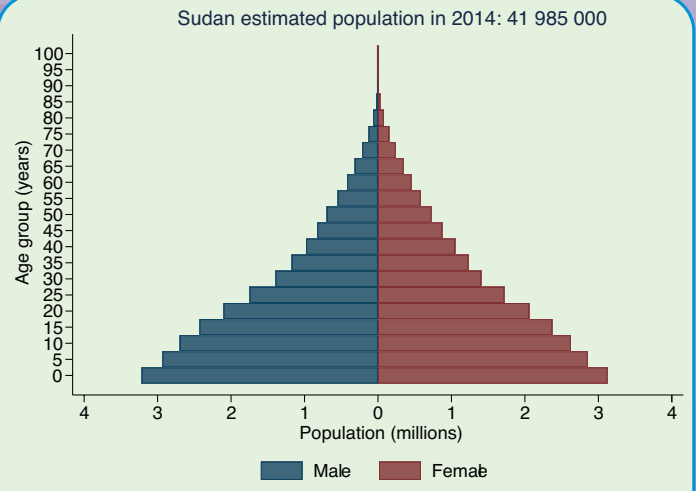
Universal health coverage

UHC service coverage index (2017)	44
Primary health care facilities per 10 000 population (2018)	1.5
Hospital beds per 10 000 population (2018)	6.6
Demand for family planning satisfied with modern methods (%) (2017)	33.3
Antenatal care visits (4+ visits) (%) (2014)	50.7
Measles immunization coverage among 1-year olds (%) (2018)	88
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	80
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	93
Out-of-pocket expenditure as percentage of current health expenditure (2016)	73.9
Domestic general government health expenditure as % of general government expenditure (2016)	10.7

Selected determinants of health

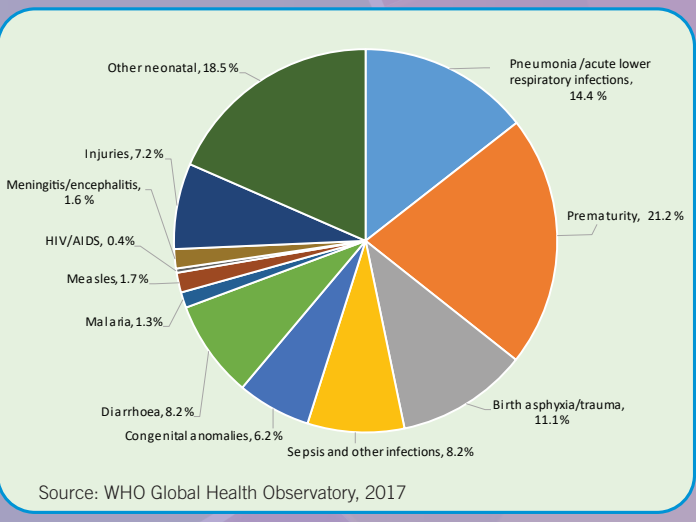
Population living in urban areas (%) (2018)	31
Annual GDP growth (%) (2018)	-2.3
Population growth rate (%) (2014)	2.5
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2014)	48.3

Estimated population in 2014



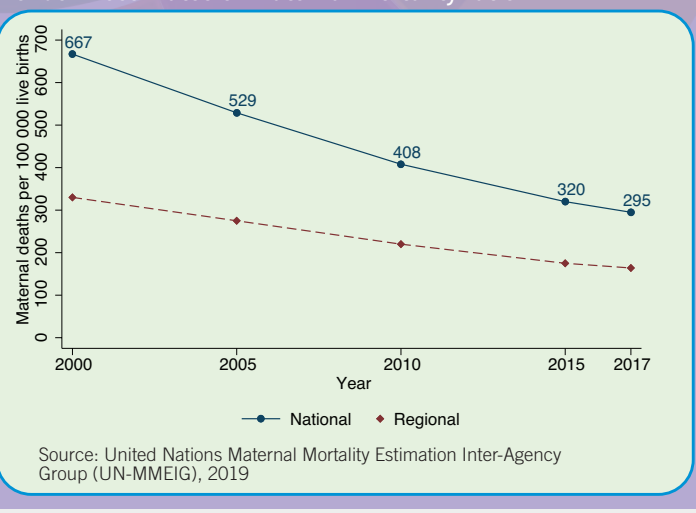
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2015)	%	36.1
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	7.5
	Female %	4.5

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	38.2
wasted	%	16.3
overweight	%	3.0
(2014)		

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2014)	Total %	60
	Male %	56
	Female %	60
Net primary school enrolment ratio per 100 school-age children (2014)	Total ratio	76
	Male ratio	77
	Female ratio	76

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	43

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2014)	%	68
Access to improved sanitation facilities (World Health Statistics, 2014)	%	33

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	12.9
	Male %	9.4
	Female %	23.1

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	47.9
	Urban	…

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	8.3

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	63.4	66.9	65.1
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	295
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	30
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	44
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	...	...	63
Tobacco use among persons 15+ years (%)	...	...	...
Overweight (18+ years) (%) (2016)	...	...	28.9
Obesity (18+ years) (%) (2016)	...	...	8.6
Raised blood pressure among persons 18+ years (%) (2014)	...	...	30.2
Raised blood glucose among persons 18+ years (%) (2015)	...	...	10.0
Raised cholesterol among persons 18+ years (%)	...	...	...
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	...	...	26.0
Cancer incidence per 100 000 (2018)	...	...	95.9

