ASSESSING NATIONAL CAPACITY FOR THE
PREVENTION AND CONTROL OF

NONCOMMUNICABLE DISEASES

2019

Report of the 2019 country capacity survey in the
Eastern Mediterranean Region

World Health Organization
REGIONAL OFFICE FOR THE Eastern Mediterranean

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Foreword

Health for all by all – that is WHO's vision for the Eastern Mediterranean Region. Our vision supports countries' ongoing efforts to move towards health for all through the involvement and participation of all of society, from governments and health professionals through to organizations, communities and individuals. Reducing the noncommunicable disease (NCD) burden and promoting mental health and well-being is essential to improving the health of millions of people in the Eastern Mediterranean Region. Our plan, in the lead-up to 2030, is to scale up key actions on all health-related Sustainable Development Goal (SDG) targets, especially under SDG target 3.4 on reducing premature mortality from NCDs by one third, through prevention and treatment and promoting mental health and well-being. Achieving this target will help us to build a better, healthier future for people of the Region, and consequently improve social, human and material capital in order to achieve optimum development in every country.

NCDs – including cardiovascular diseases, cancers, chronic respiratory diseases and diabetes – are the world's biggest killers and a leading cause of death in the Eastern Mediterranean Region. In 2019, NCDs accounted for 66% of all deaths among adults, and more than half of deaths from NCDs were premature deaths below the age of 70. Many such deaths could be prevented through lifestyle-related changes and cost-effective interventions implemented at the national level. We have come a long way in responding to the epidemic of NCDs since the adoption of the 2011 United Nations Political Declaration on Prevention and Control of NCDs. We have gained a better understanding of these conditions, their burden and related risk factors, and the interventions and actions needed to prevent and control NCDs in the Eastern Mediterranean Region. However, we are also less than a decade away from the deadline to achieve SDG target 3.4 on reducing premature mortality from NCDs and promoting mental health and well-being. During the time left, Member States must spare no effort in tackling NCDs and their related risk factors among populations in order to achieve the required measurable progress and optimize capacities to make solid steps forward to meet the target. At present, less than 10% of countries in the Eastern Mediterranean are on track to meet SDG target 3.4, which indicates an urgent need for acceleration and scaling up of interventions and efforts in the Region.

WHO's Director-General has stated that "we can only make progress if we measure progress". Surveillance of NCDs and their risk factors is a fundamental pillar in the fight against the increasing burden of NCDs, both globally and regionally. Additionally, keeping track of the health system response to NCDs in countries of the Region and identifying capacity gaps are essential to target interventions to fight NCDs. This serves to provide the information needed for policy and programme development and appropriate legislation for NCD prevention and control, and supports the monitoring and evaluation of progress made in implementing policies and programmes.

The NCD country capacity survey is a periodic global assessment of capacities for the prevention and control of NCDs, conducted by WHO in all countries. WHO works with countries to report on indicators to reflect the ongoing efforts in the areas of governance, prevention and reduction of risk factors, surveillance, monitoring and evaluation, and health care. It also identifies and follows up core progress indicators on critical essential interventions required in countries for progress in the prevention and control of NCDs based on the Global Monitoring Framework, which comprises three distinct components: outcome, risk factors and health system response. This regional report on the 2019 NCD country capacity survey marks the seventh round of the survey in the Eastern Mediterranean Region. Overall, the report shows improvements in many of the indicators compared to the assessments conducted in previous years. However, it also highlights challenges and room for

improvement in the useability of data and information, and the need for complementing actions to fight NCDs.

This is a critical time for the ongoing global epidemic of NCDs. The data for this assessment were collected just before the COVID-19 pandemic, which has added more pressure and stress on people living with NCDs and their related risk factors. People living with NCDs are at increased risk of developing severe symptoms of COVID-19 disease, in addition to the disruption of their access to health care services. The pandemic has stretched health systems and capacities and adversely affected relevant NCD activities. This further necessitates that WHO brings key stakeholders together to strengthen country capacities in all needed areas to enable populations to lead healthier lives, and to provide the necessary care for people living with NCDs, in alignment with Vision 2023 and the call for solidarity to achieve health for all by all.

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

Acknowledgements

This report is the product of contributions from many individuals. Heba Fouad, WHO Regional Office for the Eastern Mediterranean, coordinated the implementation, validation and reporting of survey results, and preparation of the report. She was supported by Ghada Nasr Radwan, WHO consultant and professor of public health, Faculty of Medicine, Cairo University, who provided regional-specific data management and statistical analysis. Leanne Riley, WHO headquarters, coordinated the preparation of the global survey, its overall implementation and reporting of results at global level. Melanie Cowan, WHO headquarters, led the web-based data collection, and performed all the data management and statistical analysis needed to prepare the global survey results.

WHO gratefully acknowledges the support of NCD focal points in conducting the survey at country level.

Abbreviations

CRD	chronic respiratory disease
CVD	cardiovascular disease
FOPL	front-of-pack labelling
GATS	Global Adult Tobacco Survey
GSHS	Global school-based student health survey
GYTS	Global Youth Tobacco Survey
HPV	human papillomavirus
IARC	International Agency for Research on Cancer
mHealth	mobile health
MOH	ministry of health
NCD	NCD
PSA	prostate-specific antigen
SARA	service availability and readiness assessment
SDG	Sustainable Development Goal
WHO	World Health Organization
WHO FCTC	WHO Framework Convention on Tobacco Control
WHO/ISH	WHO/International Society of Hypertension

Executive summary

Noncommunicable diseases (NCDs) such as chronic cardiovascular diseases, cancer, chronic respiratory diseases and diabetes are the leading cause of mortality in the world, killing 41 million people each year, equivalent to 71% of all deaths globally. Of those deaths, 15 million people who die from an NCD annually are between the ages of 30 and 69, and over 85% of these "premature" deaths occur in low- and middle-income countries *(1)*.

This epidemic of NCDs has devastating consequences for individuals, families and communities, and threatens to overwhelm health systems. The resulting socioeconomic costs make the prevention and control of these diseases a major development imperative for the 21st century *(2)*.

The rise of NCDs has been primarily driven by four major risk factors: tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diet *(3)*. Most of the premature deaths from NCDs are preventable if health systems are enabled to respond more effectively and equitably to the health care needs of people with these diseases; and, by influencing public policies in sectors outside health that tackle the four shared risk factors.

The 2030 Agenda for Sustainable Development adopted at the United Nations Summit on Sustainable Development in September 2015 recognizes NCDs as a major challenge for sustainable development, in contrast to the earlier Millennium Development Goals, which did not address NCDs.

Under the Sustainable Development Goals (SDGs), national leaders committed to actions to reduce premature mortality from NCDs by one third, to strengthen responses to reduce the harmful use of alcohol, to achieve universal health coverage, to strengthen the implementation of the WHO Framework Convention on Tobacco Control (WHO FCTC), to support the research and development of vaccines and medicines for NCDs that primarily affect developing countries, and to provide affordable access to essential medicines and vaccines for NCDs *(4)*.

To combat the rising global epidemic of NCDs, the World Health Organization (WHO) designs and conducts periodic assessments of national capacity for NCD prevention and control in all Member States. This is done using a global survey known as the NCD country capacity survey.

The first national capacity survey in the WHO Eastern Mediterranean Region was carried out in 2000, and was followed by subsequent surveys in 2005, 2010, 2013, 2015, 2017 and 2019. This consistent process of data collection over regular intervals allows countries to assess the progress made over time by comparison with the results of previous surveys.

This report summarizes the status of national capacity to prevent and control NCDs in the Region based on the 2019 survey, the seventh in the series. The questionnaire of the survey was sent to all 22 countries and territories of the Region and had a 100% response rate. This report also identifies strengths and limitations in national capacities for NCD prevention and control relative to the objectives and recommendations of the *WHO Global action plan for the prevention and control of NCDs 2013–2020 (5)* and underscores the areas that urgently need prioritization and further intervention.

A web-based survey questionnaire (see Annex 1) consisting of the following four modules was used for data collection: (i) public health infrastructure, partnerships and multisectoral collaboration; (ii) policies, strategies and action plans; (iii) health information systems, monitoring, surveillance and surveys; and (iv) health system capacity for NCD early detection, treatment and care. For further details on the approach used to implement the survey please see the section on "Methods" below.

The results of the 2019 survey showed that, for NCD infrastructure and resourcing in national governments, 91% of countries had a unit, branch or department within the ministry of health for NCDs and NCD risk factors that included at least one full-time technical/professional member of staff.

Staffing for specific NCDs or NCD risk factors within the NCD department was widely reported for tobacco use (91%), cancer (82%) and diabetes (82%), but was limited for the harmful use of alcohol (23%) and oral diseases (50%).

More than 86% of countries reported having funding available for early detection and screening of NCDs and NCD risk factors, as well as for health care and treatment. Research and palliative care were the least funded areas (64% and 73%, respectively). Taxation on tobacco was the most widespread fiscal intervention reported by almost all countries and territories of the Region (91%). However, other fiscal incentives such as taxation on sugar-sweetened beverages or on foods high in fats, sugar or salt, were not widely used (32% and 0%, respectively).

Funds earmarked for health promotion or health service provision have grown in importance since 2017, with nearly a quarter of countries reporting this as a fiscal intervention for health in the 2019 survey compared to only 9% in 2017.

Multisectoral commissions, agencies or mechanisms to oversee NCD engagement, policy coherence and accountability of sectors beyond health were instituted by substantially more countries in 2019 (73%) than in 2017 (55%) with three quarters of these reported to be operational. While the vast majority of countries (91%) included NCDs in the outputs or outcomes of their national health plans, less than two thirds (64%) had set NCD targets in line with the nine voluntary global targets from the WHO *Global action plan for the prevention and control of NCDs 2013–2020 (5)* and associated WHO *NCD global monitoring framework (6)*.

Over three quarters of the countries (77%) have integrated NCD plans that are multisectoral and multi-stakeholder. The majority of these integrated plans (88%) are operational. The proportion of countries reporting the availability of vertical programmes for NCDs ranged between 18% for chronic respiratory diseases and 68% for cancer. For NCD risk factors, the proportion of countries with vertical programmes ranged between 27% for the harmful use of alcohol and 64% for tobacco use and unhealthy diet.

In nutrition-related areas, implementation of a number of recommended policies was generally low: less than half of the countries (45%) had national policies that limit saturated fatty acids and virtually eliminate industrially produced trans-fatty acids in the food supply; less than a third (27%) had implemented policies on front-of-pack labelling (FOPL) systems; and only four countries (18%) reported policies to reduce the impact on children of marketing foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars or salt. Additionally, half of the countries surveyed had implemented recent educational campaigns on diet (55%) and physical activity (50%).

Almost all countries (91%) had NCD surveillance covered by one or more departments in the ministry of health (or equivalent). A system for collecting mortality data by cause of death on a routine basis was present in 73% of countries, while accurate, cause-specific mortality reporting represented a challenge in almost all countries in Group 3, which includes the Region's low-income Member States.

The majority of countries reported the availability of a cancer registry (91%); however, a lower proportion reported that the registry was population-based (68%). Over half of the countries (59%) reported the existence of a diabetes registry, but only one country (the United Arab Emirates) reported that it was population based.

Over 80% of countries had conducted surveys among adults addressing unhealthy diet, physical inactivity, tobacco use, overweight and obesity, raised blood glucose, raised total cholesterol and raised blood pressure, and over 60% had conducted surveys addressing harmful use of alcohol and salt intake. A higher proportion of countries (95%) reported conducting surveys among adolescents on unhealthy diet, physical inactivity and tobacco use.

Of the 12 technologies used for early NCD detection, diagnosis and monitoring, blood pressure measurement was reported to be generally available in all countries and territories of the Region, with weight, height, blood glucose and total cholesterol measurements also available in 91% of countries.

More than half of all 22 countries and territories reported having guidelines for the four main NCDs. Guidelines for the management of cardiovascular disease, diabetes and cancer were the most commonly used (73%) while those for chronic respiratory disease were used the least (59%). Screening programmes were more likely to be population based, as opposed to opportunistic, and to cover only a minority of the target population.

A significant proportion of countries surveyed (73%) reported that early detection of breast cancer was integrated into primary health care services, but lower numbers reported such integration for cancers of the cervix (50%) and colon (8%).

The most widely available medicines in the Region were metformin, calcium channel blockers, beta blockers and bronchodilators (91%), while the least available were nicotine replacement therapy and oral morphine, which less than a third of countries reported as available (27%).

Of the procedures for treating NCDs, renal replacement by dialysis and thrombolytic therapy (77%) were most widely reported as being generally available. Retinal photocoagulation, stenting and coronary bypass were reported by over 50% of countries as being generally available (ranging between 59% and 68%). Renal replacement by transplantation and bone marrow transplant were the least available procedures (50% and 32% of countries, respectively). Nearly one in five countries reported the availability of palliative care in either primary health care or community care.

Finally, cardiovascular risk stratification remained widely underused, with only 36% of countries reporting that it was offered at the majority of health care facilities.

Introduction

The burden of noncommunicable diseases (NCDs)

Chronic cardiovascular diseases, cancer, chronic respiratory diseases and diabetes are the four main groups of NCDs and together make up the main cause of mortality worldwide. Of 56.9 million global deaths in 2016, 40.5 million, or 71%, were due to NCDs. The burden created by these diseases is rising disproportionately among lower-income countries and populations; in 2016, over three quarters of NCD deaths – 31.5 million – occurred in low- and middle-income countries, with about 46% of these deaths occurring before the age of 70 *(1)*.

In 2016, cardiovascular diseases accounted for 17.9 million deaths, or 44% of all NCD deaths, followed by cancer at 9.0 million, or 22% of all NCD deaths, and respiratory diseases, including asthma and chronic obstructive pulmonary disease, at 3.8 million, or 9% of all NCD deaths. Diabetes caused another 1.6 million deaths *(1)*. These diseases are driven by a number of different forces, including rapid and unplanned urbanization, the globalization of unhealthy lifestyles, the epidemiological transition from infectious diseases to chronic conditions, and ageing populations *(7)*. The four key risk factors for NCDs are tobacco use, physical inactivity, unhealthy diet and the harmful use of alcohol, all of which are known to be modifiable behaviours. Unhealthy diet and a lack of physical activity are risk factors for raised blood pressure, increased blood glucose, elevated blood lipids and obesity, and are called metabolic risk factors *(1)*.

NCDs have potentially serious socioeconomic consequences as they can increase individual and household impoverishment and hinder social and economic development. The distribution and impact of NCDs and their risk factors is highly inequitable and imposes a disproportionately high burden on low- and middle-income countries. Evidence shows that 15 million deaths attributed annually to NCDs occur between the ages of 30 and 69 years old, with concomitant negative impacts on productivity and development *(1)*.

The NCD epidemic also hinders poverty reduction efforts and robs societies of resources that could otherwise be devoted to social and economic development. For common NCD development goals to be achieved, more must be done to reduce disease and disability and to reduce the widening gap between those with adequate resources and those who are left behind *(7)*.

To lessen the impact on individuals and society, a comprehensive approach is needed where all sectors, including health, finance, transport, education, agriculture, planning and others, collaborate to reduce the risks and promote interventions to prevent and control NCDs. Investing in better management of NCDs is critical to strengthen detection, screening and treatment of disease and improve access to palliative care for those in need. Evidence shows that essential high-impact NCD interventions can be delivered using a primary health care approach and that they are excellent economic investments because, if provided early to patients, they can reduce the need for more expensive treatments *(1)*.

Country classification

The WHO Eastern Mediterranean Region comprises 22 countries and territories – Afghanistan, Bahrain, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, occupied Palestinian territory, Oman, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, the United Arab Emirates and Yemen. The Region has an estimated total population of about 669.15 million people (Table 1).

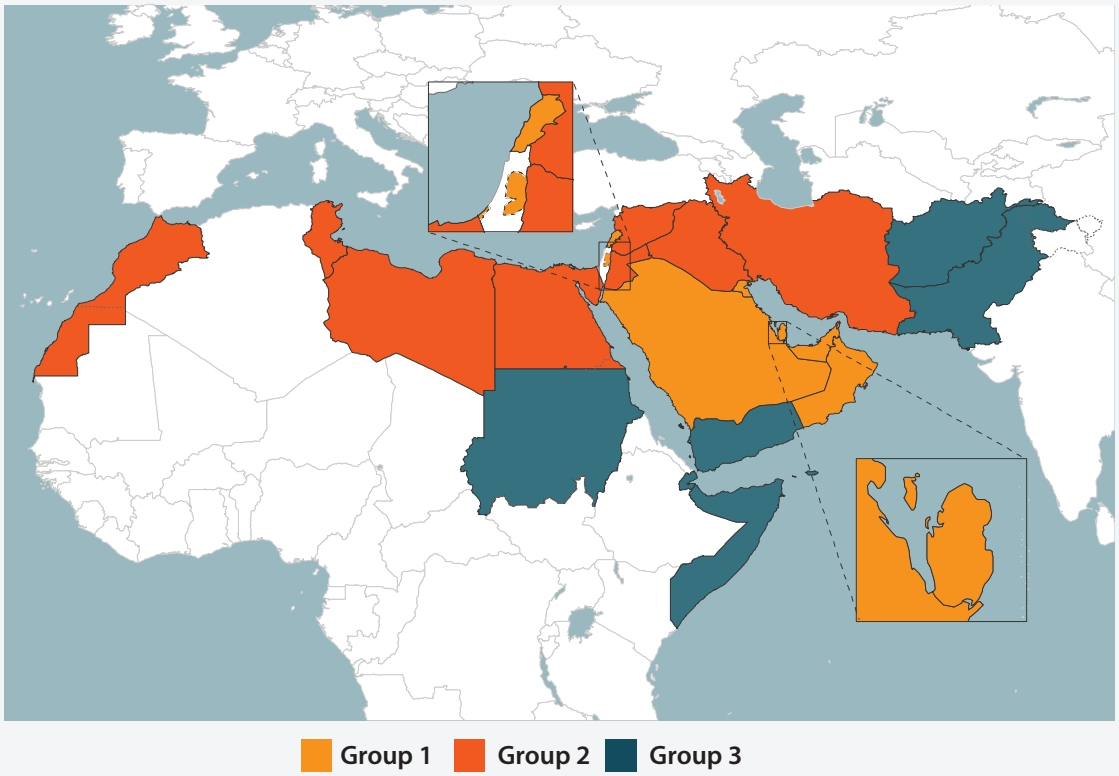
In 2012, a country classification system was developed to better take account of the socioeconomic disparities in the Region (Fig. 1). Under this system, the countries are classified into three groups: Group 1 countries are at the highest level of socioeconomic development, Group 2 countries and territories are the next most developed, and Group 3 countries are at the lowest level (Table 1).