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in

Sudan

Health and the SDGs
2019

Syrian Arab Republic

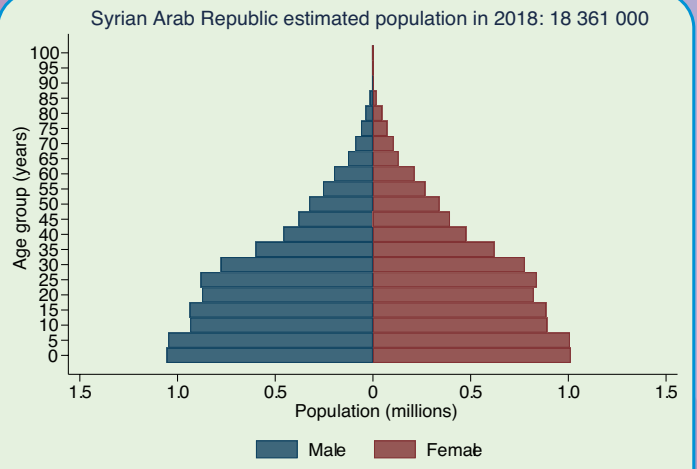
Universal health coverage

UHC service coverage index (2017)	60
Primary health care facilities per 10 000 population (2018)	0.8
Hospital beds per 10 000 population (2018)	12.6
Demand for family planning satisfied with modern methods (%) (2017)	60.0
Antenatal care visits (4+ visits) (%)	...
Measles immunization coverage among 1-year olds (%) (2018)	80
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	86
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	66
Out-of-pocket expenditure as percentage of current health expenditure (2016)	...
Domestic general government health expenditure as % of general government expenditure (2016)	...

Selected determinants of health

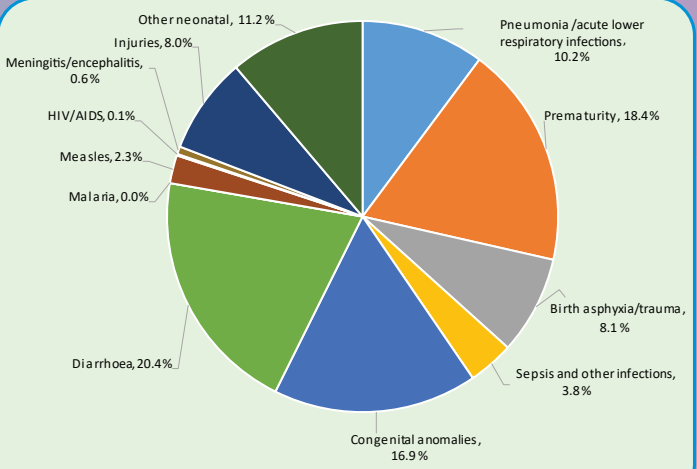
Population living in urban areas (%)	...
Annual GDP growth (%) (2007)	5.7
Population growth rate (%) (2018)	2.2
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2005)	77.0

Estimated population in 2018



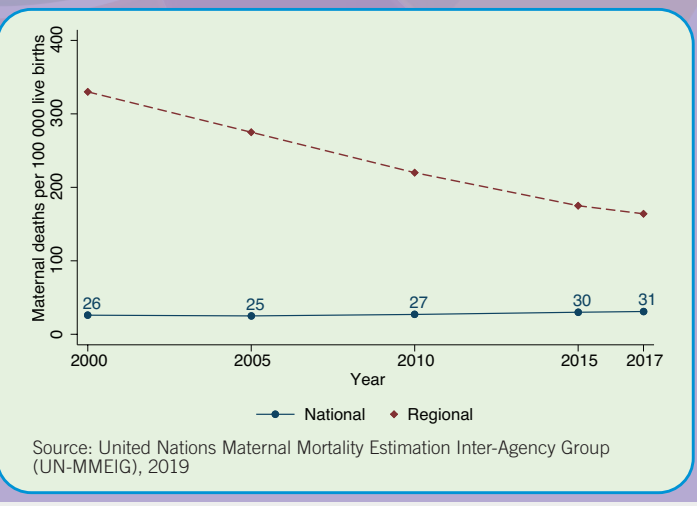
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line	%	...
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	36.7
	Female %	30.0

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	1.5
wasted	%	0.4
overweight	%	0.7
(2018)		

4 QUALITY EDUCATION

Literacy rate (15–24 years)	Total %	...
	Male %	...
	Female %	...
Net primary school enrolment ratio per 100 school-age children	Total ratio	...
	Male ratio	...
	Female ratio	...

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2015)	%	90
Access to improved sanitation facilities (World Health Statistics, 2015)	%	96

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	8.1
	Male %	6.1
	Female %	20.8

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	39.4
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	430.8

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	59.4	68.9	63.8
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	31
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	9
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	14
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	17
Tobacco use among persons 15+ years (%) (year)	…	…	…
Overweight (18+ years) (%) (2016)	…	…	61.4
Obesity (18+ years) (%) (2016)	…	…	27.8
Raised blood pressure among persons 18+ years (%) (2014)	…	…	24.5
Raised blood glucose among persons 18+ years (%) (2015)	…	…	14.6
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	21.8
Cancer incidence per 100 000 (2018)	…	…	169.9

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Syrian Arab Republic

Voluntary National Review

Planned for 2020

National Focal Point for the 2030 Agenda

Planning and International Cooperation Commission

National Focal Point in Ministry of Health for health-related SDGs

Dr Rasha Mohammad, Head of Statistics Unit, Ministry of Health

Ms Maisoon AlMady

Setting national targets for SDG 3+

The Syrian Arab Republic contributed to the SDG development process through participation in regional consultations on identifying and prioritization of needs. The country also participated in the United Nations Sustainable Development Summit in September 2015, at which the 2030 Agenda was adopted. The Syrian national report was developed in line with the SDG targets, after selecting the indicators which most suit the national perspectives and development challenges in the country.

Incorporating SDG 3 targets in health policy, strategy and planning

National post-war development plans for the Syrian Arab Republic (2019–2030) have been developed, covering 12 main areas of work. The SDGs were incorporated in the development plan using the following approaches:

- plans are in line with the time frame for the SDGs (2030);
- priorities and results of the first national SDGs report were utilized;
- SDG targets and indicators of the national SDGs report were adopted;
- government working groups that prepared the national SDGs report also participated in developing the post-war plans (under the coordination of the Planning and International Cooperation Commission).

A national development plan for SDG 3 including localized indicators and policies is under development.

Strategic priorities reflected in the 2017 Humanitarian Response Plan include: providing life-saving and life-sustaining humanitarian health assistance; strengthening health sector coordination and health information systems to improve effectiveness, with an emphasis on enhancing protection and increasing access to health; and improving access to health services and livelihoods, by supporting community resilience and institutional and response capacity.

Strategic priorities reflected in the 2016–2017 Strategic Framework include: restoring and expanding more responsive essential services and infrastructure; building capacity and supporting institutions to develop, implement and monitor evidence-based policies, strategies, plans and resilience programmes; and improving socioeconomic resilience of the Syrian people, including economic recovery and social inclusion.

Partnerships for advancing the 2030 Agenda

Partnerships have been established with United Nations agencies to support reporting on the SDG targets, as well as to create information systems aiming to monitor progress up to 2030. The Syrian Arab Republic also participates in conferences, senior meetings and sustainable development forums in the Region, especially activities organized by the Arab League and the United Nations Economic and Social Commission for Western Asia. The official online portal of SDGs in the Syrian Arab Republic has been developed in cooperation with UNDP, and will be launched and activated soon.

The humanitarian response to the ongoing conflict in the Syrian Arab Republic is coordinated through 11 sectors. The governance of the health sector is led by the Ministry of Health. The Ministry of Higher Education, with its network of teaching hospitals, is an important health care provider. Various registered nongovernmental organizations (NGOs) are providing health care services in close coordination with health authorities at central and governorate level.

Partnerships for advancing the health-related SDGs

The Ministry of Health and WHO are working in coordination to advance the health-related SDGs, especially through agreed health agendas and programmes concerning related indicators. As part of its ongoing response in the country, WHO leads and coordinates more than 80 health partners including United Nations agencies, and international and national NGOs. WHO coordinates strategic planning and operational reviews, leads the process of assessing humanitarian health needs and oversees the preparation of the health component of the annual humanitarian response plan. WHO's network of focal points throughout the country assesses needs, monitors ongoing activities, and reviews health facility and NGO records to ensure that WHO's supplies are reaching end beneficiaries.

Country success story or an example of efforts to accelerate action on the health-related SDGs

Not available

Health and the SDGs
2019

Tunisia

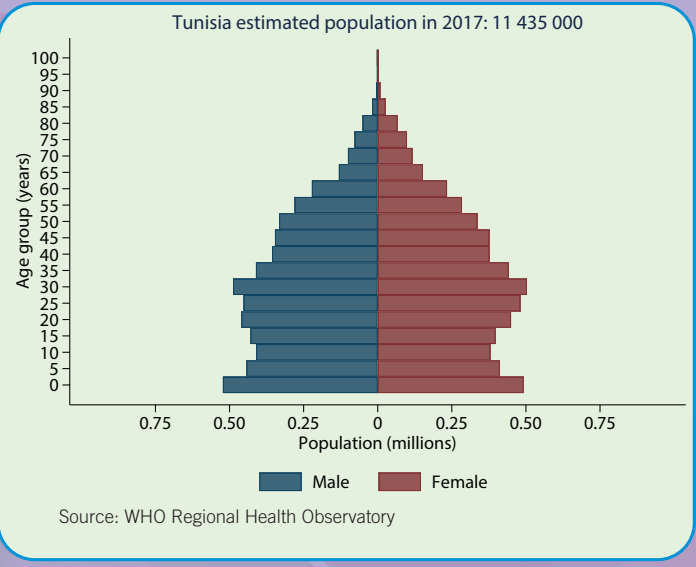
Universal health coverage

UHC service coverage index (2017)	70
Primary health care facilities per 10 000 population (2013)	1.9
Hospital beds per 10 000 population (2013)	21.8
Demand for family planning satisfied with modern methods (%) (2017)	74.7
Antenatal care visits (4+ visits) (%) (2016)	86.4
Measles immunization coverage among 1-year olds (%) (2018)	96
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	89
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	97
Out-of-pocket expenditure as percentage of current health expenditure (2016)	39.9
Domestic general government health expenditure as % of general government expenditure (2016)	13.7

Selected determinants of health

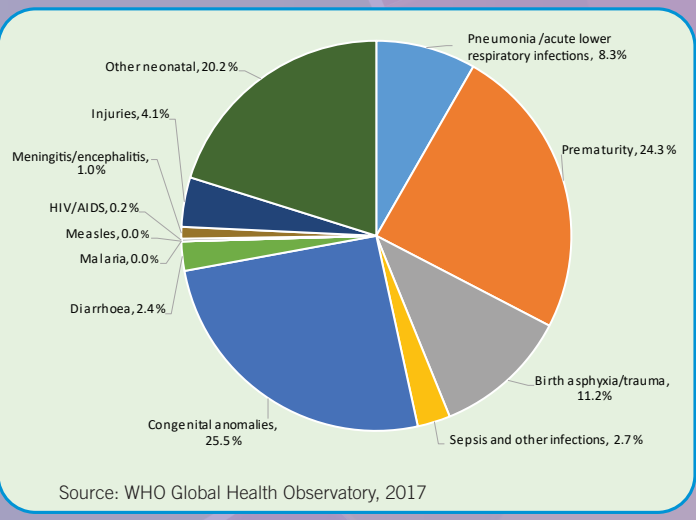
Population living in urban areas (%) (2018)	68
Annual GDP growth (%) (2018)	2.5
Population growth rate (%) (2017)	1.2
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2012)	59.5