NCD mortality in the Eastern Mediterranean Region

Mortality data in 2016 showed that NCDs were the leading cause of death in most countries of the Region accounting for 63% of all deaths, an increase of 1% compared to those reported in 2015 (Table 2). Of the 63% of deaths attributed to NCDs in 2016, cardiovascular diseases alone accounted for almost half (32%), while cancer, diabetes and chronic respiratory diseases were responsible for 10%, 3% and 4% of all deaths respectively (Fig. 2). The NCD contribution to total crude mortality varied between 24% in Somalia and 91% in Lebanon (Table 2 and Fig. 3).

Fig. 1.

Map showing the 22 Eastern Mediterranean Region countries and territories divided into three socioeconomic country groups



The NCD proportionate mortality rate was lowest in Group 3 countries, followed by Group 1 and Group 2 (Fig. 3). The NCD proportionate mortality rates were 73%, 76% and 53% in Group 1, Group 2 and Group 3 countries respectively. The levels were above 80% in Bahrain, Egypt, Iran (Islamic Republic of), Lebanon and Tunisia.

Fig. 4 shows the proportionate mortality rates of NCDs compared to communicable diseases and injuries, by country/territory group in the Region in 2016. The data underscore the high burden of NCDs for all countries of the Region.

Consistent with the data globally, cardiovascular diseases are the major contributor to the proportionate mortality from NCDs in the different countries of the Region (Fig. 5).

Fig. 6 shows the probability, by percentage, of dying between age 30 and exact age 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease in the Eastern Mediterranean Region in 2016, by country/territory group. The data reveal that the lowest probability of dying between age 30 and exact age 70 from any of the NCDs was in Bahrain (11%) while the highest was in Yemen (31%).

Fig. 7 shows the probability of dying between age 30 and 70 years from any of the four major NCDs in different WHO regions in 2015 and 2016. The highest probability was reported in South-East Asia (23%), followed by the Eastern Mediterranean Region (22%), while the lowest probability was reported in the Americas (15%).

Figs. 8a, 8b and 8c present the age-standardized mortality rate per 100 000 population in the Region by cause and sex in 2016. The results show the greater burden of NCDs disproportionately affecting Group 3 countries compared to Group 1 and 2 countries and territories.

Finally, Table 3 shows the top 20 causes of death in the Region in 2016. Ischaemic heart disease and stroke occupy the first two places, diabetes comes sixth, chronic obstructive pulmonary disease is 11th and breast cancer is 18th.

Table 1.

Population size and country groupings of countries/territories in the Eastern Mediterranean Region

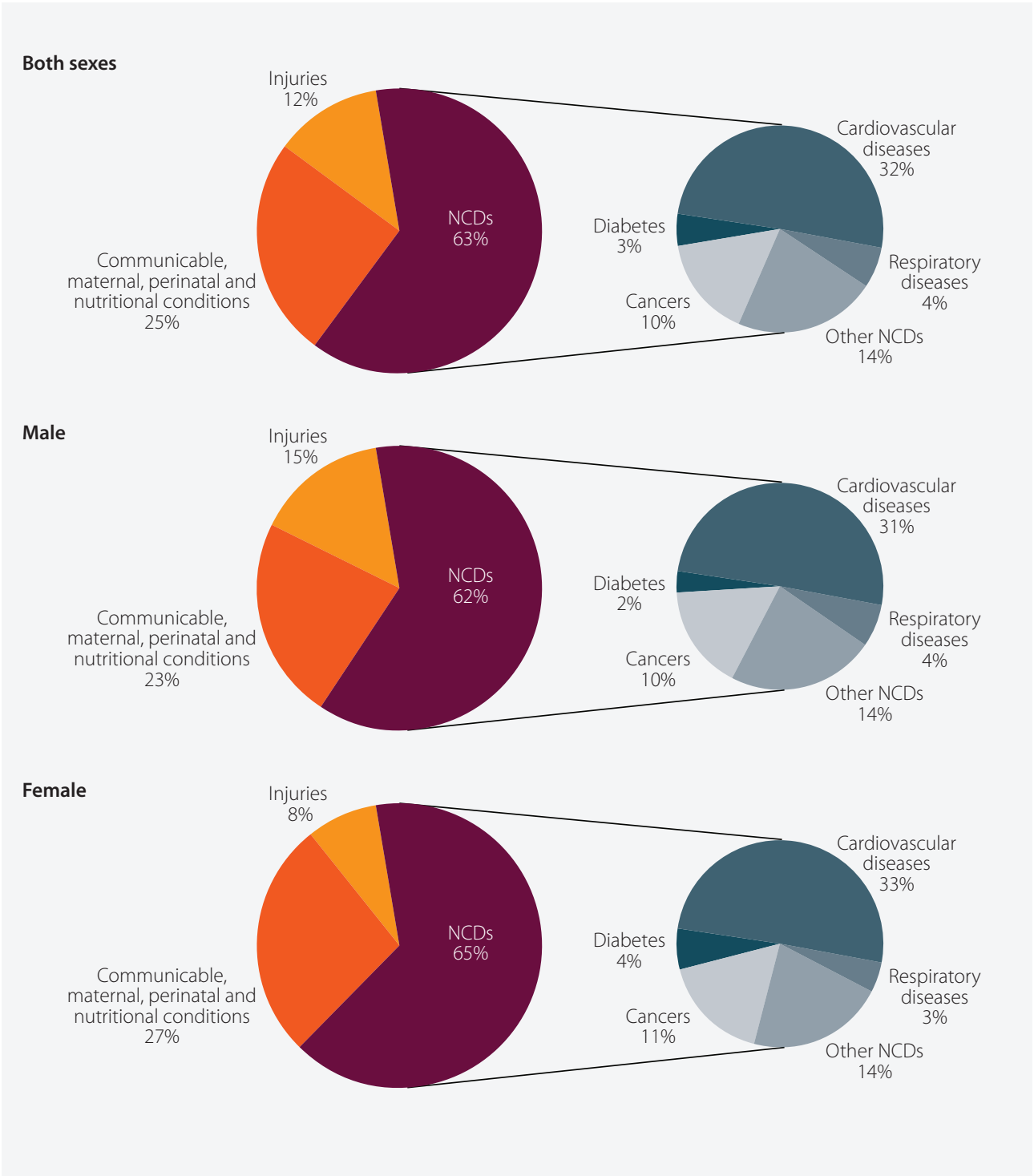
Country/territory	Population in millions (2016)[a]	Country group	World Bank country income group (2017)
Bahrain	1.43	Group 1	High-income
Kuwait	4.05	Group 1	High-income
Oman	4.43	Group 1	High-income
Qatar	2.57	Group 1	High-income
Saudi Arabia	32.28	Group 1	High-income
United Arab Emirates	9.27	Group 1	High-income
Group 1 total population (millions)	**54.02**		
Egypt	95.69	Group 2	Lower middle-income
Iran (Islamic Republic of)	80.28	Group 2	Upper middle-income
Iraq	37.20	Group 2	Upper middle-income
Jordan	9.46	Group 2	Upper middle-income
Lebanon	6.01	Group 2	Upper middle-income
Libya	6.29	Group 2	Upper middle-income
Morocco	35.28	Group 2	Lower middle-income
Occupied Palestinian territory[b]	4.82	Group 2	Lower middle-income
Syrian Arab Republic	18.43	Group 2	Lower middle-income
Tunisia	11.40	Group 2	Upper middle-income
Group 2 total population (millions)	**304.85**		
Afghanistan	34.66	Group 3	Low-income
Djibouti	0.94	Group 3	Lower middle-income
Pakistan	193.20	Group 3	Lower middle-income
Somalia	14.32	Group 3	Low-income
Sudan	39.58	Group 3	Lower middle-income
Yemen	27.58	Group 3	Lower middle-income
Group 3 total population (millions)	**303.14**		
Eastern Mediterranean Region total	**669.153**		

[a] Population figures taken from WHO Country Profiles ***(8)*** except for occupied Palestinian territory.

[b] Palestinian Central Bureau of Statistics ***(9)***.

Fig. 2.

Total deaths in the Eastern Mediterranean Region by sex, 2016



Source: WHO Global Health Observatory data repository *(10)*.

Table 2.

NCD proportionate mortality rate (%) by country group in the Eastern Mediterranean Region, 2015 and 2016

Country group		2015	2016
Group 1	Bahrain	84.5	83.0
	Kuwait	77.4	72.4
	Oman	70.1	71.9
	Qatar	66.3	68.9
	Saudi Arabia	71.9	73.2
	United Arab Emirates	76.4	76.8
	Total	**74.4**	**73.4**
Group 2	Egypt	83.3	84.1
	Iran (Islamic Republic of)	80.5	81.9
	Iraq	53.8	54.7
	Jordan	77.7	78.4
	Lebanon	88.7	90.6
	Libya	76.1	71.9
	Morocco	77.8	79.6
	Occupied Palestinian territory	Data unavailable	
	Syrian Arab Republic	47.6	45.1
	Tunisia	84.7	85.8
	Total	**74.5**	**76.2**
Group 3	Afghanistan	42.5	44.1
	Djibouti	43.1	44.4
	Pakistan	56.5	57.8
	Somalia	21.8	23.9
	Sudan	50.3	52.2
	Yemen	60.7	56.6
	Total	**45.8**	**53.0**
Eastern Mediterranean Region		**62.4**	**63.3**

Source: WHO Global Health Observatory data repository *(10)*.

Fig. 3.

NCD proportionate mortality rate (%) by country group in the Eastern Mediterranean Region, 2015–2016

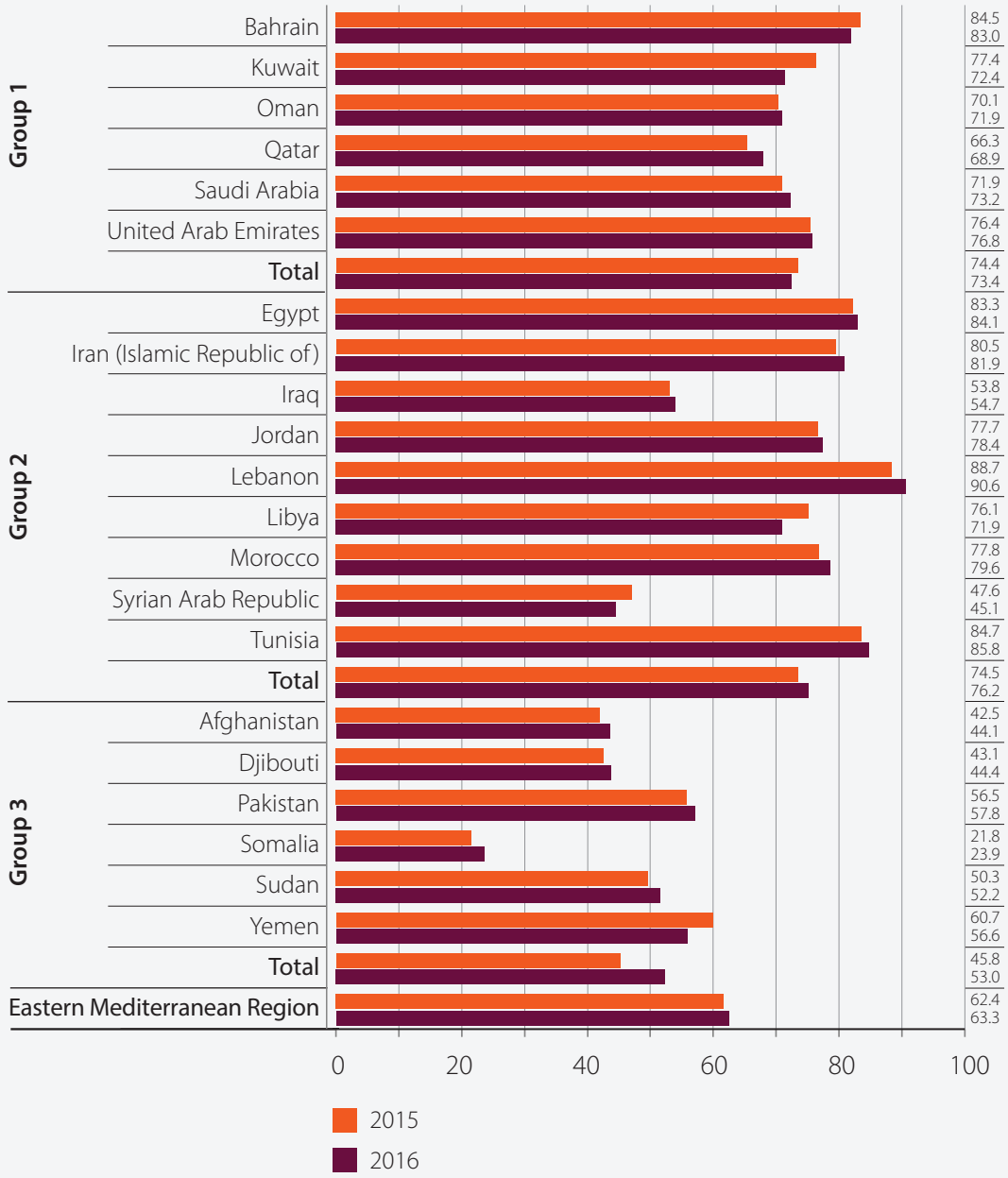


Fig. 4.

Proportionate mortality rates (%) of NCDs, communicable diseases and injuries by country group in the Eastern Mediterranean Region, 2016

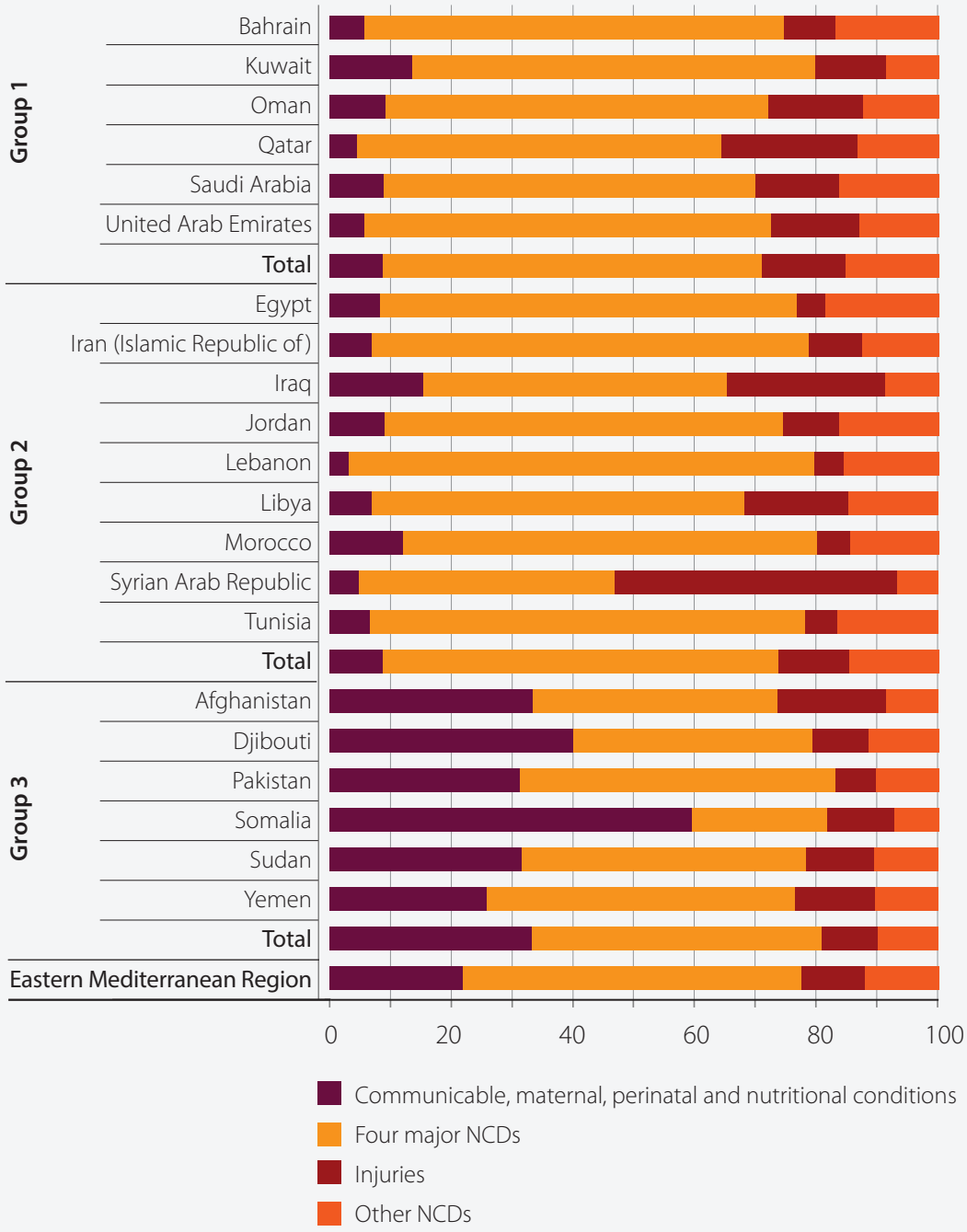


Fig. 5.

Proportionate mortality rates (%) of different NCDs in the Eastern Mediterranean Region by country group, 2016

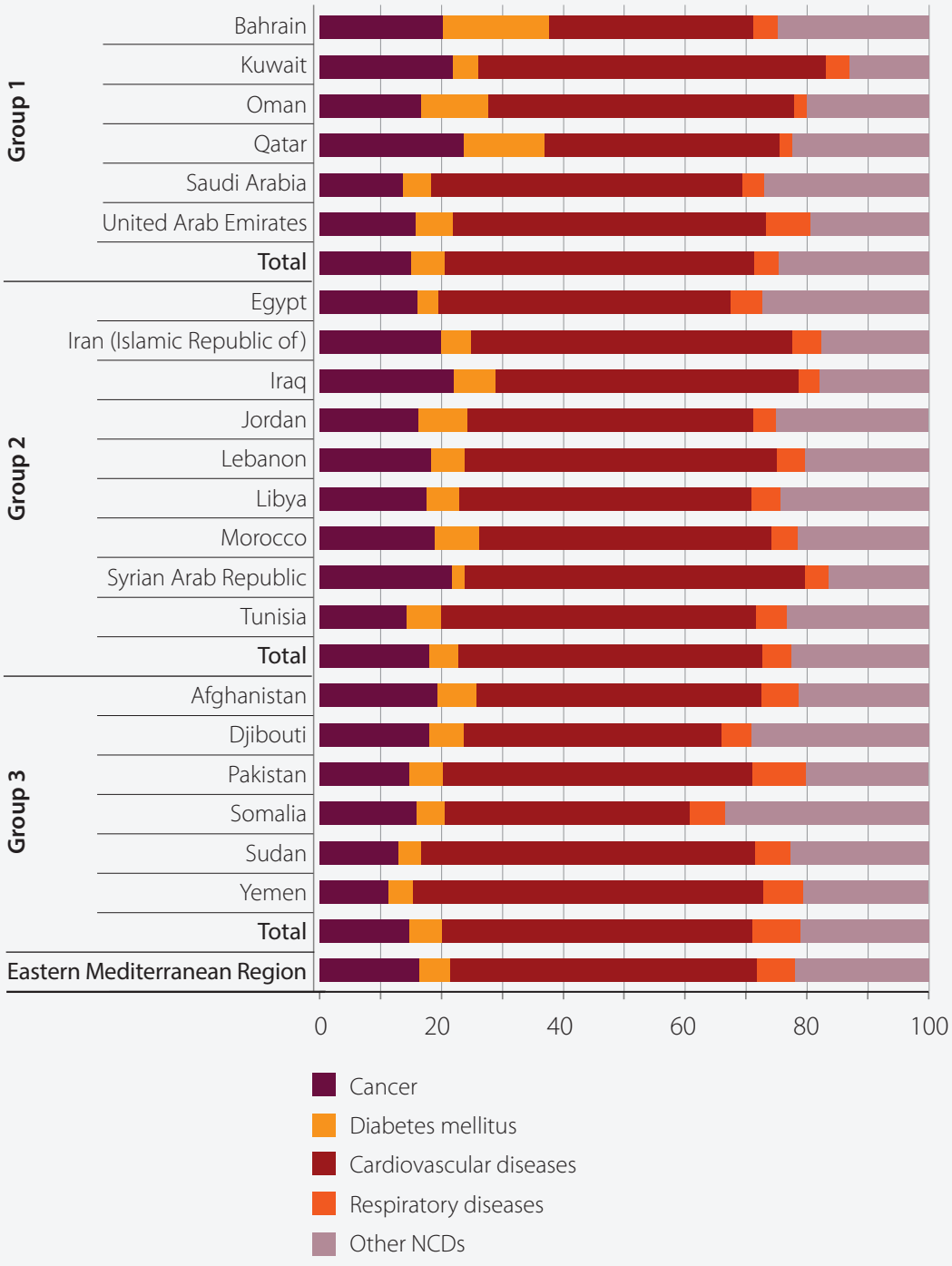


Fig. 6.

Probability (%) of dying between age 30 and exact age 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease in the Eastern Mediterranean Region, by country group, 2016

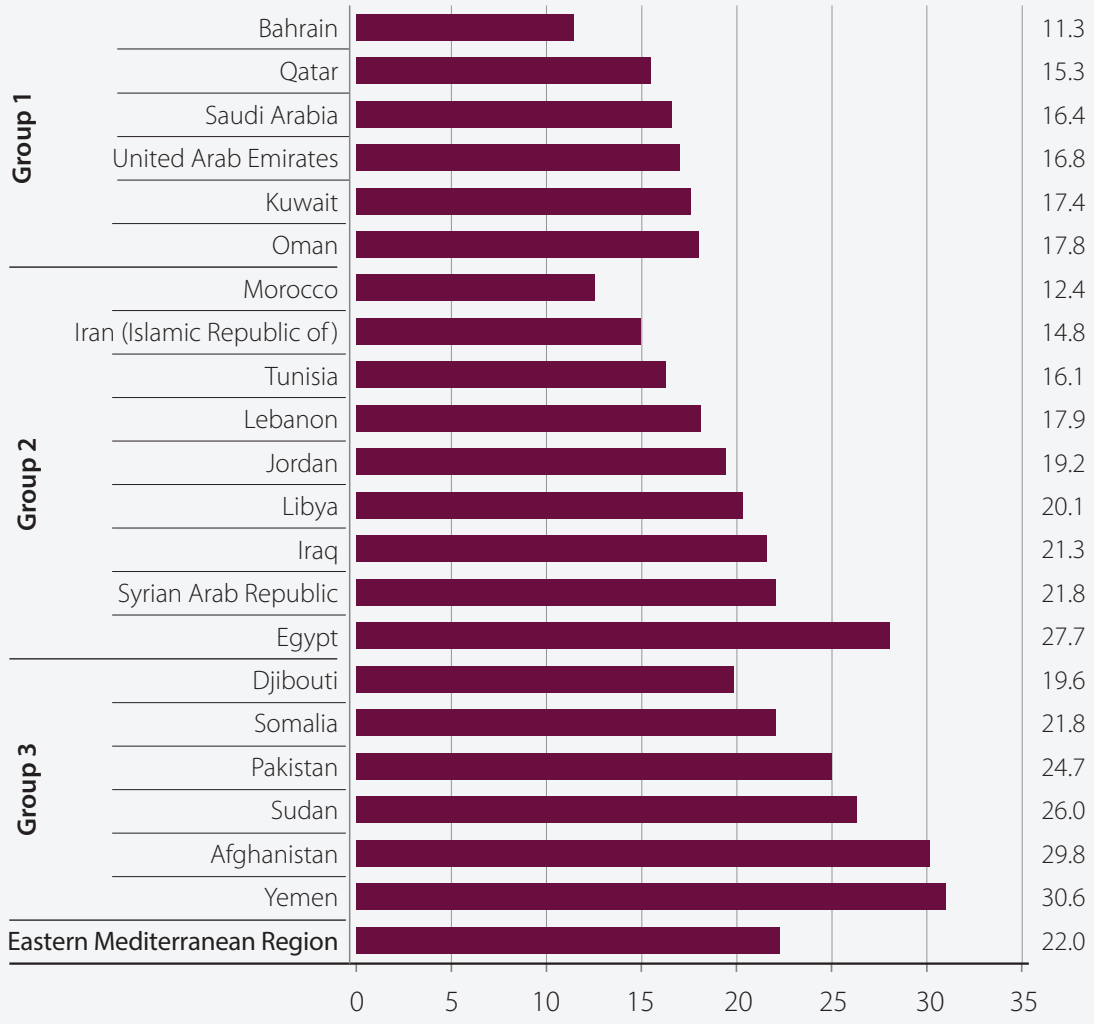


Fig. 7.

Probability (%) of dying between age 30 and exact age 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease, by WHO region (both sexes), 2015 and 2016

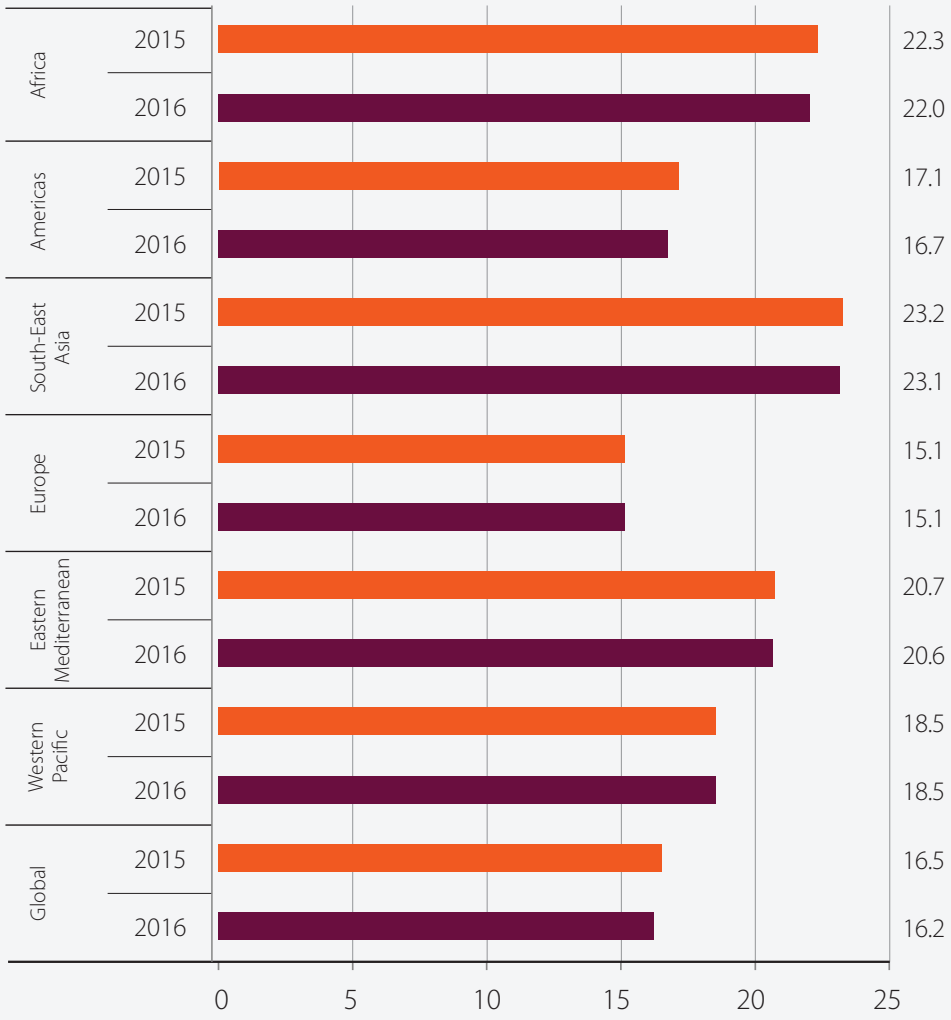


Fig. 8a.

Age-standardized mortality rate from NCDs, communicable diseases and injuries per 100 000 population in the Eastern Mediterranean Region, by country group (both sexes), 2016

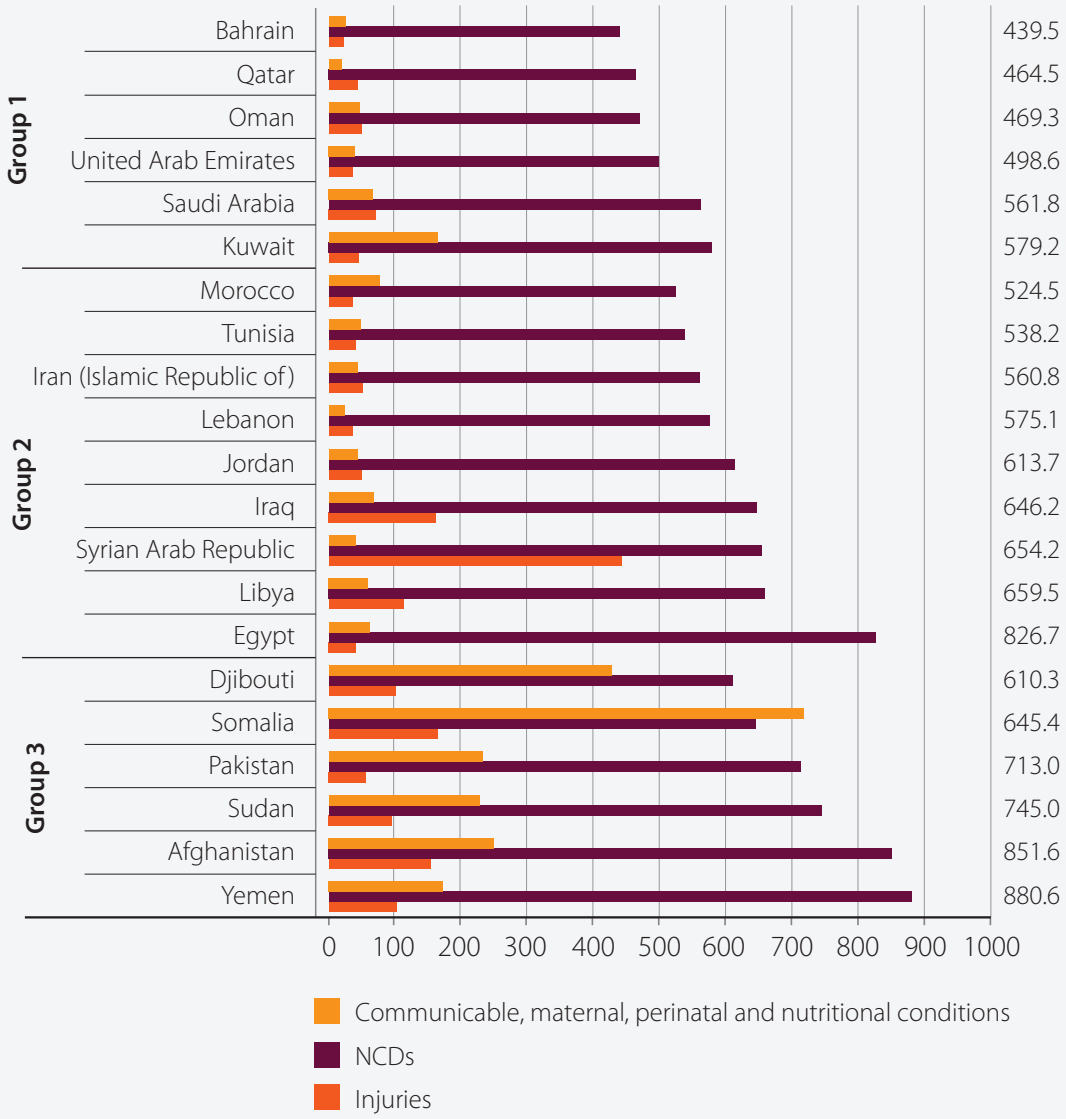


Fig. 8b.

Age-standardized mortality rate from NCDs, communicable diseases and injuries per 100 000 population in the Eastern Mediterranean Region, by country group (females), 2016

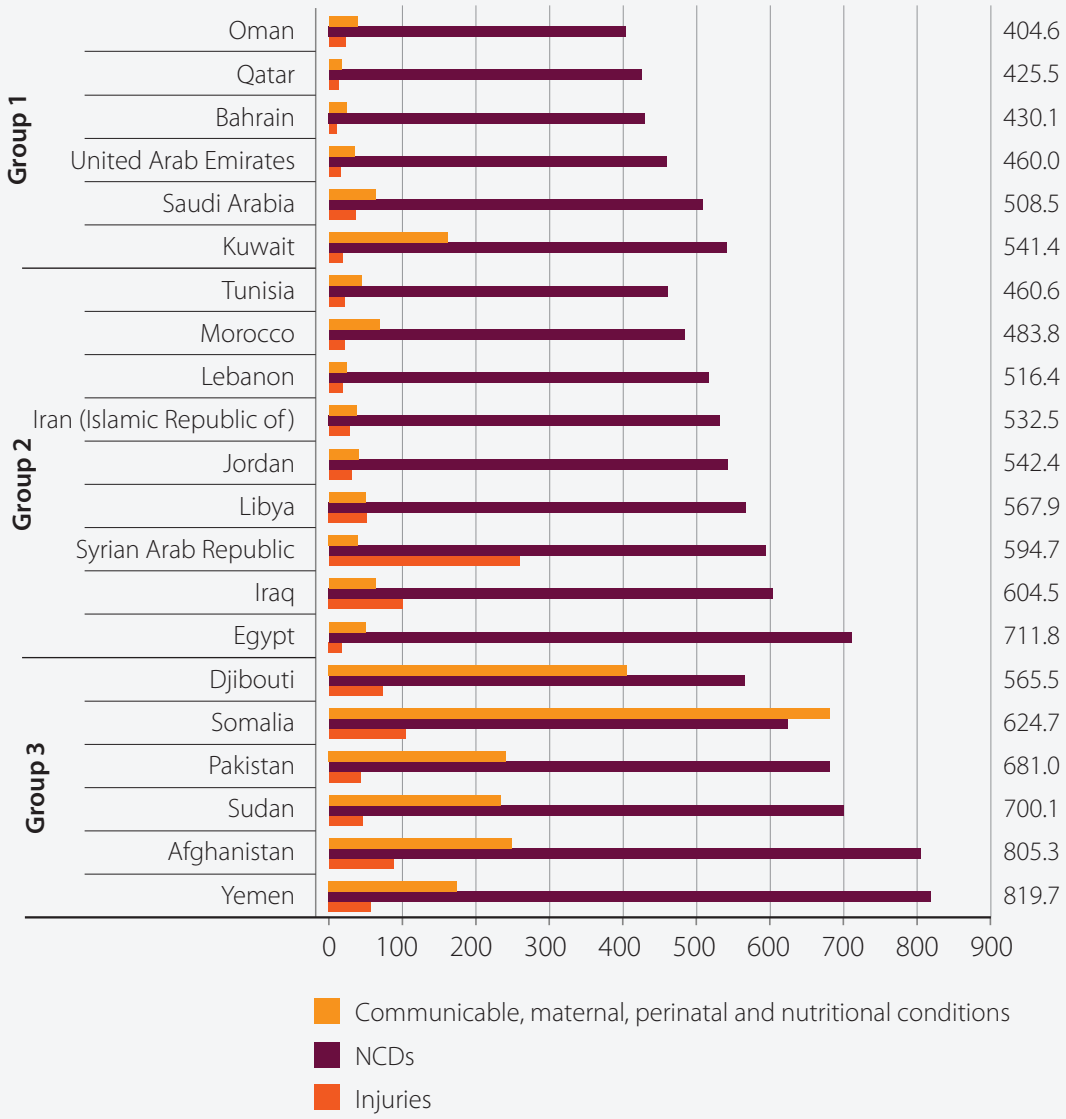


Fig. 8c.