Estimated population in 2017



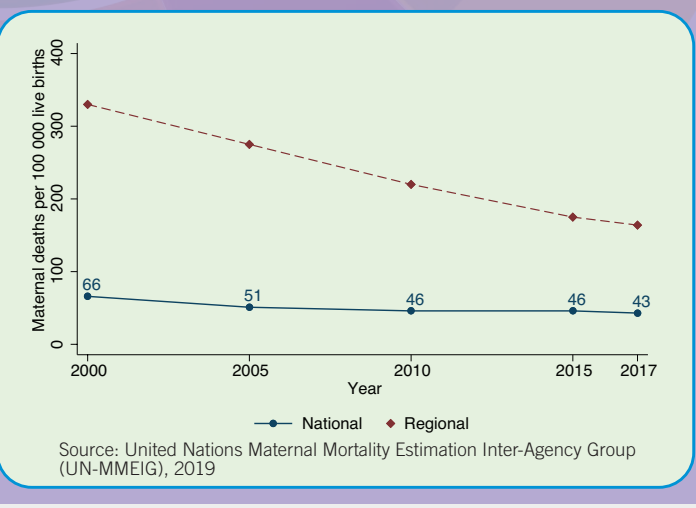
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2015)	%	15.2
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.3
	Female %	0.3

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	8.3
wasted	%	2.8
overweight	%	17.2
(2016)		

4 QUALITY EDUCATION

Literacy rate (15–24 years)	Total %	...
	Male %	...
	Female %	...
Net primary school enrolment ratio per 100 school-age children (2016)	Total ratio	97
	Male ratio	97
	Female ratio	97

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2016)	%	86
Access to improved sanitation facilities (World Health Statistics, 2016)	%	97

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	15.5
	Male %	13.1
	Female %	22.3

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	35.7
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	0.4

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	74.5	78.1	75.4
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	43
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	8
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	11
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	13
Tobacco use among persons 15+ years (%) (2018)	56.9	0.9	28.3
Overweight (18+ years) (%) (2016)	…	…	61.6
Obesity (18+ years) (%) (2016)	…	…	26.9
Raised blood pressure among persons 18+ years (%) (2014)	…	…	23.2
Raised blood glucose among persons 18+ years (%) (2015)	…	…	12.5
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	16.1
Cancer incidence per 100 000 (2018)	…	…	115.4

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Tunisia

Voluntary National Review

Completed in 2019: https://sustainabledevelopment.un.org/content/documents/23372Rapport_National_Volontaire_2019_Tunisie.pdf

National Focal Point for the 2030 Agenda

Ministere du Développement de l'Investissement et de la Coopération Internationale

National Focal Point in Ministry of Health for health-related SDGs

Directorate of Studies and Planning, Ministry of Health (SDGs focal point)

Ms Sonia Khayat, General Director for International Cooperation, Ministry of Health (UHC focal point).

Setting national targets for SDG 3+

In September 2018, Tunisia signed the UHC2030 International Health Partnership Global Compact for progress towards UHC in Salalah, Oman.

Incorporating SDG 3 targets in health policy, strategy and planning

The SDGs are at the core of the White Book for a Better Health in Tunisia, which was the result of a large-scale citizen participation process including a societal dialogue for health. Ever since, the White Book has inspired health policy documents in the country. SDG 3 targets are being incorporated in development of the national strategy for maternal and neonatal health (2020–2024), and were integrated in the National Multisectoral Strategy tp Prevent and Control Noncommunicable Diseases (2018–2025) and the 2016–2020 strategy for the health sector. A joint project between the Ministry of Health and United Nations agencies on maternal and newborn health is gradually integrating health into all policies, strengthening the vaccination schedule (pneumococcal and hepatitis vaccines) and consolidating the health infrastructure through building of hospitals (particularly in interior regions of the country) starting in 2020.

Partnerships for advancing the 2030 Agenda

As part of the United Nations Development Assistance Framework 2015–2019 and in cooperation with the Ministry of Development and International Cooperation and the Ministry of Foreign Affairs, the United Nations Country Team is currently developing a joint programme to support the Tunisian Government in monitoring and reporting progress towards the SDGs.

Partnerships for advancing the health-related SDGs

WHO will lead activities related to SDG 3 in cooperation with UNICEF, UNFPA and UNAIDS. In line with the development process of the national health strategy, the joint programme will be dedicated to awareness raising among decision-makers and civil society on SDG 3, setting of national targets, gap analysis and capacity-building related to the monitoring of SDG 3 indicators (which will be fully embedded in the monitoring and evaluation framework of the national health strategy).

Since 2012, Tunisia has been a member of the European Union (EU) Luxembourg Partnership for UHC, the EU being the financial partner for Tunisia. As part of this partnership, the Tunisian Government is receiving technical support to sustain citizen participation and generate reliable evidence as essential foundations for developing the national health sector strategy towards achieving the SDG targets. Key achievements of this partnership are reported annually on the UHC Partnership website: http://uhcpartnership.net/country-profile/tunisia-2/.t

Example of efforts to accelerate action on the health-related SDGs

A societal dialogue was used in the development of the national health policy and strategy. The first phase of the dialogue (2012–2014) involved evaluating the situation of the Tunisian health system and proposing solutions for its improvement. The second phase was launched in July 2017 and aimed at developing a national health policy based on a participatory process involving all stakeholders, including the lay population and professionals. Debates were organized in the 24 governorates to discuss the draft policy. This phase was concluded by a national forum in June 2019, where the national health policy was presented, discussed and endorsed. The third phase, towards the end of 2019, will focus on implementation, monitoring and evaluation of the new health policy.