Age-standardized mortality rate from NCDs, communicable diseases and injuries per 100 000 population in the Eastern Mediterranean Region, by country group (males), 2016

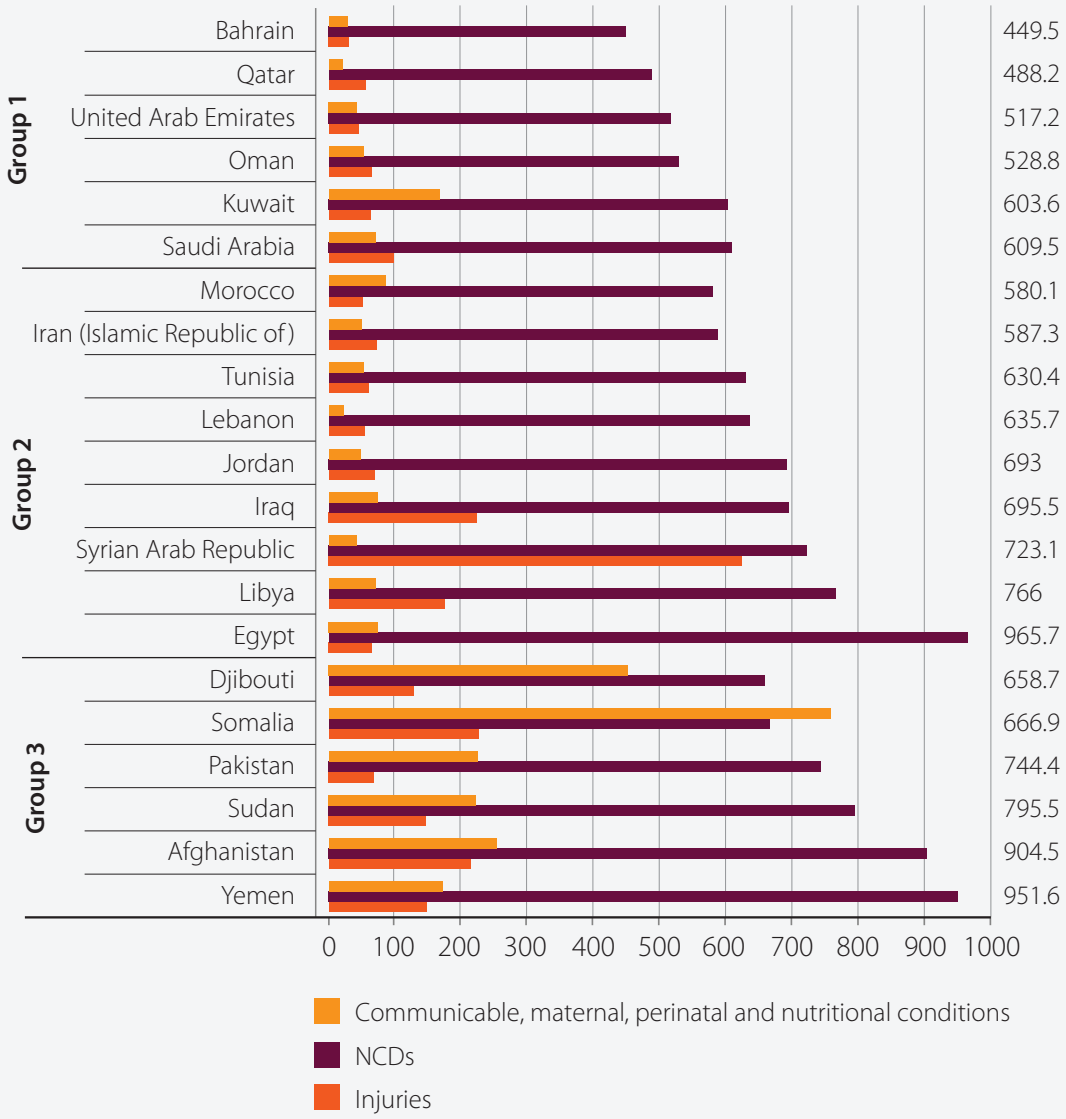


Table 3.

Top 20 causes of death in the Eastern Mediterranean Region, 2016

Rank	Cause	Deaths (000s)	(%) of total deaths	Cumulative (%) of total deaths	Crude death rate (per 100 000 population)
	All causes	**4122**	**100.0**	**100.0**	**620.5**
1	Ischaemic heart disease	835	20.3	20.3	125.6
2	Stroke	326	7.9	28.2	49.1
3	Lower respiratory infections	221	5.4	33.5	33.2
4	Preterm birth complications	181	4.4	37.9	27.2
5	Collective violence and legal intervention	154	3.7	41.7	23.2
6	Diabetes mellitus	131	3.2	44.8	19.7
7	Cirrhosis of the liver	130	3.1	48.0	19.5
8	Road injury	128	3.1	51.1	19.3
9	Birth asphyxia and birth trauma	117	2.8	53.9	17.5
10	Diarrhoeal diseases	116	2.8	56.7	17.5
11	Chronic obstructive pulmonary disease	114	2.8	59.5	17.1
12	Kidney diseases	105	2.6	62.0	15.9
13	Alzheimer disease and other dementias	103	2.5	64.5	15.5
14	Congenital anomalies	83	2.0	66.6	12.5
15	Tuberculosis	82	2.0	68.5	12.3
16	Neonatal sepsis and infections	78	1.9	70.4	11.7
17	Hypertensive heart disease	58	1.4	71.8	8.8
18	Breast cancer	46	1.1	73.0	7.0
19	Interpersonal violence	45	1.1	74.1	6.7
20	Asthma	34	0.8	74.9	5.2

WHO leadership and coordination role in NCD prevention and control

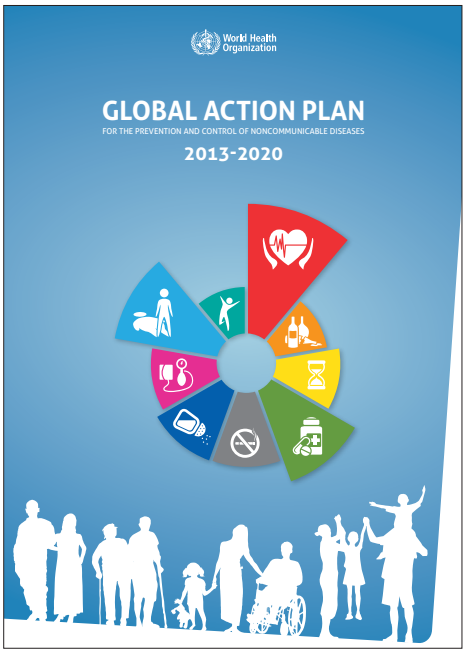
WHO has achieved the following key milestones in the prevention and control of NCDs.

The first United Nations General Assembly High-level Meeting on NCDs, held on 19–20 September 2011, led to:

- the landmark adoption of the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases *(11)*; which required countries to take action on NCDs at the national level.

The Sixty-sixth World Health Assembly, held on 20–28 May 2013, endorsed the *WHO Global action plan for the prevention and control of NCDs 2013–2020* (resolution WHA66.10) *(5)*. The plan:

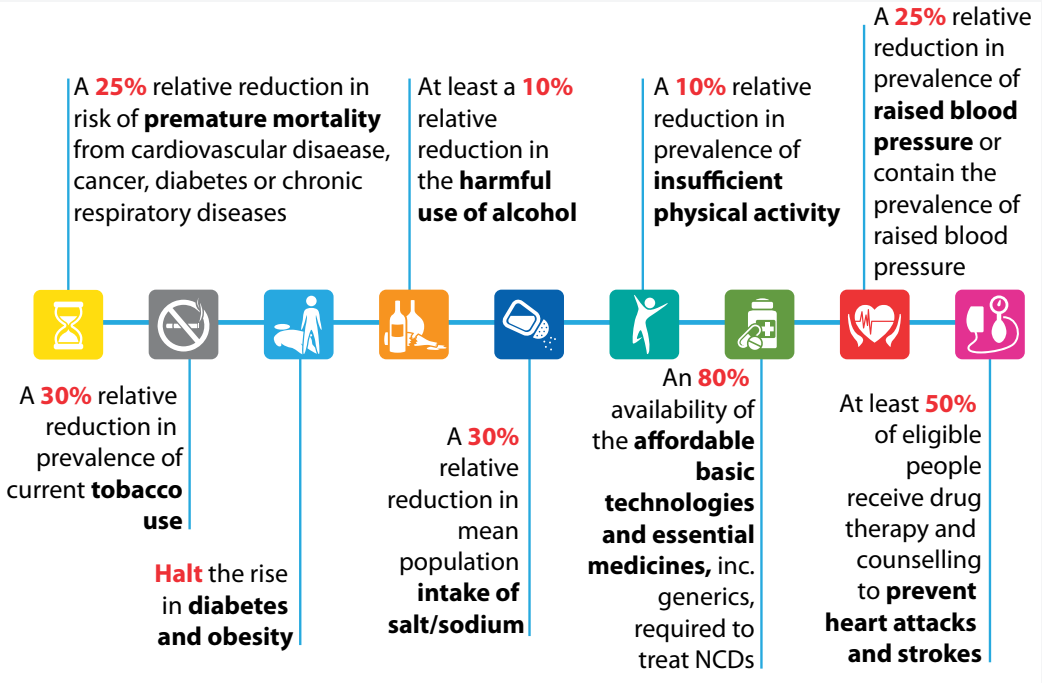
- strengthens national efforts to address the burden of NCDs;
- offers a road map and menu of policy options for Member States, international partners and WHO which, when implemented collectively between 2013 and 2020 (currently extended till 2030), will shift the paradigm and attain nine **voluntary NCD global targets**, including a 25% relative reduction in the risk of premature mortality from selected NCDs by 2025 (Box 1), now extended to 2030 with a reduction target of one third of premature mortality from NCDs by 2030 (SDG target 3.4.1).



In 2014, the second United Nations High-level Meeting on NCDs took place and in July the United Nations General Assembly adopted the Outcome Document on NCDs, which reviewed the progress achieved by countries in NCD prevention and control. This included

Box 1.

The nine voluntary NCD global targets in the WHO *Global action plan for the prevention and control of NCDs 2013–2020*

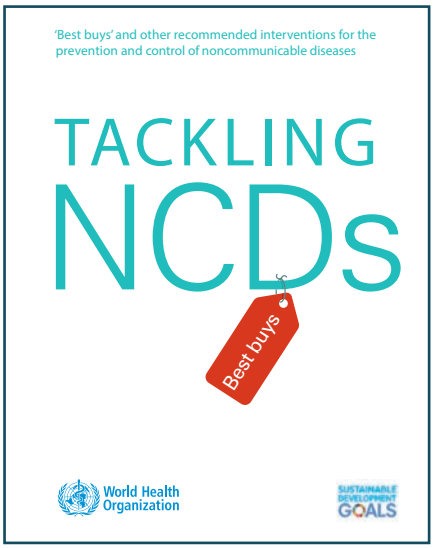


the following four time-bound commitments on which governments will take national action *(12)*.

- WHO report to the UN General Assembly on the progress achieved in the implementation of national commitments included in the 2011 United Nations Political Declaration *(11)* and the 2014 Outcome Document on NCDs *(12, 13)* using a set of ten progress indicators intended to monitor the progress made by countries in implementing the four time-bound commitments included in the 2014 Outcome Document. The latest version of the set of 10 indicators is shown in Box 2.

The Regional Committee for the Eastern Mediterranean at its 59th and 60th sessions in 2012 and 2013, adopted two resolutions (EM/RC59/R.2 and EM/RC60/R.4) concerning the implementation of the Political Declaration of the High-level Meeting of the United Nations General Assembly on the Prevention and Control of Non-communicable Diseases. Central to both resolutions is a regional framework for action to implement the Political Declaration comprising commitments by Member States to implement a set of strategic interventions in four priority areas: governance; prevention and reduction of risk factors; surveillance; and health care.

- In 2017 WHO updated the menu of policy options (known as Appendix 3 of the GAP) included in its *Global action plan for the prevention and control of NCDs 2013–2020*.
- The updated menu comprised a total of 88 interventions including overarching/enabling policy actions, the most cost-effective and other recommended interventions.
- Of the 88 interventions, 16 "best buys" are considered the most cost-effective and feasible for implementation. A WHO-CHOICE analysis found an average cost-effectiveness ratio of ≤100 international dollars per disability adjusted life year (DALY) averted in low- and lower-middle-income countries *(16)*.



On 27 September 2018, at the third United Nations High-level Meeting on NCDs, Heads of State committed to lead a response to beat NCDs and promote mental health *(17)*.

- Heads of State and government committed to 13 new steps to tackle NCDs including cancers, heart and lung diseases, stroke and diabetes, and to promote mental health and well-being.
- They agreed to take responsibility themselves for their countries' efforts to prevent and treat NCDs. They also agreed that efforts should include robust laws and fiscal measures to protect people from tobacco use, unhealthy foods and other harmful products, for example by restricting alcohol advertising, banning smoking and taxing sugary drinks.
- These developments necessitate an update to the regional framework for action on NCDs which was extended and endorsed in 2019 by the Regional Committee for the Eastern Mediterranean until 2030. It also summarizes and assesses the progress made by countries in implementing the strategic interventions in the framework through its progress indicators that match the 10 WHO progress monitor indicators.

The NCD country capacity survey

To respond to the increasing burden of NCDs worldwide, WHO conducts periodic assessments of national capacity in preventing and controlling NCDs, using a global survey

Box 2.

Ten indicators to monitor country progress on NCD commitments

- **Indicator 1:** Member State has set time-bound national targets based on WHO guidance.
- **Indicator 2:** Member State has a functioning system for generating reliable cause-specific mortality data on a routine basis.
- **Indicator 3:** Member State has a STEPS survey or a comprehensive health examination survey every 5 years.
- **Indicator 4:** Member State has an operational multisectoral national strategy/action plan that integrates the major NCDs and their shared risk factors.
- **Indicator 5:** Member State has implemented the following five demand-reduction measures of the WHO FCTC at the highest level of achievement:
  a) reduce affordability of tobacco products by increasing excise taxes and prices on tobacco products;
  b) eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places and public transport;
  c) implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages;
  d) enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship;
  e) implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke.
- **Indicator 6:** Member State has implemented, as appropriate according to national circumstances, the following three measures to reduce the harmful use of alcohol as per the WHO *Global strategy to reduce the harmful use of alcohol (14):*
  a) enact and enforce restrictions on the physical availability of alcohol (via reduced hours of sale);
  b) enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising (across multiple types of media);
  c) increase excise taxes on alcoholic beverages.
- **Indicator 7:** Member State has implemented the following four measures to reduce unhealthy diet:
  a) adopt national policies to reduce population salt/sodium consumption;
  b) adopt national policies that limit saturated fatty acids and virtually eliminate industrially produced trans-fatty acids in the food supply;
  c) adopt WHO set of recommendations on marketing of foods and non-alcoholic beverages to children;
  d) adopt legislation/regulations fully implementing the *International Code of Marketing of Breast-milk Substitutes (15).*
- **Indicator 8:** Member State has implemented at least one recent national public awareness programme on physical activity, including mass media campaigns for physical activity behavioural change.
- **Indicator 9:** Member State has evidence-based national guidelines/protocols/standards for the management of major NCDs through a primary care approach, recognized/approved by government or competent authorities.
- **Indicator 10:** Member State has provision of drug therapy, including glycaemic control and counselling for eligible persons at high risk to prevent heart attacks and strokes, with emphasis on the primary care level.

of all Member States. The NCD country capacity survey aims to gather detailed information on the progress at country level in addressing and responding to NCDs.

The survey tool used in the assessment has evolved and expanded over time. In particular, it assists countries in assessing the progress made in the four areas of intervention set out in the regional *Framework for action to implement the United Nations Political Declaration on NCDs (18)* (i.e. governance; prevention and reduction of risk factors; surveillance, monitoring and evaluation; and health care) using the 10 progress indicators set out in the 2017 Technical Note *(13)* and shown in Box 2.

Objectives

This report summarizes national capacity to prevent and control NCDs in countries of the WHO's Eastern Mediterranean Region. It is based on a survey carried out in 2019 in all 22 countries, with a 100% response rate.

The 2019 survey is the seventh national capacity survey in the Region since 2000. It therefore enables countries to assess the progress made over time by comparing the results with previous survey data wherever available.

The report also identifies limitations and challenges to national capacity for NCD prevention and control in the Region, relative to the objectives and recommendations of the *WHO Global action plan for the prevention and control of NCDs 2013–2020 (5)*, and underscores the areas that urgently need prioritization and further intervention.

Methods

Data collection, review and validation

A web-based questionnaire was used for the survey data collection, consisting of four modules: (i) public health infrastructure, partnerships and multisectoral collaboration; (ii) policies, strategies and action plans; (iii) health information systems, monitoring, surveillance and surveys; and (iv) health system capacity for detection, treatment and care (the full questionnaire can be found in Annex 1). Unique log-in details were provided for the assigned NCD focal point in each country.

The focal points were either personnel at ministries of health responsible for a unit or programme on NCDs, or delegated members of staff in ministries of health, other national ministries or institutes. The focal points were requested to submit their completed questionnaire, with the supporting documents, using the WHO website by the end of May 2019. The survey instructions specified that a team of people, led by the NCD focal point, should complete the responses so that topic-specific experts in each country could respond to those questions relating to their area of expertise, thus ensuring a more thorough assessment.

WHO checked the completeness and validity of the countries' responses by reviewing the relevant supporting documents, as well as by comparing the 2019 responses with those of the 2017 round to check for any unexpected inconsistencies. Where discrepancies were noted between the country response and other sources, a clarification request was sent to the country by the WHO Regional Office for the Eastern Mediterranean. Similarly, if the review revealed missing documentation or incomplete questions, the focal point was asked to provide this information.

Mortality-related data were checked against information on vital registration systems, available at the WHO Department of Data and Analytics. Information on recent NCD risk factor surveys was checked against key WHO-supported risk factor surveys. These included the WHO STEPS (adult risk factor surveillance) instrument *(19),* the Global school-based student health survey (GSHS) *(21),* the Global Youth Tobacco Survey (GYTS) *(21)* and the Global Adult Tobacco Survey (GATS) *(22)*.

Alcohol and tobacco taxation data available from WHO surveys such as the WHO *report on the global tobacco epidemic, 2019 (23)* were used to check country responses to questions on these fiscal measures; data on cancer registries from the International Agency for Research on Cancer (IARC) were used to validate country responses to the cancer registry questions.

The questionnaire

The 2019 country capacity survey questionnaire contains a set of standardized questions that allows comparisons of country capacities and responses. The survey is divided into four modules, as outlined above.

Specific components of the questionnaire were as follows *(24)*:

1. **The public health infrastructure, partnerships and multisectoral collaboration module** asked questions relating to the presence of a unit or division within the ministry of health dedicated to NCDs; staffing and funding; fiscal interventions including taxation and subsidies and the motivation for the fiscal interventions; and if there was a high-level national multisectoral commission, agency or mechanism to oversee NCD-related work.
2. **The policies, strategies and action plans module** asked questions relating to the presence of policies, strategies or action plans. The questions differentiated between integrated policies, strategies or action plans addressing several risk factors or diseases and policies, strategies or action plans for a specific disease or risk factor. Ministries of health were asked to name the policy and indicate if the plan was currently in operation. Additionally, this component covered cost-effective policies for NCDs, such as policies to reduce population salt consumption.
3. **The health information systems and surveillance module** asked questions addressing the routine collection of mortality data; patient information; facility surveys; the existence of cancer and diabetes registries; and risk factor surveillance activities.
4. **The health system capacity module** asked countries to assess the capacity of their health system related to NCD prevention, early detection, and treatment and care within the primary health care sector. Specific questions focused on the existence of guidelines or protocols to treat major NCDs; the availability of the tests, procedures and equipment related to NCDs within the health system; cancer screening programmes and diagnosis and treatment services; and the availability of palliative care services for NCDs.

Compared with the 2017 questionnaire, the 2019 version included new questions on staffing for NCDs within the ministry of health (or equivalent); physical activity guidelines; front-of-pack labelling (FOPL) policies; mobile health initiatives; child risk factor surveillance; and NCD risk factor management guidelines.

A detailed set of instructions was included on how to complete the questionnaire, and a glossary defining the

terms used was provided (Annex 2). The questionnaire was administered in English.

All 22 countries and territories in the Region completed the survey, giving a response rate of 100%; the same rate as that achieved in 2017.

Responses to the questions in all four modules enabled reporting against the 10 progress indicators and the four time-bound commitments developed following the second United Nations High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases *(11, 12)*, as well as against the 25 NCD global monitoring framework indicators set out in the *WHO Global action plan for the prevention and control of NCDs 2013–2020 (5)*.

Analysis

Data for each country response were extracted from the web-based application in Microsoft Excel format. Data cleaning was carried out to ensure consistency of the survey responses. SPSS (version 21) statistical analysis software was used for all analysis conducted.

Percentages reported in the findings reflect the positive responses to a question, while non-positive responses ("No", "Don't know", "Not applicable", and missing answers) were treated equally as negative responses.

The Eastern Mediterranean Region country classification system which classifies the Region's countries and territories into three groups based on socioeconomic development (see Introduction above) was used to conduct stratified analysis, accounting for the socioeconomic disparities between the countries and territories of the Region.

For country-level analysis, the denominator used was always the total number of responding countries and territories, either overall or within a particular country group.

Whenever possible, trends in national NCD capacity were derived by comparing the results of the 2019 survey with those conducted in 2013, 2015 and 2017.

Results

Overview of the status of the 10 progress indicators by country/ territory and group

The 10 progress indicators to monitor country progress on NCD commitments (see Box 2 above) were evaluated in all 22 countries and territories of the Region in the 2019 survey; Tables 4–23 and Figs. 9 and 10 show the countries' achievement status.

In general, the number of countries that have fully achieved many of the indicators in 2019 has increased compared to 2017. However, none of the countries was able to fully achieve progress indicator 2 ("Member State has a functioning system for generating reliable cause-specific mortality data on a routine basis") in 2019, a continuation of the situation in 2017.

Progress monitor indicator 1:

Member State has set time-bound national targets based on WHO guidance

There was a notable increase in the number of countries and territories that have achieved progress monitor indicator 1. Fourteen countries and territories (64%) achieved this indicator in 2019 compared to 12 countries (54.5%) in 2017 and only three (13.6%) in 2015. These 14 countries and territories were Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates in Group 1; Egypt, Iran (Islamic Republic of), Iraq, Jordan, Morocco, occupied Palestinian territory and Tunisia in Group 2; and Sudan in Group 3.

Progress monitor indicator 2:

Member State has a functioning system for generating reliable cause-specific mortality data on a routine basis

Fourteen countries and territories (64%) have partially achieved progress monitor indicator 2, the same group that had achieved the indictor in 2017. These countries and territories are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates in Group 1; Egypt, Iran (Islamic Republic of), Iraq, Jordan, Morocco, Syrian Arab Republic, occupied Palestinian territory and Tunisia in Group 2. As of 2019, no country or territory in the Region had fully achieved this indicator.

Progress monitor indicator 3:

Member State has a STEPS survey or a comprehensive health examination survey every 5 years

Six countries in the Region (27%) – the United Arab Emirates in Group 1; Egypt, Iran (Islamic Republic of), Morocco and Tunisia in Group 2; and Sudan in Group 3 – have fully achieved this indicator, compared to only three countries (14%) in 2017.

Progress monitor indicator 4:

Member State has an operational multisectoral national strategy/action plan that integrates the major NCDs and their shared risk factors

More than half of the countries and territories (12 countries, or 55%) have an operational multisectoral national strategy or action plan that integrates the major NCDs and their shared risk factors. This represents a remarkable increase in the number of countries or territories fully achieving this indicator since 2015, when only one (occupied Palestinian territory) had achieved this. It also represents good progress since 2017, when only eight countries and territories (36%) had achieved the indicator (Fig. 10).

Progress monitor indicator 5 and sub-indicators 5a–e:

Member State has implemented the five demand-reduction measures of the WHO FCTC at the highest level of achievement

Less than half of the countries and territories surveyed have fully achieved progress monitor sub-indicators 5a–e, although there has been a slight increase from the figures reported in 2017. The vast majority that have fully achieved them are in Group 2; except for sub-indicator 5d, which has been fully achieved by a larger proportion of countries in Group 1.

Only 14% of the countries and territories (Egypt, Jordan and occupied Palestinian territory) have fully achieved sub-indicator 5a; nearly one third (32%) (Egypt, Iran (Islamic Republic of), Lebanon, Libya and occupied Palestinian territory in Group 2; and Afghanistan and Pakistan in Group 3) have fully achieved sub-indicator 5b; 23% (Saudi Arabia in Group 1; Egypt and Iran (Islamic Republic of) in Group 2; and Djibouti and Pakistan in Group 3) have fully achieved sub-indicator 5c; 45% (Bahrain, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates in Group 1; Egypt, Iran (Islamic Republic of) and Libya in Group 2; and Afghanistan, Djibouti and Yemen in Group 3) have fully achieved sub-indicator 5d; and 18% (Qatar in Group 1; Iraq and Jordan in Group 2; and Pakistan in Group 3) have fully achieved sub-indicator 5e.

Progress monitor indicator 6 and sub-indicators 6a–c:

The three measures to reduce the harmful use of alcohol as per the *WHO Global strategy to reduce the harmful use of alcohol*

Nearly half of the countries and territories (between 41% and 50% of the country groups) have implemented some of the measures to reduce the harmful use of alcohol as

per the WHO Global strategy (progress monitor sub-indicators 6a–c).

Contrary to the findings for most of the other progress monitor indicators, Group 3 has the highest proportion of countries reporting full achievement (83% for sub-indicators 6a and 6b, and 100% for sub-indicator 6c).

Qatar and Saudi Arabia in Group 1; Iran (Islamic Republic of) and Libya in Group 2; and Afghanistan, Pakistan, Somalia, Sudan and Yemen in Group 3 (41% of the countries and territories) have fully achieved sub-indicator 6a; Saudi Arabia and the United Arab Emirates in Group 1; Egypt, Iran (Islamic Republic of), Jordan and Libya in Group 2; and Afghanistan, Djibouti, Somalia, Sudan and Yemen in Group 3: (50%) have fully achieved sub-indicator 6b; and Saudi Arabia in Group 1; Egypt, Iran (Islamic Republic of) and Libya in Group 2; and Afghanistan, Djibouti, Pakistan, Somalia, Sudan and Yemen in Group 3: (45%) have fully achieved sub-indicator 6c.

Progress monitor indicator 7 and sub-indicators 7 a–d:

Member State has implemented four measures to reduce unhealthy diet

More than one third of the countries and territories (Bahrain, Kuwait, Oman, Saudi Arabia and the United Arab Emirates in Group 1; and Iran (Islamic Republic of), occupied Palestinian territory and Tunisia in Group 2) (36%) have fully achieved sub-indicator 7a.

Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates in Group 1; and Iran (Islamic Republic of), Morocco and Tunisia in Group 2 have fully achieved sub-indicator 7b (41%) while Bahrain and Oman in Group 1; and Iran (Islamic Republic of) and Morocco in Group 2 have fully achieved sub-indicator 7c (18%), with 27% of the countries (Bahrain and Kuwait in Group 1; Lebanon in Group 2; and Afghanistan, Pakistan and Yemen in Group 3) have fully achieved sub-indicator 7d.

The data show that the vast majority of countries which have fully achieved sub-indicators 7a–c are in Group 1, while sub-indicator 7d has been fully achieved by a larger proportion of countries in Group 3.

Progress monitor indicator 8:

Member State has implemented at least one recent national public awareness programme on physical activity, including mass media campaigns for physical activity behavioural change

Around one in five countries and territories (23%) have fully achieved progress monitor indicator 8, which is much lower than the number reported in 2017 (54%). The countries that reported full achievement of this indicator are Oman, Qatar and the United Arab Emirates in Group 1; and Egypt and Iraq in Group 2.

Progress monitor indicator 9:

Member State has evidence-based national guidelines/ protocols/standards for the management of major NCDs through a primary care approach, recognized/ approved by government or competent authorities

Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates in Group 1; Iran (Islamic Republic of) and Lebanon in Group 2; and Sudan in Group 3 (36% of countries and territories) have fully achieved indicator 9.

Progress monitor indicator 10:

Member State has provision of drug therapy, including glycaemic control and counselling for eligible persons at high risk to prevent heart attacks and strokes, with emphasis on the primary care level.

Bahrain, Kuwait, Oman, Saudi Arabia and the United Arab Emirates in Group 1; and Iran (Islamic Republic of), Lebanon and occupied Palestinian territory in Group 2 (36% of countries and territories) have fully achieved indicator 10.

Table 4.

Overall summary of progress indicator achievement in the Eastern Mediterranean Region (22 countries and territories)

Progress indicator number	Progress indicator	Number and percentage of countries partially achieving indicator	Countries partially achieving indicator[a]
1	Member State has set time-bound national targets based on WHO guidance.	14 countries (64%)	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Morocco, occupied Palestinian territory, Tunisia, Sudan.
2	Member State has a functioning system for generating reliable cause-specific mortality data on a routine basis.	0 countries (0%)	
3	Member State has a STEPS survey or a comprehensive health examination survey every 5 years.	6 countries (27%)	United Arab Emirates, Egypt, Iran (Islamic Republic of), Morocco, Tunisia, Sudan.
4	Member State has an operational multisectoral national strategy/action plan that integrates the major NCDs and their shared risk factors.	12 countries (55%)	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Egypt, Iran (Islamic Republic of), Iraq, Morocco, Tunisia, Afghanistan.
5	a) Reduce affordability by increasing excise taxes and prices on tobacco products.	3 countries (14%)	Egypt, Jordan, occupied Palestinian territory.
	b) Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places and public transport.	7 countries (32%)	Egypt, Iran (Islamic Republic of), Lebanon, Libya, occupied Palestinian territory, Pakistan, Afghanistan.
	c) Implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages.	5 countries (23%)	Saudi Arabia, Egypt, Iran (Islamic Republic of), Djibouti, Pakistan.
	d) Enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship.	10 countries (45%)	Bahrain, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, Egypt, Iran (Islamic Republic of), Libya, Afghanistan, Djibouti, Yemen.
	e) Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke.	4 countries (18%)	Qatar, Iraq, Jordan, Pakistan.
6	a) Enact and enforce restrictions on the physical availability of retailed alcohol (via reduced hours of sale).	9 countries (41%)	Qatar, Saudi Arabia, Iran (Islamic Republic of), Libya, Afghanistan, Pakistan, Somalia, Sudan, Yemen.
	b) Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising (across multiple types of media).	11 countries (50%)	Saudi Arabia, United Arab Emirates, Egypt, Iran (Islamic Republic of), Jordan, Libya, Afghanistan, Djibouti, Somalia, Sudan, Yemen.
	c) Increase excise taxes on alcoholic beverages.	10 countries (45%)	Saudi Arabia, Egypt, Iran (Islamic Republic of), Libya, Afghanistan, Djibouti, Pakistan, Somalia, Sudan, Yemen.

Progress indicator number	Progress indicator	Number and percentage of countries partially achieving indicator	Countries partially achieving indicator[a]
7	a) Adopt national policies to reduce population salt/sodium consumption.	8 (36%)	Bahrain, Kuwait, Oman, Saudi Arabia, United Arab Emirates, Iran (Islamic Republic of), occupied Palestinian territory, Tunisia.
	b) Adopt national policies that limit saturated fatty acids and virtually eliminate industrially produced trans-fatty acids in the food supply.	9 (41%)	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Iran (Islamic Republic of), Morocco, Tunisia.
	c) WHO set of recommendations on marketing of foods and non-alcoholic beverages to children.	4 countries (18%)	Bahrain, Oman, Iran (Islamic Republic of), Morocco.
	d) Legislation/regulations fully implementing the International Code of Marketing of Breast-milk Substitutes.	6 countries (27%)	Bahrain, Kuwait, Lebanon, Afghanistan, Pakistan, Yemen.
8	Member State has implemented at least one recent national public awareness and motivational communication for physical activity, including mass media campaigns for physical activity behavioural change.	5 countries (23%)	Oman, Qatar, United Arab Emirates, Egypt, Iraq.
9	Member State has evidence-based national guidelines/protocols/standards for the management of major NCDs through a primary care approach, recognized/approved by government or competent authorities.	8 countries (36%)	Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Iran (Islamic Republic of), Lebanon, Sudan.
10	Member State has provision of drug therapy, including glycaemic control and counselling for eligible persons at high risk to prevent heart attacks and strokes, with emphasis on the primary care level	8 countries (36%)	Bahrain, Kuwait, Oman, Saudi Arabia, United Arab Emirates, Iran (Islamic Republic of), Lebanon, occupied Palestinian territory.

[a] Countries and territories are presented in country group order as set out in Table 1, with Group 1 first.

Fig. 9.

Number of progress indicators/sub-indicators fully achieved by country/territory, 2017–2019

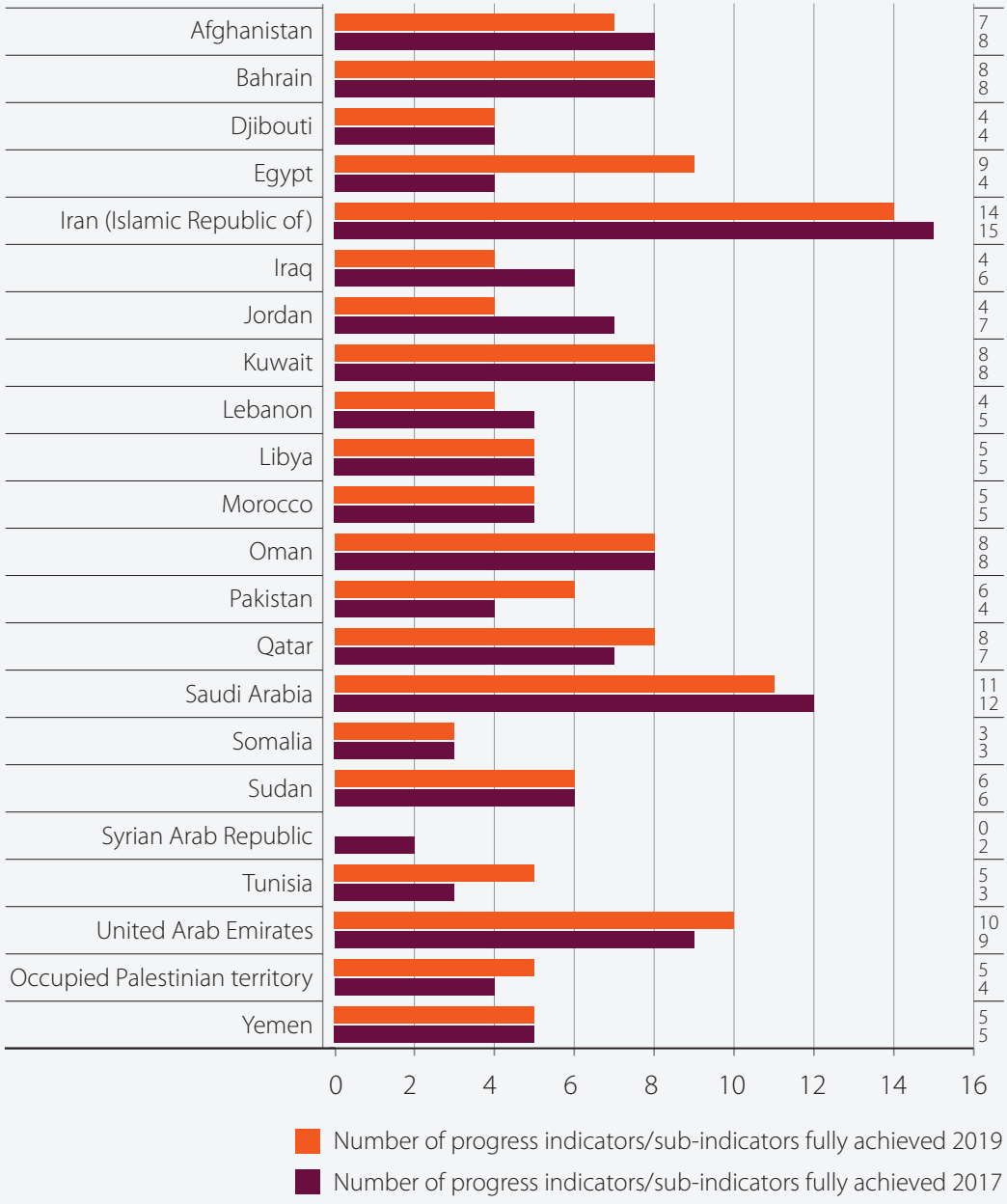


Fig. 10.