Health and the SDGs
2019

United Arab Emirates

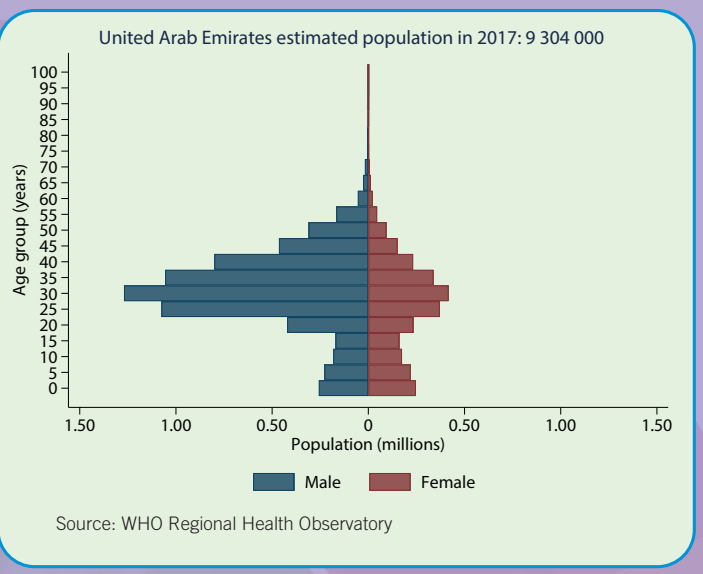
Universal health coverage

UHC service coverage index (2017)	76
Primary health care facilities per 10 000 population (2017)	3.8
Hospital beds per 10 000 population (2017)	14.4
Demand for family planning satisfied with modern methods (%) (2017)	60.9
Antenatal care visits (4+ visits) (%) (2017)	97.3
Measles immunization coverage among 1-year olds (%) (2018)	99
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	74
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	99
Out-of-pocket expenditure as percentage of current health expenditure (2016)	18.6
Domestic general government health expenditure as % of general government expenditure (2016)	7.9

Selected determinants of health

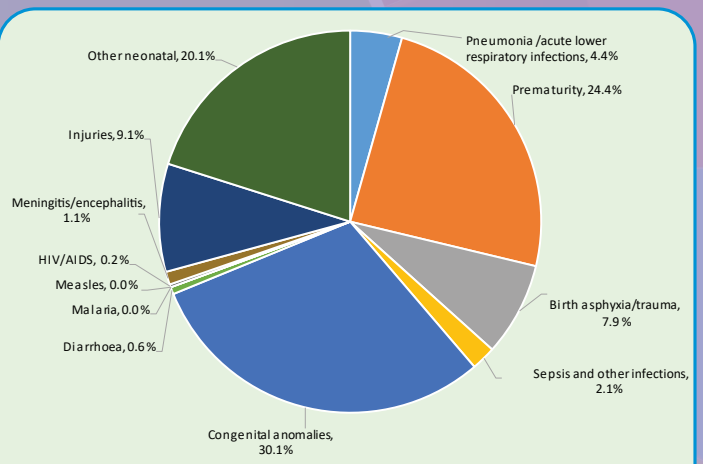
Population living in urban areas (%) (2018)	84
Annual GDP growth (%) (2018)	1.4
Population growth rate (%) (2016)	2.0
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2015)	. . .

Estimated population in 2017



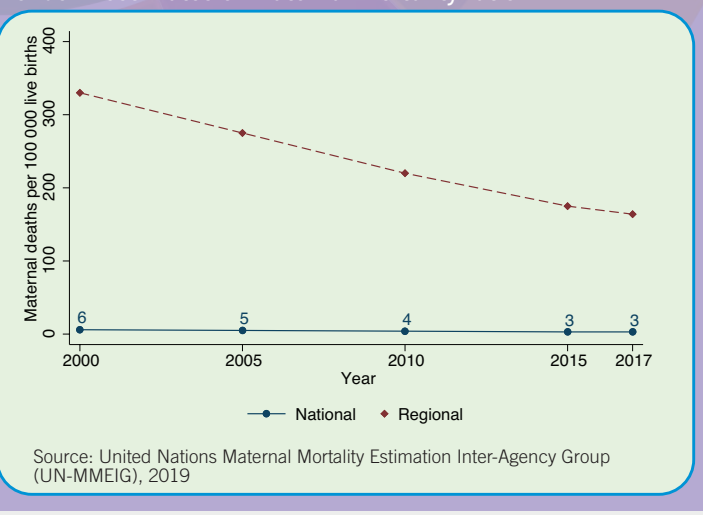
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2018)	%	0.01
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	0.0
	Female %	0.0

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	...
wasted	%	...
overweight	%	...

4 QUALITY EDUCATION

Literacy rate (15–24 years) (2018)	Total %	95
	Male %	95
	Female %	94
Net primary school enrolment ratio per 100 school-age children (2017)	Total ratio	95
	Male ratio	95
	Female ratio	95

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	>95

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2018)	%	100
Access to improved sanitation facilities (World Health Statistics, 2018)	%	100

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	2.6
	Male %	1.7
	Female %	7.7

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	39.4
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	0

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	78.1	81.5	79.7
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	3
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	5
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	8
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	9
Tobacco use among persons 15+ years (%) (2018)	15.7	2.4	9.1
Overweight (18+ years) (%) (2016)	…	…	67.9
Obesity (18+ years) (%) (2016)	…	…	27.8
Raised blood pressure among persons 18+ years (%) (2014)	…	…	28.8
Raised blood glucose among persons 18+ years (%) (2015)	…	…	11.8
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	11.1
Cancer incidence per 100 000 (2018)	…	…	112.5

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in United Arab Emirates

Voluntary National Review

Completed in 2017: https://sustainabledevelopment.un.org/content/documents/20161UAE_SDGs_Report_Full_English.pdf

National Focal Point for the 2030 Agenda

Mr Majid Al-Suwaidi, Ministry of Foreign Affairs, Directorate of Energy and Climate Change