Number of countries/territories that have fully achieved the progress indicators, 2015–2019

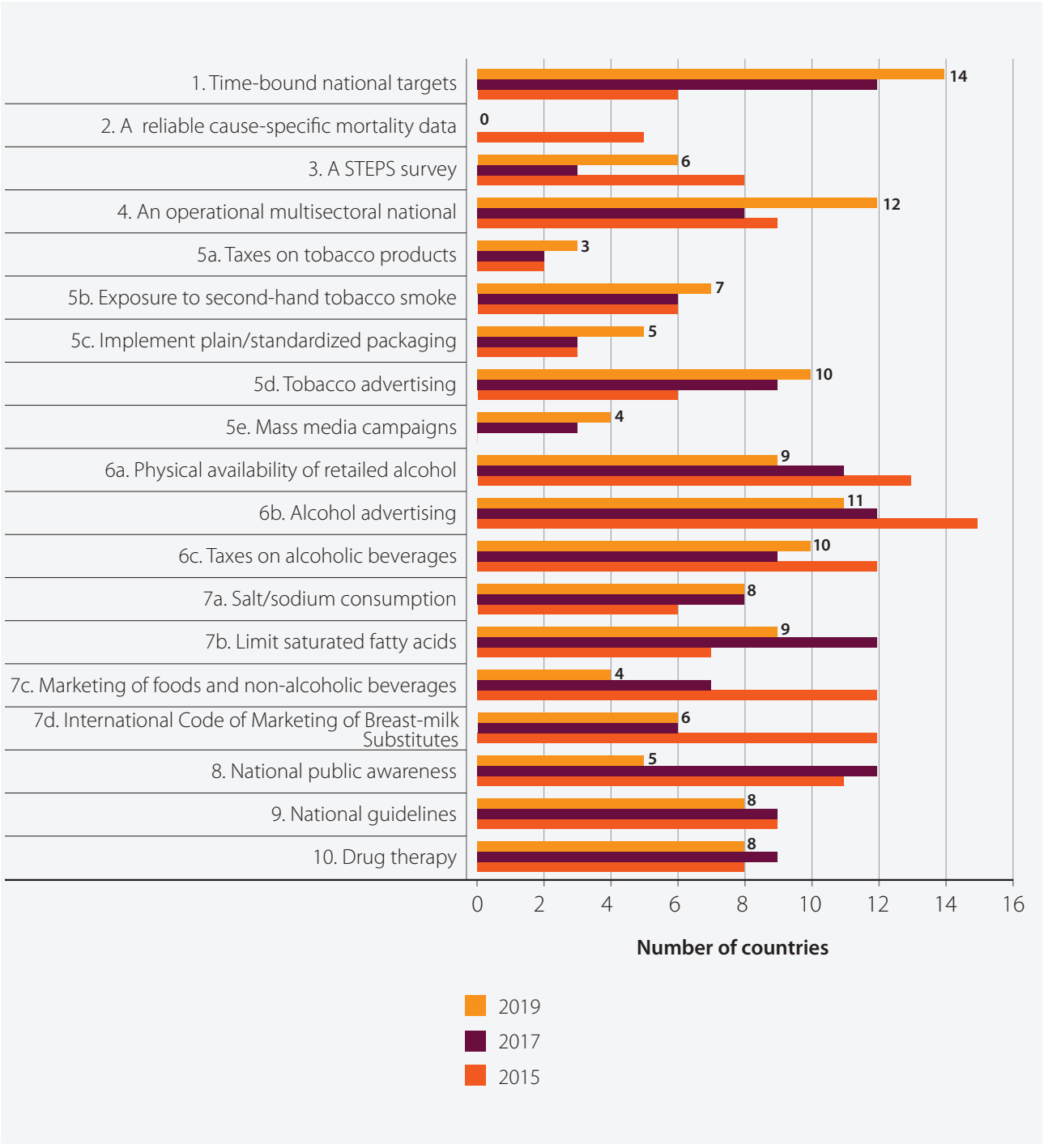


Table 5.

Progress indicator 1: achievement by country/territory and country group

Group	Country/territory	Indicator 1 Member State has set time-bound national targets based on WHO guidance		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain			√
	Kuwait			√
	Oman			√
	Qatar			√
	Saudi Arabia			√
	United Arab Emirates			√
	Total			**6**
		0%	**0%**	**100%**
Group 2	Egypt			√
	Iran (Islamic Republic of)			√
	Iraq			√
	Jordan			√
	Lebanon	√		
	Libya	√		
	Morocco			√
	Occupied Palestinian territory			√
	Syrian Arab Republic	√		
	Tunisia			√
	Total	**3**		**7**
		30%	**0%**	**70%**
Group 3	Afghanistan	√		
	Djibouti	√		
	Pakistan	√		
	Somalia	√		
	Sudan			√
	Yemen	√		
	Total	**5**		**1**
		83%	**0%**	**17%**
Eastern Mediterranean Region		**8**	**-**	**14**
		36%	**0%**	**64%**

Table 6.

Progress indicator 2: achievement by country/territory and country group

Group	Country/territory	Indicator 2 Member State has a functioning system for generating reliable cause-specific mortality data on a routine basis		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain		√	
	Kuwait		√	
	Oman		√	
	Qatar		√	
	Saudi Arabia		√	
	United Arab Emirates		√	
	Total		6	
		0%	**100%**	**0%**
Group 2	Egypt		√	
	Iran (Islamic Republic of)		√	
	Iraq		√	
	Jordan		√	
	Lebanon	√		
	Libya	√		
	Morocco		√	
	Occupied Palestinian territory		√	
	Syrian Arab Republic		√	
	Tunisia		√	
	Total	**2**	**8**	
		20%	**80%**	**0%**
Group 3	Afghanistan	√		
	Djibouti	√		
	Pakistan	√		
	Somalia	√		
	Sudan	√		
	Yemen	√		
	Total	**6**		
		100%	**0%**	**0%**
Eastern Mediterranean Region		**8**	**14**	
		36%	**64%**	**0%**

Table 7.

Progress indicator 3: achievement by country/territory and country group

Group	Country/territory	Indicator 3 Member State has a STEPS survey or a comprehensive health examination survey every 5 years		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain		√	
	Kuwait		√	
	Oman		√	
	Qatar		√	
	Saudi Arabia		√	
	United Arab Emirates			√
	Total		5	**1**
		0%	**83%**	**17%**
Group 2	Egypt			√
	Iran (Islamic Republic of)			√
	Iraq		√	
	Jordan		√	
	Lebanon		√	
	Libya	√		
	Morocco			√
	Occupied Palestinian territory		√	
	Syrian Arab Republic	√		
	Tunisia			√
	Total	**2**	**4**	**4**
		20%	**40%**	**40%**
Group 3	Afghanistan		√	
	Djibouti	√		
	Pakistan		√	
	Somalia		√	
	Sudan			√
	Yemen	√		
	Total	**2**	**3**	**1**
		33%	**50%**	**17%**
Eastern Mediterranean Region		**4**	**12**	**6**
		18%	**55%**	**27%**

Table 8.

Progress indicator 4: achievement by country/territory and country group

Group	Country/territory	Indicator 4 Member State has an operational multisectoral national strategy/action plan that integrates the major NCDs and their shared risk factors		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain			√
	Kuwait			√
	Oman			√
	Qatar			√
	Saudi Arabia			√
	United Arab Emirates			√
	Total			**6**
		0%	**0%**	**100%**
Group 2	Egypt			√
	Iran (Islamic Republic of)			√
	Iraq			√
	Jordan	√		
	Lebanon		√	
	Libya	√		
	Morocco			√
	Occupied Palestinian territory		√	
	Syrian Arab Republic	√		
	Tunisia			√
	Total	**3**	**2**	**5**
		30%	**20%**	**50%**
Group 3	Afghanistan			√
	Djibouti	√		
	Pakistan	√		
	Somalia	√		
	Sudan		√	
	Yemen	√		
	Total	**4**	**1**	**1**
		67%	**17%**	**17%**
Eastern Mediterranean Region		**7**	**3**	**12**
		32%	**14%**	**55%**

Table 9.

Progress sub-indicator 5a: achievement by country/territory and country group

Group	Country/territory	Indicator 5a Member State has implemented the following demand-reduction measure of the WHO FCTC at the highest level of achievement: Reduce affordability by increasing excise taxes and prices on tobacco products		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain		√	
	Kuwait	√		
	Oman	√		
	Qatar	√		
	Saudi Arabia		√	
	United Arab Emirates		√	
	Total	**3**	**3**	
		50%	**50%**	**0%**
Group 2	Egypt			√
	Iran (Islamic Republic of)	√		
	Iraq	√		
	Jordan			√
	Lebanon	√		
	Libya	√		
	Morocco		√	
	Occupied Palestinian territory			√
	Syrian Arab Republic	√		
	Tunisia		√	
	Total	**5**	**2**	**3**
		50%	**20%**	**30%**
Group 3	Afghanistan	√		
	Djibouti[a]			
	Pakistan		√	
	Somalia	√		
	Sudan		√	
	Yemen		√	
	Total	**2**	**3**	
		33%	**50%**	**0%**
Eastern Mediterranean Region		**10**	**8**	**3**
		45%	**36%**	**14%**

[a] Data missing.

Table 10.

Progress sub-indicator 5b: achievement by country/territory and country group

Group	Country/territory	Indicator 5b Member State has implemented the following demand-reduction measure of the WHO FCTC at the highest level of achievement: Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places and public transport		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain	√		
	Kuwait		√	
	Oman	√		
	Qatar	√		
	Saudi Arabia		√	
	United Arab Emirates		√	
	Total	**3**	**3**	
		50%	**50%**	**0%**
Group 2	Egypt			√
	Iran (Islamic Republic of)			√
	Iraq		√	
	Jordan		√	
	Lebanon			√
	Libya			√
	Morocco		√	
	Occupied Palestinian territory			√
	Syrian Arab Republic		√	
	Tunisia	√		
	Total	**1**	**4**	**5**
		10%	**40%**	**50%**
Group 3	Afghanistan			√
	Djibouti		√	
	Pakistan			√
	Somalia	√		
	Sudan	√		
	Yemen		√	
	Total	**2**	**2**	**2**
		33%	**33%**	**33%**
Eastern Mediterranean Region		**6**	**9**	**7**
		27%	**41%**	**32%**

Table 11.

Progress sub-indicator 5c: achievement by country/territory and country group

Group	Country/territory	Indicator 5c Member State has implemented the following demand-reduction measure of the WHO FCTC at the highest level of achievement: Implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain		√	
	Kuwait		√	
	Oman		√	
	Qatar		√	
	Saudi Arabia			√
	United Arab Emirates		√	
	Total		**5**	**1**
		0%	**83%**	**17%**
Group 2	Egypt			√
	Iran (Islamic Republic of)			√
	Iraq		√	
	Jordan		√	
	Lebanon		√	
	Libya	√		
	Morocco	√		
	Occupied Palestinian territory	√		
	Syrian Arab Republic	√		
	Tunisia		√	
	Total	**4**	**4**	**2**
		40%	**40%**	**20%**
Group 3	Afghanistan	√		
	Djibouti			√
	Pakistan			√
	Somalia	√		
	Sudan	√		
	Yemen		√	
	Total	**3**	**1**	**2**
		50%	**17%**	**33%**
Eastern Mediterranean Region		**7**	**10**	**5**
		32%	**45%**	**23%**

Table 12.

Progress sub-indicator 5d: achievement by country/territory and country group

Group	Country/territory	Indicator 5d Member State has implemented the following demand-reduction measure of the WHO FCTC at the highest level of achievement: Enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain			√
	Kuwait			√
	Oman		√	
	Qatar			√
	Saudi Arabia			√
	United Arab Emirates			√
	Total		**1**	**5**
		0%	**17%**	**83%**
Group 2	Egypt		√	
	Iran (Islamic Republic of)			√
	Iraq		√	
	Jordan		√	
	Lebanon		√	
	Libya			√
	Morocco		√	
	Occupied Palestinian territory		√	
	Syrian Arab Republic		√	
	Tunisia		√	
	Total		**8**	**2**
		0%	**80%**	**20%**
Group 3	Afghanistan			√
	Djibouti			√
	Pakistan		√	
	Somalia	√		
	Sudan		√	
	Yemen			√
	Total	**1**	**2**	**3**
		17%	**33%**	**50%**
Eastern Mediterranean Region		**1**	**11**	**10**
		5%	**50%**	**45%**

Table 13.

Progress sub-indicator 5e: achievement by country/territory and country group

Group	Country/territory	Indicator 5e Member State has implemented the following demand-reduction measure of the WHO FCTC at the highest level of achievement: Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain		√	
	Kuwait	√		
	Oman	√		
	Qatar			√
	Saudi Arabia		√	
	United Arab Emirates	√		
	Total	**3**	**2**	**1**
		50%	**33%**	**17%**
Group 2	Egypt	√		
	Iran (Islamic Republic of)		√	
	Iraq			√
	Jordan			√
	Lebanon		√	
	Libya	√		
	Morocco		√	
	Occupied Palestinian territory		√	
	Syrian Arab Republic	√		
	Tunisia		√	
	Total	**3**	**5**	**2**
		30%	**50%**	**20%**
Group 3	Afghanistan	√		
	Djibouti	√		
	Pakistan			√
	Somalia	√		
	Sudan	√		
	Yemen		√	
	Total	**4**	**1**	**1**
		67%	**17%**	**17%**
Eastern Mediterranean Region		**10**	**8**	**4**
		45%	**36%**	**18%**

Table 14.

Progress sub-indicator 6a: achievement by country/territory and country group

Group	Country/territory	Indicator 6a Member State has implemented, as appropriate according to national circumstances, the following measure to reduce the harmful use of alcohol as per the WHO *Global strategy to reduce the harmful use of alcohol*: Enact and enforce restrictions on the physical availability of retailed alcohol (via reduced hours of sale)		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain		√	
	Kuwait[a]			
	Oman		√	
	Qatar			√
	Saudi Arabia			√
	United Arab Emirates		√	
	Total		**3**	**2**
		0%	**50%**	**33%**
Group 2	Egypt		√	
	Iran (Islamic Republic of)			√
	Iraq		√	
	Jordan		√	
	Lebanon		√	
	Libya			√
	Morocco		√	
	Occupied Palestinian territory[a]			
	Syrian Arab Republic		√	
	Tunisia		√	
	Total		**7**	**2**
		0%	**70%**	**20%**
Group 3	Afghanistan			√
	Djibouti		√	
	Pakistan			√
	Somalia			√
	Sudan			√
	Yemen			√
	Total		**1**	**5**
		0%	**17%**	**83%**
Eastern Mediterranean Region		**0**	**11**	**9**
		0%	**50%**	**41%**

[a] Data missing.

Table 15.

Progress sub-indicator 6b: achievement by country/territory and country group

Group	Country/territory	Indicator 6b Member State has implemented, as appropriate according to national circumstances, the following measure to reduce the harmful use of alcohol as per the WHO *Global strategy to reduce the harmful use of alcohol:* Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising (across multiple types of media)		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain	√		
	Kuwait[a]			
	Oman		√	
	Qatar	√		
	Saudi Arabia			√
	United Arab Emirates			√
	Total	**2**	**1**	**2**
		33%	**17%**	**33%**
Group 2	Egypt			√
	Iran (Islamic Republic of)			√
	Iraq[a]			
	Jordan			√
	Lebanon	√		
	Libya			√
	Morocco		√	
	Occupied Palestinian territory[a]			
	Syrian Arab Republic	√		
	Tunisia[a]			
	Total	**2**	**1**	**4**
		20%	**10%**	**40%**
Group 3	Afghanistan			√
	Djibouti			√
	Pakistan		√	
	Somalia			√
	Sudan			√
	Yemen			√
	Total		**1**	**5**
		0%	**17%**	**83%**
Eastern Mediterranean Region		**4**	**3**	**11**
		18%	**14%**	**50%**

[a] Data missing.

Table 16.

Progress sub-indicator 6c: achievement by country/territory and country group

Group	Country/territory	Indicator 6c Member State has implemented, as appropriate according to national circumstances, the following measure to reduce the harmful use of alcohol as per the WHO *Global strategy to reduce the harmful use of alcohol*: Increase excise taxes on alcoholic beverages		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain		√	
	Kuwait[a]			
	Oman		√	
	Qatar	√		
	Saudi Arabia			√
	United Arab Emirates	√		
	Total	**2**	**2**	**1**
		33%	**33%**	**17%**
Group 2	Egypt			√
	Iran (Islamic Republic of)			√
	Iraq		√	
	Jordan		√	
	Lebanon	√		
	Libya			√
	Morocco		√	
	Occupied Palestinian territory[a]			
	Syrian Arab Republic		√	
	Tunisia	√		
	Total	**2**	**4**	**3**
		20%	**40%**	**30%**
Group 3	Afghanistan			√
	Djibouti			√
	Pakistan			√
	Somalia			√
	Sudan			√
	Yemen			√
	Total			**6**
		0%	**0%**	**100%**
Eastern Mediterranean Region		**4**	**6**	**10**
		18%	**27%**	**45%**

[a] Data missing.

Table 17.