National Focal Point in Ministry of Health and Prevention for health-related SDGs

Dr Hussain Abdul Rahman Al Rand, Assistant Undersecretary of Health Centers and Clinics Sector, Ministry of Health and Prevention, United Arab Emirates

Setting national targets for SDG 3+

The United Arab Emirates has established a national committee for all SDGs, of which the Ministry of Health and Prevention is a member. The seven-year UAE National Agenda (https://www.vision2021.ae/en/national-agenda-2021), which was developed by over 300 officials from 90 federal and local government entities, includes a set of national indicators aligned to the SDGs. These are periodically monitored by Government leadership to ensure targets are achieved by 2021. The targets and indicators have been integrated within national health strategies and action plans by the Ministry of Health and Prevention, health authorities and national stakeholders. The indicators for each SDG are monitored on regular basis. Appropriate interventions are put in place according to progress and identified areas for improvement.

Incorporating SDG 3 targets in health policy, strategy and planning

A National Health Taskforce comprising all concerned parties and authorities have agreed on a framework and mechanism to integrate health-related SDG targets and indicators within all health plans, policies and strategies, including: Noncommunicable Diseases (NCDs) National Action Plan; MNCH National Action Pan; Nutrition National Action Plan; National Adolescent Action Plan; and Childhood obesity framework.

Each plan has a National Technical Committee which is responsible for its implementation and monitoring. In addition, SDG targets and indicators were included in the World Health Survey/UAE National Health Survey (conducted in 2017) and in the list of national core indicators to facilitate monitoring and surveillance. A log of all activities and initiatives to achieve each goal has been aggregated to identify challenges, gaps and the way forward. Polices, laws and decrees have been issued/amended to support implementation of SDG 3, including:

- executive decree on control of communicable diseases (target 3.3);
- amendment of provisions of Cabinet Decree No. 7 for the year 2008 on medical examination screening for expatriates coming for work or residence (target 3.3);
- community protection from HIV and protection of rights of people living with HIV (target 3.3);
- amendment of tables attached to Federal Law No. 14 for the year 1995 on combating narcotic drugs and psychotropic substances (targets 3.5 and 3.6);
- classification, prescription and dispensing of narcotics and controlled/semi-controlled medicines (targets 3.5 and 3.8);
- Executive Decree of Federal Law No. 15 for the year 2009 on tobacco control (targets 3.5 and 3.9);
- licensing of fertilization centres (target 3.9);
- decree for strategic medical stockpiles (target 3.b.3);
- medical liability law and executive decree (target 3.c);
- establishment of national authority for emergency, crisis and disaster management (target 3.d.1);
- establishment of national committee for implementationof the International Health Regulations and control of pandemics (target 3.d.1).

Partnerships for advancing the 2030 Agenda

A National Committee for SDGs was established by a cabinet decree in January 2017 and is chaired by H.E Reem Al Hashimy, Minister of State for International Cooperation and Chairwoman of the Federal Competitiveness and Statistics authority (FCSA). Various government entities are represented in the Committee. Separate committees/taskforces were established to address each goal.

Partnerships for advancing the health-related SDGs

The Ministry of Health and Prevention established a National Health Taskforce comprising concerned parties and authorities to agree on a framework and mechanism to integrate health-related SDG targets and indicators within all health plans. Other partnerships also ensure alignment and prevent duplication, including: the Higher Counsel for Motherhood and Childhood, FCSA, Ministry of Climate Change and Environment, National Media Counsel, academia and others.

Examples of efforts to accelerate action on the health-related SDGs

The burden of NCDs is high in the United Arab Emirates. Various initiatives have been launched to combat NCDs and their associated risk factors, including:

- a national multisectoral framework to combat childhood obesity (5–17 years) and mass media campaigns targeting adult obesity (18+ years), developed by the Ministry of Health and Prevention in collaboration with stakeholders;
- smart phone applications to promote physical activity and combat obesity in children and adults (Health Heroes and Fitfind);
- in October 2017, excise taxes implemented on sugary drinks (50%) and tobacco products (100%);
- awareness-raising campaigns on smoking, sugary drinks, salt intake, physical inactivity and hypertension;
- introduction of national cancer registry;
- vaccination of schoolgirls against human papillomavirus;
- integration of NCD risk assessment, including cardiovascular risk assessment, in primary health care centres.

Health and the SDGs 2019

Yemen

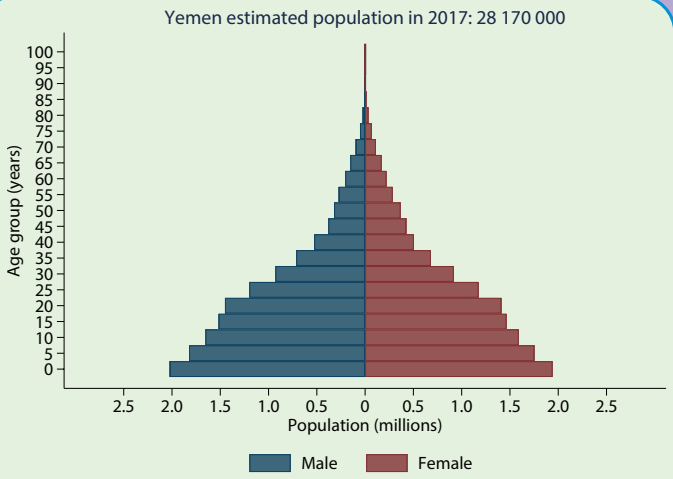
Universal health coverage

UHC service coverage index (2017)	42
Primary health care facilities per 10 000 population (2018)	1.4
Hospital beds per 10 000 population (2018)	0.1
Demand for family planning satisfied with modern methods (%) (2017)	58.3
Antenatal care visits (4+ visits) (%) (2013)	25.1
Measles immunization coverage among 1-year olds (%) (2018)	99
Tuberculosis treatment success rate and relapse cases notified (%) (2017)	89
DTP3-containing vaccine/pentavalent coverage among 1-year olds (%) (2018)	80
Out-of-pocket expenditure as percentage of current health expenditure (2016)	...
Domestic general government health expenditure as % of general government expenditure (2016)	...