Progress sub-indicator 7a: achievement by country/territory and country group

Group	Country/territory	Indicator 7a Member State has implemented the following measure to reduce unhealthy diet: Adopt national policies to reduce population salt/sodium consumption		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain			√
	Kuwait			√
	Oman			√
	Qatar		√	
	Saudi Arabia			√
	United Arab Emirates			√
	Total		**1**	**5**
		0%	**17%**	**83%**
Group 2	Egypt		√	
	Iran (Islamic Republic of)			√
	Iraq		√	
	Jordan		√	
	Lebanon	√		
	Libya	√		
	Morocco		√	
	Occupied Palestinian territory			√
	Syrian Arab Republic	√		
	Tunisia			√
	Total	**3**	**4**	**3**
		30%	**40%**	**30%**
Group 3	Afghanistan	√		
	Djibouti	√		
	Pakistan	√		
	Somalia	√		
	Sudan	√		
	Yemen	√		
	Total	**6**		
		100%	**0%**	**0%**
Eastern Mediterranean Region		**9**	**5**	**8**
		41%	**23%**	**36%**

Table18.

Progress sub-indicator 7b: achievement by country/territory and country group

Group	Country/territory	Indicator 7b Member State has implemented the following measure to reduce unhealthy diet: Adopt national policies that limit saturated fatty acids and virtually eliminate industrially produced trans-fatty acids in the food supply		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain			√
	Kuwait			√
	Oman			√
	Qatar			√
	Saudi Arabia			√
	United Arab Emirates			√
	Total			**6**
		0%	**0%**	**100%**
Group 2	Egypt	√		
	Iran (Islamic Republic of)			√
	Iraq[a]			
	Jordan		√	
	Lebanon	√		
	Libya	√		
	Morocco			√
	Occupied Palestinian territory	√		
	Syrian Arab Republic	√		
	Tunisia			√
	Total	**5**	**1**	**3**
		50%	**10%**	**30%**
Group 3	Afghanistan	√		
	Djibouti	√		
	Pakistan	√		
	Somalia	√		
	Sudan	√		
	Yemen	√		
	Total	**6**		
		100%	**0%**	**0%**
Eastern Mediterranean Region		**11**	**1**	**9**
		50%	**5%**	**41%**

[a] Data missing.

Table 19.

Progress sub-indicator 7c: achievement by country/territory and country group

Group	Country/territory	Indicator 7c Member State has implemented the following measure to reduce unhealthy diet: WHO set of recommendations on marketing of foods and non-alcoholic beverages to children		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain			√
	Kuwait	√		
	Oman			√
	Qatar	√		
	Saudi Arabia	√		
	United Arab Emirates	√		
	Total	**4**		**2**
		67%	**0%**	**33%**
Group 2	Egypt	√		
	Iran (Islamic Republic of)			√
	Iraq	√		
	Jordan	√		
	Lebanon	√		
	Libya	√		
	Morocco			√
	Occupied Palestinian territory	√		
	Syrian Arab Republic	√		
	Tunisia	√		
	Total	**8**		**2**
		80%	**0%**	**20%**
Group 3	Afghanistan	√		
	Djibouti	√		
	Pakistan	√		
	Somalia	√		
	Sudan	√		
	Yemen	√		
	Total	**6**		
		100%	**0%**	**0%**
Eastern Mediterranean Region		**18**		**4**
		82%	**0%**	**18%**

Table 20.

Progress sub-indicator 7d: achievement by country/territory and country group

Group	Country/territory	Indicator 7d Member State has implemented the following measure to reduce unhealthy diet: Legislation/regulations fully implementing the International Code of Marketing of Breast-milk Substitutes		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain			√
	Kuwait			√
	Oman		√	
	Qatar	√		
	Saudi Arabia		√	
	United Arab Emirates		√	
	Total	**1**	**3**	**2**
		17%	**50%**	**33%**
Group 2	Egypt		√	
	Iran (Islamic Republic of)		√	
	Iraq		√	
	Jordan		√	
	Lebanon			√
	Libya	√		
	Morocco	√		
	Occupied Palestinian territory[a]			
	Syrian Arab Republic		√	
	Tunisia		√	
	Total	**2**	**6**	**1**
		20%	**60%**	**10%**
Group 3	Afghanistan			√
	Djibouti		√	
	Pakistan			√
	Somalia	√		
	Sudan		√	
	Yemen			√
	Total	**1**	**2**	**3**
		17%	**33%**	**50%**
Eastern Mediterranean Region		**4**	**11**	**6**
		18%	**50%**	**27%**

[a] Data missing.

Table 21.

Progress indicator 8: achievement by country/territory and country group

Group	Country/territory	Indicator 8 Member State has implemented at least one recent national public awareness and motivational communication for physical activity, including mass media campaigns for physical activity behavioural change		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain		√	
	Kuwait		√	
	Oman			√
	Qatar			√
	Saudi Arabia		√	
	United Arab Emirates			√
	Total		**3**	**3**
		0%	**50%**	**50%**
Group 2	Egypt			√
	Iran (Islamic Republic of)		√	
	Iraq[a]			√
	Jordan	√		
	Lebanon	√		
	Libya	√		
	Morocco		√	
	Occupied Palestinian territory	√		
	Syrian Arab Republic	√		
	Tunisia		√	
	Total	**5**	**3**	**2**
		50%	**30%**	**20%**
Group 3	Afghanistan	√		
	Djibouti	√		
	Pakistan	√		
	Somalia	√		
	Sudan	√		
	Yemen	√		
	Total	**6**		
		100%	**0%**	**0%**
Eastern Mediterranean Region		**11**	**6**	**5**
		50%	**27%**	**23%**

Table 22.

Progress indicator 9: achievement by country/territory and country group

Group	Country/territory	Indicator 9 Member State has evidence-based national guidelines/ protocols/standards for the management of major NCDs through a primary care approach, recognized/approved by government or competent authorities		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain		√	
	Kuwait			√
	Oman			√
	Qatar			√
	Saudi Arabia			√
	United Arab Emirates			√
	Total		**1**	**5**
		0%	**17%**	**83%**
Group 2	Egypt		√	
	Iran (Islamic Republic of)			√
	Iraq[a]		√	
	Jordan		√	
	Lebanon			√
	Libya		√	
	Morocco		√	
	Occupied Palestinian territory		√	
	Syrian Arab Republic		√	
	Tunisia	√		
	Total	**1**	**7**	**2**
		10%	**70%**	**20%**
Group 3	Afghanistan	√		
	Djibouti	√		
	Pakistan	√		
	Somalia	√		
	Sudan			√
	Yemen	√		
	Total	**5**		**1**
		83%	**0%**	**17%**
Eastern Mediterranean Region		**6**	**8**	**8**
		27%	**36%**	**36%**

Table 23.

Progress indicator 10: achievement by country/territory and country group

Group	Country/territory	Indicator 10 Member State has provision of drug therapy, including glycaemic control and counselling for eligible persons at high risk to prevent heart attacks and strokes, with emphasis on the primary care level		
		Not achieved	Partially achieved	Fully achieved
Group 1	Bahrain			√
	Kuwait			√
	Oman			√
	Qatar	√		
	Saudi Arabia			√
	United Arab Emirates			√
	Total	**1**		**5**
		17%	**0%**	**83%**
Group 2	Egypt	√		
	Iran (Islamic Republic of)			√
	Iraq[a]		√	
	Jordan	√		
	Lebanon			√
	Libya	√		
	Morocco	√		
	Occupied Palestinian territory			√
	Syrian Arab Republic		√	
	Tunisia	√		
	Total	**5**	**2**	**3**
		50%	**20%**	**30%**
Group 3	Afghanistan	√		
	Djibouti	√		
	Pakistan	√		
	Somalia	√		
	Sudan	√		
	Yemen	√		
	Total	**6**		
		100%	**0%**	**0%**
Eastern Mediterranean Region		**12**	**2**	**8**
		55%	**9%**	**36%**

Status of strategic interventions from the Framework for action to implement the United Nations Political Declaration on NCDs in the Eastern Mediterranean Region

Aspects of NCD infrastructure

Unit, branch or department responsible for NCD

All countries and territories in the Region except Lebanon and Yemen (20 out of 22, or 91%) reported the availability of a unit, branch or department within the ministry of health for NCDs and NCD risk factors, with at least one full-time technical/professional member of staff. There was little variation between country groups regarding the availability of an NCD unit/branch/department. The number of full-time members of staff in these units was highest in Group 1 and Group 2 countries and lowest in Group 3 countries (Table 24). The proportion of countries that reported the availability of an NCD unit/branch/department has remained unchanged (91%) since 2013 (Fig. 11).

In 2019, a new question was added on the presence of technical/professional staff in the unit/branch/department that dedicate a significant proportion of their time to different NCDs and their key risk factors (Table 25). The majority of countries reported that a significant proportion of staff time is dedicated to tobacco (91%), cancer (82%) and diabetes (82%). The lowest proportion was dedicated to harmful use of alcohol and oral diseases (23% and 50%, respectively). There were also significant differences between country groups, with a larger proportion of Group 1 countries dedicating time to NCDs and their risk factors than countries in Group 2 and Group 3.

Fig. 11.

Presence of NCD unit/branch/department at the ministry of health, or equivalent, by country group, 2013–2019

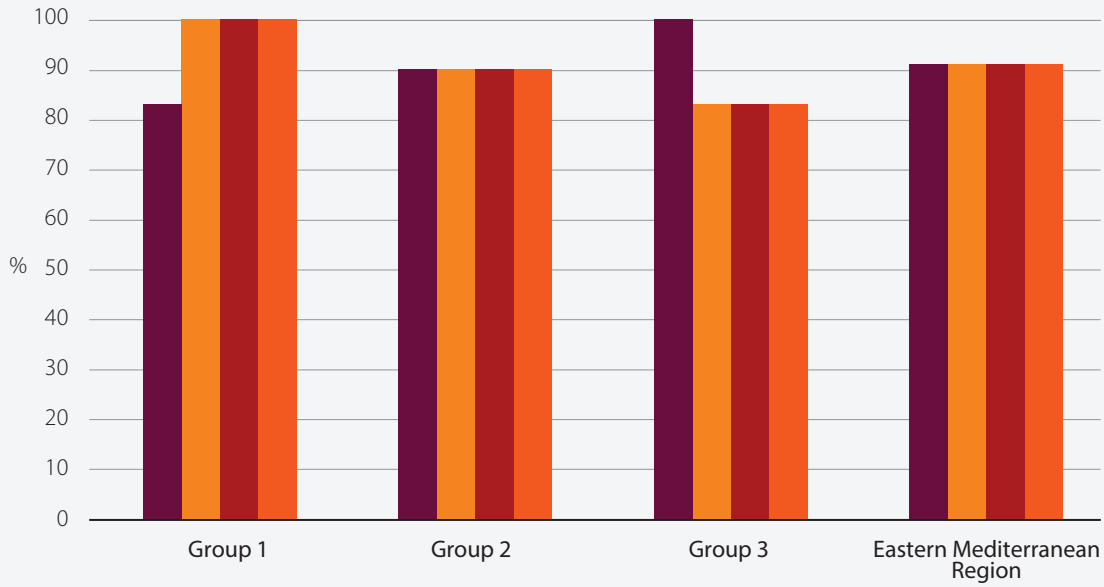


Table 24.

Countries with a unit/branch/department at the ministry of health responsible for NCDs

Group	Country/territory	Unit/branch/ department present	Number of full-time technical/professional members of staff in the NCD unit
Group 1	Bahrain	√	6 to 10
	Kuwait	√	2 to 5
	Oman	√	11 or more
	Qatar	√	11 or more
	Saudi Arabia	√	11 or more
	United Arab Emirates	√	6 to 10
	Total	**6**	
		100%	
Group 2	Egypt	√	2 to 5
	Iran (Islamic Republic of)	√	11 or more
	Iraq	√	11 or more
	Jordan	√	11 or more
	Lebanon		
	Libya	√	11 or more
	Morocco	√	11 or more
	Occupied Palestinian territory	√	2 to 5
	Syrian Arab Republic	√	2 to 5
	Tunisia	√	2 to 5
	Total	**9**	
		90%	
Group 3	Afghanistan	√	6 to 10
	Djibouti	√	1
	Pakistan	√	2 to 5
	Somalia	√	1
	Sudan	√	2 to 5
	Yemen		
	Total	**5**	
		83.3%	
Eastern Mediterranean Region		20	
		91%	

Table 25.

Countries with technical/professional staff in the unit/branch/department dedicating a significant proportion of their time to the following NCDs and their key risk factors*

Country group	Country/ territory	Harmful use of alcohol	Unhealthy diet	Physical inactivity	Tobacco use	Cancer	Cardiovascular diseases	Chronic respiratory diseases	Diabetes	Oral diseases
Group 1	Bahrain	√	√	√	√	√	√	√	√	√
	Kuwait		√		√	√	√	√	√	√
	Oman		√	√	√	√	√	√	√	√
	Qatar		√	√	√	√	√	√	√	√
	Saudi Arabia		√	√	√	√	√	√	√	√
	United Arab Emirates		√	√	√	√	√	√	√	√
	Total	**1**	**6**	**5**	**6**	**6**	**6**	**6**	**6**	**6**
		17%	**100%**	**83%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Group 2	Egypt		√	√	√	√	√	√	√	
	Iran (Islamic Republic of)	√	√	√	√	√	√	√	√	√
	Iraq	√	√	√	√	√	√	√	√	√
	Jordan	√	√	√	√	√	√	√	√	
	Lebanon									
	Libya		√		√	√	√	√	√	√
	Morocco	√	√	√	√	√	√	√	√	√
	Occupied Palestinian territory		√	√	√	√	√	√	√	√
	Syrian Arab Republic				√	√	√	√	√	
	Tunisia				√	√	√	√	√	
	Total	**4**	**7**	**6**	**9**	**9**	**9**	**9**	**9**	**5**
		40%	**70%**	**60%**	**90%**	**90%**	**90%**	**90%**	**90%**	**50%**
Group 3	Afghanistan				√	√			√	
	Djibouti				√					
	Pakistan		√	√	√	√	√	√	√	
	Somalia				√					
	Sudan		√		√	√	√	√	√	
	Yemen									
	Total	**0**	**2**	**1**	**5**	**3**	**2**	**2**	**3**	**0**
		0%	**33%**	**17%**	**83%**	**50%**	**33%**	**33%**	**50%**	**0%**
Eastern Mediterranean Region		5	15	12	20	18	17	17	18	11
		23%	**68%**	**55%**	**91%**	**82%**	**77%**	**77%**	**82%**	**50%**

* New question in 2019 survey.

Funding mechanisms

Countries and territories were asked about the availability of funding for eight key NCD-related activities or functions such as primary prevention, early detection/screening, or health care and treatment. The most commonly funded areas were early detection/screening and health care and treatment (86% of all countries in both areas); followed by capacity-building (82%). The least funded areas were research and palliative care (64% and 73%, respectively), although nearly two thirds of countries reported that government funds had been allocated to these two areas.

The average number of the areas funded was highest in Group 1 countries (all countries funded all eight areas), followed by Group 2 (an average of 6.5 out of eight funding areas) and then Group 3 (an average of four out of eight areas). Overall, countries in the Region funded an average of 6.2 of the eight areas in their government budgets (Table 26).

The majority of countries and territories (86%) reported that government revenues were the largest source of regular funding for activities related to NCDs and their risk factors. There were, however, some differences between country groups in terms of the relative size of funding from different sources, including government revenues.

All of Group 1, 90% of Group 2 and 67% of Group 3 countries and territories reported that government revenues were the largest source of regular funding for NCDs and NCD risk factors. Health insurance and international donors were the second-largest sources of funding at 46% and 41%, respectively, for the Region as a whole.

In 2019, 41% of countries and territories reported that international donors were a major source of NCD funding. The proportion of countries and territories that reported this was highest in Group 3 (three out of six, or 50%) and lowest in Group 1 (two out of six, or 33%) (Table 27). On the other hand, the use of earmarked taxes on alcohol and tobacco as a major source of funding was more evident in Group 2 (four out of 10, or 40%) than in Group 3 (two out of six, or 33%) or Group 1 (one out of six, or 17%).

Table 26.

Funding allocated in the government budget for NCDs and risk factor-related activities/functions

Country group	Country/ territory	Primary prevention	Health promotion	Early detection/screening	Health care and treatment	Surveillance, monitoring and evaluation	Capacity-building	Palliative care	Research	Total areas funded out of 8
Group 1	Bahrain	√	√	√	√	√	√	√	√	8
	Kuwait	√	√	√	√	√	√	√	√	8
	Oman	√	√	√	√	√	√	√	√	8
	Qatar	√	√	√	√	√	√	√	√	8
	Saudi Arabia	√	√	√	√	√	√	√	√	8
	United Arab Emirates	√	√	√	√	√	√	√	√	8
	Total	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**8[a]**
		100%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	
Group 2	Egypt	√	√	√	√	√	√	√	√	8
	Iran (Islamic Republic of)	√	√	√	√	√	√	√	√	8
	Iraq	√	√	√	√	√	√		√	7
	Jordan				√	√				2
	Lebanon	√	√	√	√	√	√	√		7
	Libya			√	√		√			3
	Morocco	√	√	√	√	√	√	√	√	8
	Occupied Palestinian territory	√	√	√	√	√	√	√		7
	Syrian Arab Republic	√	√	√	√	√	√	√		7
	Tunisia	√	√	√	√	√	√	√	√	8
	Total	**8**	**8**	**9**	**10**	**9**	**9**	**7**	**5**	**6.5[a]**
		80%	**80%**	**90%**	**100%**	**90%**	**90%**	**70%**	**50%**	
Group 3	Afghanistan			√				√		2
	Djibouti	√	√	√	√	√	√	√	√	8
	Pakistan	√	√	√	√		√		√	6
	Somalia									0
	Sudan	√	√	√	√	√	√	√	√	8
	Yemen									0
	Total	**3**	**3**	**4**	**3**	**2**	**3**	**3**	**3**	**4[a]**
		50%	**50%**	**67%**	**50%**	**33%**	**50%**	**50%**	**50%**	
Eastern Mediterranean Region		17	17	19	19	17	18	16	14	6.2[a]
		77%	**77%**	**86%**	**86%**	**77%**	**82%**	**73%**	**64%**	

[a] Average number.

Table 27.