Selected determinants of health

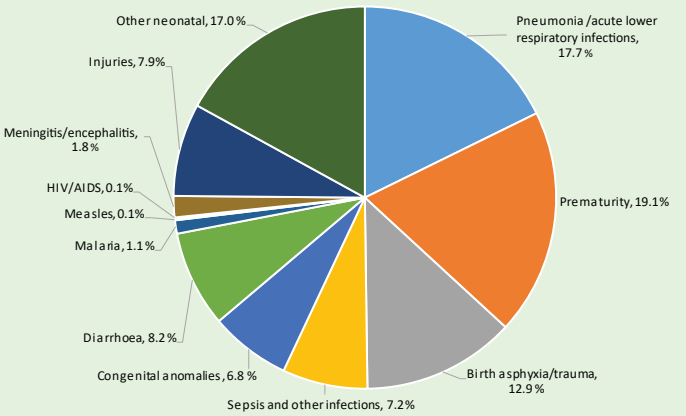
Population living in urban areas (%) (2018)	29
Annual GDP growth (%) (2018)	-2.7
Population growth rate (%) (2018)	3.4
Children aged <5 years with pneumonia symptoms taken to a health care provider (%) (2015)	34.0

Estimated population in 2017



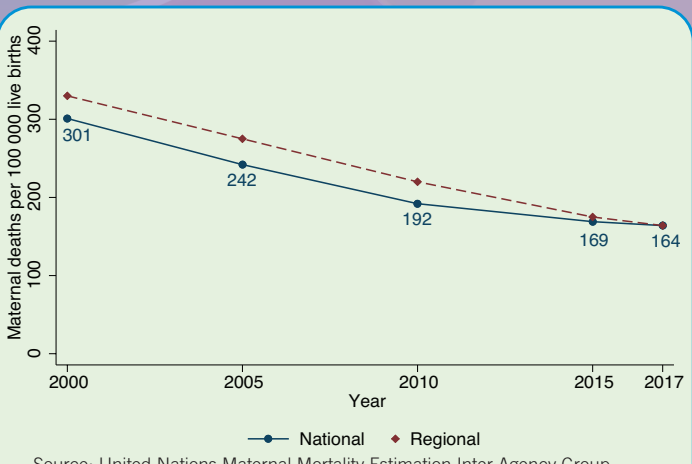
Source: WHO Regional Health Observatory

Distribution of causes of death among children aged <5 years (%)



Source: WHO Global Health Observatory, 2017

Trends in estimates of maternal mortality ratio



Source: United Nations Maternal Mortality Estimation Inter-Agency Group (UN-MMEIG), 2019

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SUSTAINABLE DEVELOPMENT GOALS

Selected health-related SDG indicators*

1 NO POVERTY

Population below the international poverty line (2014)	%	48.6
Proportion of employed population below the international poverty line (ILO estimate, 2019)	Male %	46.1
	Female %	42.6

2 ZERO HUNGER

Children under 5 who are:		
stunted	%	47.0
wasted	%	16.3
overweight	%	2.0
(2014)		

4 QUALITY EDUCATION

Literacy rate (15–24 years)	Total %	...
	Male %	...
	Female %	...
Net primary school enrolment ratio per 100 school-age children	Total ratio	...
	Male ratio	...
	Female ratio	...

7 AFFORDABLE AND CLEAN ENERGY

Population with primary reliance on clean fuels and technologies at the household level (WHO Global Health Observatory, 2017)	%	62

6 CLEAN WATER AND SANITATION

Access to improved drinking water (World Health Statistics, 2013)	%	58
Access to improved sanitation facilities (World Health Statistics, 2013)	%	23

8 DECENT WORK AND ECONOMIC GROWTH

Unemployment rate (15+ years) (ILO estimate, 2019)	Total %	12.9
	Male %	12.0
	Female %	22.8

11 SUSTAINABLE CITIES AND COMMUNITIES

Concentrations of fine particulate matter (PM2.5) (μg/m^3) (WHO Regional Centre for Environmental Health Action, 2016)	Total	45.0
	Urban	...

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Estimated direct deaths from major conflicts (per 100 000 population) (WHO Global Health Observatory, 2012–2016)	21.6

*Data are unavailable for some indicators. Where possible, data are obtained from the WHO Regional Health Observatory.

Key health indicators

Indicator	Male	Female	Total
Life expectancy at birth in years (2018)	64.0	65.0	64.0
Maternal mortality ratio (deaths per 100 000 live births) (UN-MMEIG 2017 estimate)	—	—	164
Neonatal mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	27
Infant mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	43
Under-5 mortality rate (deaths per 1000 live births) (UN-IGME 2017 estimate)	…	…	55
Tobacco use among persons 15+ years (%) (2018)	23.6	5.0	14.3
Overweight (18+ years) (%) (2016)	…	…	48.8
Obesity (18+ years) (%) (2016)	…	…	17.1
Raised blood pressure among persons 18+ years (%) (2014)	…	…	30.7
Raised blood glucose among persons 18+ years (%) (2015)	…	…	11.3
Raised cholesterol among persons 18+ years (%)	…	…	…
Mortality between exact ages 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease (%) (2016)	…	…	30.6
Cancer incidence per 100 000 (2018)	…	…	76.1

Universal health coverage (UHC) means provision of quality services to everybody without discrimination of any kind and without exposing people to financial hardship. UHC is one of the targets of SDG 3, and attaining UHC will also contribute directly or indirectly to achieving the other SDGs. Achieving UHC means ensuring healthy lives and promoting well-being for all at all ages with explicit affirmative action for vulnerable populations including refugees and migrants. Thus, disaggregated data will be necessary to assess and address inequities in health. UHC requires intersectoral action. All countries can and must advance towards UHC by 2030, if not earlier.

Health and the SDGs at a glance in Yemen

Voluntary National Review

N/A

National Focal Point for the 2030 Agenda

Ministry of Planning and International Cooperation

National Focal Point in Ministry of Public Health and Population for health-related SDGs

Dr Munasr Al-Aslly (Aden)
Dr Abdulmalik Al-Sanany (Sana'a)

Setting national targets for SDG 3+

The current humanitarian crisis and ongoing war have prevented Yemen from conducting the necessary consultative processes to discuss and agree on national targets for SDG 3+. More recently, with the support of partners including WHO, there is a renewed focus on the SDGs in general and SDG 3+ in particular. The Ministry of Public Health and Population is keen to define national targets for SDG 3+. All health authorities agree that international technical assistance will be needed to define baselines and realistic targets for monitoring progress towards the SDGs. The results of the National Health and Demographic Survey 2013 are outdated and can no longer serve as the source of baseline indicators. Recent war impact studies conducted by international organizations and academic institutions, including the 2019 UNDP-commissioned study *Assessing the impact of war on development in Yemen* indicate that most health indicators have deteriorated compared to 20–25 years ago and may continue to do so unless there is a reversal of the situation. Reliable national studies that can assist in defining baseline indicators are urgently needed.

Incorporating SDG 3 targets in health policy, strategy and planning

There is no approved national health policy or strategy in place. Some progress has, however, been made in raising awareness on the importance of ensuring that SDG 3+ targets are incorporated in all health policies and strategies under discussion or review. The most recent National Health Strategy (2010–2015) was developed before the 2030 Agenda was adopted, and addresses the Millennium Development Goals. Its implementation has been interrupted by the humanitarian crisis in the country. Despite such challenges, it is important to note that all programmes are supported by the international community as part of humanitarian response, and include SDG 3 themes such as reducing maternal and child mortality and other deaths through primary health care, strengthening disease outbreak response, and improving access to health care for hard-to-reach areas and vulnerable populations. United Nations agencies and other humanitarian partners have continued, through the Humanitarian Response Plan (HRP) 2018 and 2019, to mitigate the effects of the war on SDG 3 and other health-related SDG indicators such as malnutrition, access to safe water and sanitation services, access to energy, and advocating for reduced violence.

Partnerships for advancing the 2030 Agenda

In addition to existing United Nations instruments within the Humanitarian Country Team and United Nations Country Team (i.e. HRP, United Nations Development Assistance Framework, Integrated Strategic Framework) and the ongoing United Nations-World Bank partnership launched in 2017, which covers a wide range of sectors (including health and nutrition), an increasing number of other partners have joined the current dialogue on the importance of the humanitarian-development-peace nexus (HDPNx). This enlarged partnership includes United Nations agencies, the European Union, key individual donor countries (including Canada, Denmark, Germany, Italy, the Netherlands, Spain, United Kingdom of Great Britain and Northern Ireland, and the United States of America) and international nongovernmental organizations.

There is a growing consensus that support to peacebuilding and transition in Yemen with a focus on governance and state-building, improving security and rule of law, protecting vulnerable and at-risk populations encouraging economic recovery and reconstruction, and initiating long-term development reforms in line with the SDGs, are key strategic areas of the HDPNx. In addition, preventing the worsening of the humanitarian situation and addressing underlying drivers of vulnerability as well as strengthening Yemen's development assets (i.e. social and economic capital and institutional capacities) are the foundations of recovery and development.

Partnerships for advancing the health-related SDGs

At present, the major partnership with focus on the advancement of health-related SDGs is the World Bank/WHO/UNICEF grant for the Emergency Health and Nutrition Programme, launched in January 2017, which continues to support the HDPNx.

While contributions from most partners focus on humanitarian response, there is ongoing discussion on how substantive partnerships can be established to address specific health-related SDGs. At present, it is too early to define such partnerships; however, a limited number of key partners have started discussions with Yemeni authorities on their future engagement with a possible footprint in health. Discussions are also underway to explore ways for Yemen to implement the Global Action Plan for Healthy Lives and Well-being and strengthen collaboration among multilateral organizations to accelerate country progress on the health-related SDGs.

Country success stories

In July 2019, Yemen was declared free from lymphatic filariasis, a neglected tropical disease that has affected over 120 000 people in the country since the year 2000. This was made possible through the combined efforts of local health authorities at district level, WHO technical assistance and financial support provided by key donors.

Despite ongoing conflict in many parts of the country, immunization activities have continued with over 7.1 million children protected against vaccine-preventable diseases in 2018 alone. This was achieved through innovative approaches including applying the concept of health as a bridge for peace, which allowed negotiations for access of vaccinators to hard-to-reach areas.

This health and well-being profile for the Eastern Mediterranean Region presents a comprehensive assessment of the health situation at the regional and country levels, using available data up to October 2019. It is guided by the strategic priorities and goals of *WHO's Thirteenth General Programme of Work* (GPW 13): achieving universal health coverage; addressing health emergencies; and promoting healthier populations across the life course. Detailed country profiles for each of the 22 countries present the latest available data for a range of health indicators and the health-related SDGs, and highlight country efforts in implementing the 2030 Agenda for Sustainable Development. The health and well-being profile reviews progress made in the Region towards achieving the ambitious goals of *Vision 2023* and GPW 13 and provides an opportunity to assess the opportunities and challenges that lie ahead.

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