Major sources of regular funding for NCDs and their risk factors

Country group	Country/ territory	Largest source: general government revenues	Next largest source: health insurance	International donors	National donors	Earmarked taxes on alcohol, tobacco, etc.	Other
Group 1	Bahrain	√					
	Kuwait	√	√				√[a]
	Oman	√	√		√		√[b]
	Qatar	√		√			
	Saudi Arabia	√	√	√		√	
	United Arab Emirates	√					
	Total	**6**	**3**	**2**	**1**	**1**	**2**
		100%	**50%**	**33%**	**17%**	**17%**	**33%**
Group 2	Egypt	√					
	Iran (Islamic Republic of)	√	√	√	√	√	
	Iraq	√					√
	Jordan					√	√
	Lebanon	√	√	√			
	Libya	√	√				
	Morocco	√		√			
	Occupied Palestinian territory	√				√	
	Syrian Arab Republic	√			√	√	√
	Tunisia	√	√	√			
	Total	**9**	**4**	**4**	**2**	**4**	**3**
		90%	**40%**	**40%**	**20%**	**40%**	**30%**
Group 3	Afghanistan	√		√			
	Djibouti	√	√	√			
	Pakistan	√	√	√		√	√
	Somalia						
	Sudan	√	√		√	√	
	Yemen						
	Total	**4**	**3**	**3**	**1**	**2**	**1**
		67%	**50%**	**50%**	**17%**	**33%**	**17%**
Eastern Mediterranean Region		19	10	9	4	7	6
		86%	**46%**	**41%**	**18%**	**32%**	**27%**

[a] Nongovernmental organizations.

[b] Endowment funds.

Fiscal interventions

Taxation on tobacco was the most reported health-related fiscal intervention, with 91% of countries and territories (all except Iraq and Somalia) reporting they had implemented such a tax (Table 28). Alcohol taxation was the next most common fiscal intervention, which was reported by nearly half of the countries in the Region (10 out of 22 countries, or 46%). Seven countries (32%) had implemented taxation on sugar-sweetened beverages by 2019 (Bahrain, Oman, Saudi Arabia and the United Arab Emirates in Group 1; and Iran (Islamic Republic of), Morocco and Tunisia in Group 2) compared to the 2015 survey, in which only one country in the Region (the Islamic Republic of Iran) had reported this fiscal intervention.

Only two countries (9%) had price subsidies for healthy foods (Djibouti and Tunisia). No country or territory reported levying taxes on unhealthy foods high in fat, sugar or salt, or said they provided taxation incentives for promoting physical activities. Nearly one in five countries and territories reported earmarking funds for health promotion or health service provision (Qatar, Saudi Arabia in Group 1, Iran (Islamic Republic of) and Morocco in Group 2, and Yemen in Group 3). In 2017, only the Islamic Republic of Iran and Morocco reported implementing this intervention.

Table 28.

Fiscal interventions for health, by source

Country group	Country/ territory	Taxation on:				Price subsidies for healthy foods	Taxation incentives to promote physical activity	Funds earmarked for health promotion or health service provision
		Alcohol	Tobacco	Sugar-sweetened beverages	Foods high in fat, sugars or salt			
Group 1	Bahrain		√	√				
	Kuwait		√					
	Oman	√	√	√				
	Qatar	√	√					√
	Saudi Arabia		√	√				√
	United Arab Emirates	√	√	√				
	Total	**3**	**6**	**4**	**0**	**0**	**0**	**2**
		50%	**100%**	**67%**	**0%**	**0%**	**0%**	**33%**
Group 2	Egypt	√	√					
	Iran (Islamic Republic of)		√	√				√
	Iraq							
	Jordan	√	√					
	Lebanon	√	√					
	Libya		√					
	Morocco	√	√	√				√
	Occupied Palestinian territory		√					
	Syrian Arab Republic		√					
	Tunisia	√	√	√		√		
	Total	**5**	**9**	**3**	**0**	**1**	**0**	**2**
		50%	**90%**	**30%**	**0%**	**10%**	**0%**	**20%**
Group 3	Afghanistan		√					
	Djibouti	√	√			√		
	Pakistan	√	√					
	Somalia							
	Sudan		√					
	Yemen		√					√
	Total	**2**	**5**	**0**	**0**	**1**	**0**	**1**
		33%	**83%**			**17%**		**17%**
Eastern Mediterranean Region		10	20	7	0	2	0	5
		46%	**91%**	**32%**	**0%**	**9%**	**0%**	**23%**

Multisectoral commissions, agencies or mechanisms

The availability of a national multisectoral commission, agency or mechanism to oversee NCD engagement, policy coherence and accountability of sectors beyond health was reported by 73% (16 countries) of the 22 countries and territories in the Region. Yet only 55% (12 countries) confirmed that these were operational (Table 29). The most common members of the national multisectoral commission were from other non-health government ministries (15 countries/territories, or 68%), followed by academia (14 countries, or 64%) and nongovernmental organizations (13 countries, or 59%).

The tobacco industry was excluded from the multisectoral commission in almost one third of the countries and territories (27%). The availability of a multisectoral commission correlated with country/territory groups, with the least availability in Group 3 countries/territories. However, there has been notable progress in the Region since 2017 when only 55% of the countries (compared to 73% in 2019) reported the availability of a national multisectoral body to oversee NCD engagement, policy coherence and accountability in sectors beyond health. In 2017, these bodies were reported to be operational in 41% of such countries compared to 55% in 2019 (Fig. 12).

Fig. 12.

Comparison of availability of a national multisectoral commission, agency or mechanism to oversee NCD engagement, policy coherence and accountability of sectors beyond health, 2015–2019

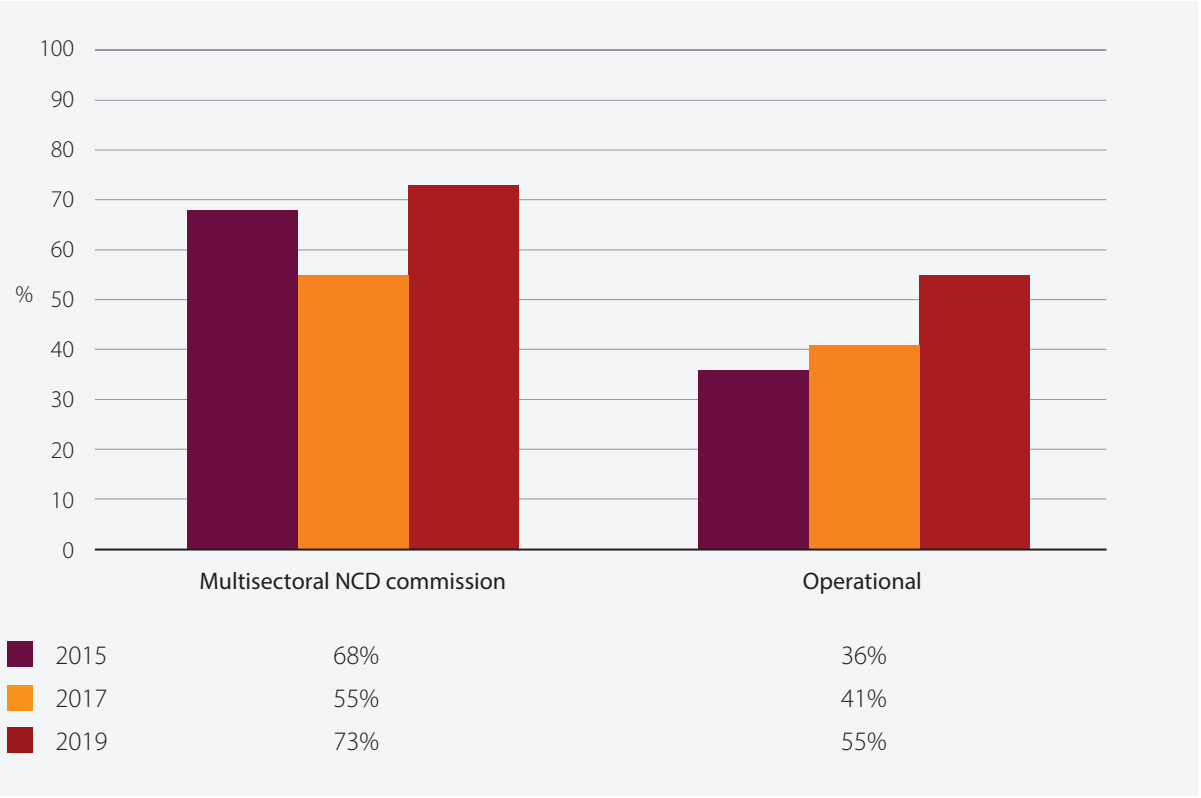


Table 29.

Presence of a national multisectoral commission, agency or mechanism to oversee NCD engagement, policy coherence and accountability of sectors beyond health, and tobacco industry involvement

Country group	Country/ territory	Multisectoral NCD commission	Operational	Members include							
					UN agencies	Other international institutions	Academia	Nongovernmental organizations	Private sector	Other	Tobacco industry excluded from the national multisectoral commission
Group 1	Bahrain	√	√	√			√	√	√		√
	Kuwait	√	√	√			√				
	Oman	√	√	√	√		√	√			
	Qatar	√	√	√			√	√	√		√
	Saudi Arabia	√	√	√			√	√	√	√	√
	United Arab Emirates	√	√	√			√	√		√	
	Total	**6**	**6**	**6**	**1**	**0**	**6**	**5**	**3**	**2**	**3**
		100%	**100%**	**100%**	**17%**	**0%**	**100%**	**83%**	**50%**	**33%**	**50%**
Group 2	Egypt	√	√	√	√	√		√	√		
	Iran (Islamic Republic of)	√	√	√			√	√		√	
	Iraq	√	√	√			√			√	
	Jordan	√		√			√	√	√	√	√
	Lebanon										
	Libya										
	Morocco	√		√			√	√	√		
	Occupied Palestinian territory	√	√	√	√	√	√	√			
	Syrian Arab Republic										
	Tunisia	√	√	√			√	√	√		√
	Total	**7**	**5**	**7**	**2**	**2**	**6**	**6**	**4**	**3**	**2**
		70%	**50%**	**70%**	**20%**	**20%**	**60%**	**60%**	**40%**	**30%**	**20%**
Group 3	Afghanistan	√	√	√	√	√	√	√	√		√
	Djibouti	√									
	Pakistan										
	Somalia										
	Sudan	√		√	√	√	√	√	√		
	Yemen										
	Total	**3**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**0**	**1**
		50%	**17%**	**33%**	**33%**	**33%**	**33%**	**33%**	**33%**	**0%**	**17%**
Eastern Mediterranean Region		16	12	15	5	4	14	13	9	5	6
		73%	**55%**	**68%**	**23%**	**18%**	**64%**	**59%**	**41%**	**23%**	**27%**

Plans, policies and strategies

National health plans and targets

All but two of the Region's 22 countries and territories (91%) reported the inclusion of NCD prevention and control in their national health plan. At the group level, 100% of Group 1 countries, 90% of the countries and territories in Group 2 and 83% of the countries in Group 3 answered affirmatively (Table 30).

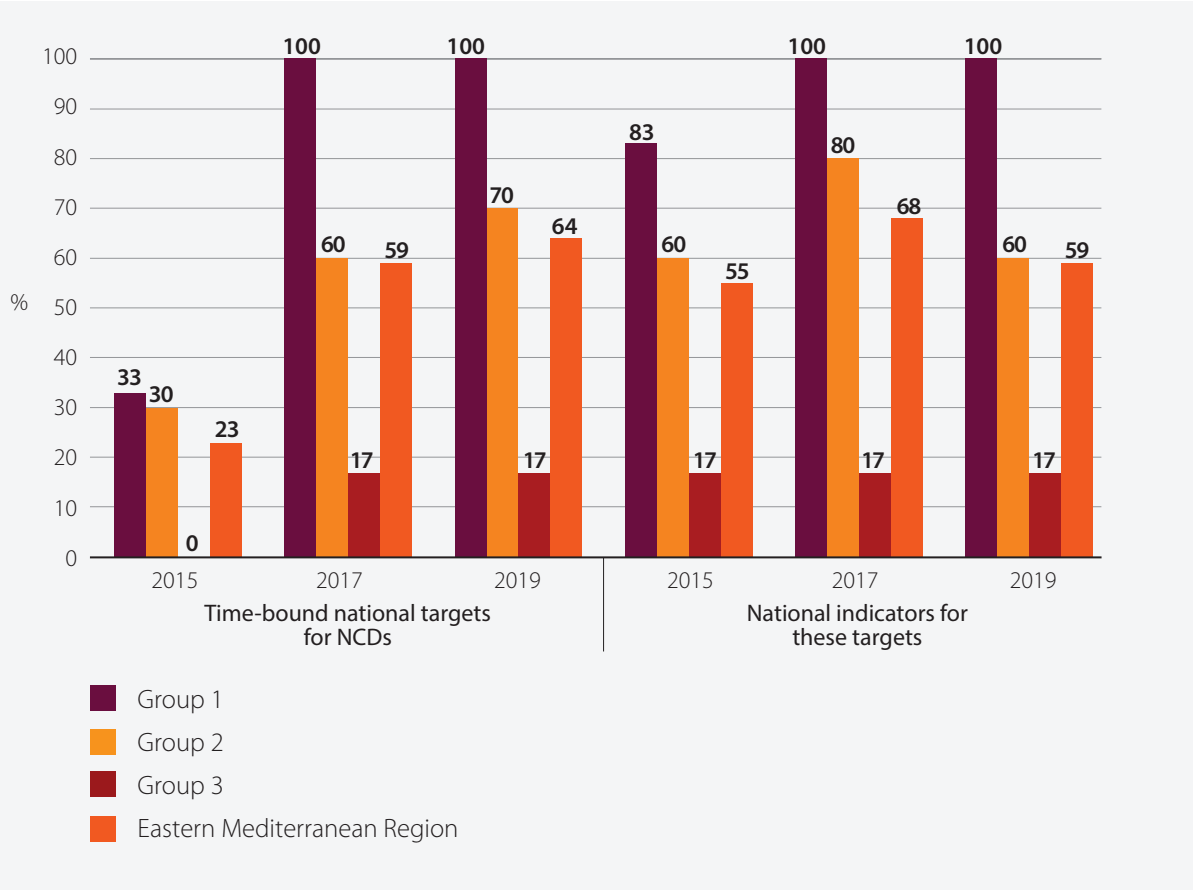
These numbers showed an increase since 2017 when 82% of countries and territories reported that NCDs were included in their current national health plan; this was in turn a rise from 68% reported in 2015.

In the 2019 data, 17 out of the 22 countries and territories (77%) said NCDs had been included in their national development agenda, with the lowest proportion reported in Group 3 countries (Table 30).

Countries and territories were asked if they had set any time-bound national targets for NCDs based on the nine voluntary global targets of the WHO *Global action plan for the prevention and control of NCDs 2013–2020*, and whether they had indicators for those targets. Region-wide, 64% of countries and territories reported putting some targets in place, and 59% reported setting indicators for those targets (Fig. 13).

Fig. 13.

Proportion of countries with time-bound national targets for NCDs and national indicators for these targets, 2015–2019[a]



[a] Based on the WHO *NCD global monitoring framework (6).*

Table 30.

National NCD commitment and planning

Country group	Country/ territory	NCDs included in the outcomes or outputs of current national health plan	NCDs included in the outcomes or outputs of current national development agenda	A set of time-bound national targets for NCDs based on the 9 voluntary global targets	A set of national indicators for these targets
Group 1	Bahrain	√	√	√	√
	Kuwait	√	√	√	√
	Oman	√	√	√	√
	Qatar	√	√	√	√
	Saudi Arabia	√	√	√	√
	United Arab Emirates	√	√	√	√
	Total	**6**	**6**	**6**	**6**
		100%	**100%**	**100%**	**100%**
Group 2	Egypt	√	√	√	√
	Iran (Islamic Republic of)	√	√	√	√
	Iraq	√	√	√	√
	Jordan	√	√	√	√
	Lebanon	√			
	Libya				
	Morocco	√	√	√	√
	Occupied Palestinian territory	√	√	√	
	Syrian Arab Republic	√			
	Tunisia	√	√	√	√
	Total	**9**	**7**	**7**	**6**
		90%	**70%**	**70%**	**60%**
Group 3	Afghanistan	√	√		
	Djibouti	√	√		
	Pakistan	√	√		
	Somalia	√	√		
	Sudan	√		√	√
	Yemen				
	Total	**5**	**4**	**1**	**1**
		83%	**67%**	**17%**	**17%**
Eastern Mediterranean Region		20	17	14	13
		91%	**77%**	**64%**	**59%**

Policies addressing the major NCDs and their risk factors

The survey asks about the availability of an operational, multisectoral integrated policy, strategy or action plan covering the four main NCDs (cardiovascular diseases, diabetes, cancer, chronic respiratory diseases) and their major associated risk factors (tobacco use, unhealthy diet, physical inactivity, harmful use of alcohol).

Regionally, 77% (17 countries) of the 22 countries and territories had policies, strategies or action plans that integrated several NCDs and their risk factors, and that were multisectoral and multi-stakeholder. The countries that lacked operational plans were seven countries; Jordan, Libya and Syrian Arab Republic (Group 2), Djibouti, Pakistan, Somalia and Yemen (Group 3) (Table 31).

Seventeen countries and territories (77%) also reported the availability of an operational, multisectoral integrated policy, strategy or action plan that addresses unhealthy diet, physical activity, cardiovascular diseases and diabetes. A slightly lower proportion reported the availability of an operational, multisectoral integrated policy, strategy or action plan that includes tobacco (16, or 73%), cancer (15, or 68%), or chronic respiratory diseases (15, or 68%). Only one third (seven, or 32%) reported the availability of a similar approach to address harmful use of alcohol (Table 32).

The regional average of the eight NCDs and NCD risk factors included in an operational, multisectoral integrated policy, strategy or action plan was 5.5. There were clear differences in the averages of the three country/territory groups; the highest average was reported in Group 1 (seven countries out of eight), followed by Group 2 (six out of eight) and lastly Group 3 countries (two out of eight) (Table 32).

The percentage of countries and territories that have reported the availability of an operational, multisectoral integrated policy, strategy or action plan covering the four main NCDs and their four main risk factors, since 2015, is illustrated in Fig. 14.

Fig. 14.

Inclusion of the four main NCDs and their risk factors in integrated national NCD policies, strategies or action plans, 2015–2019

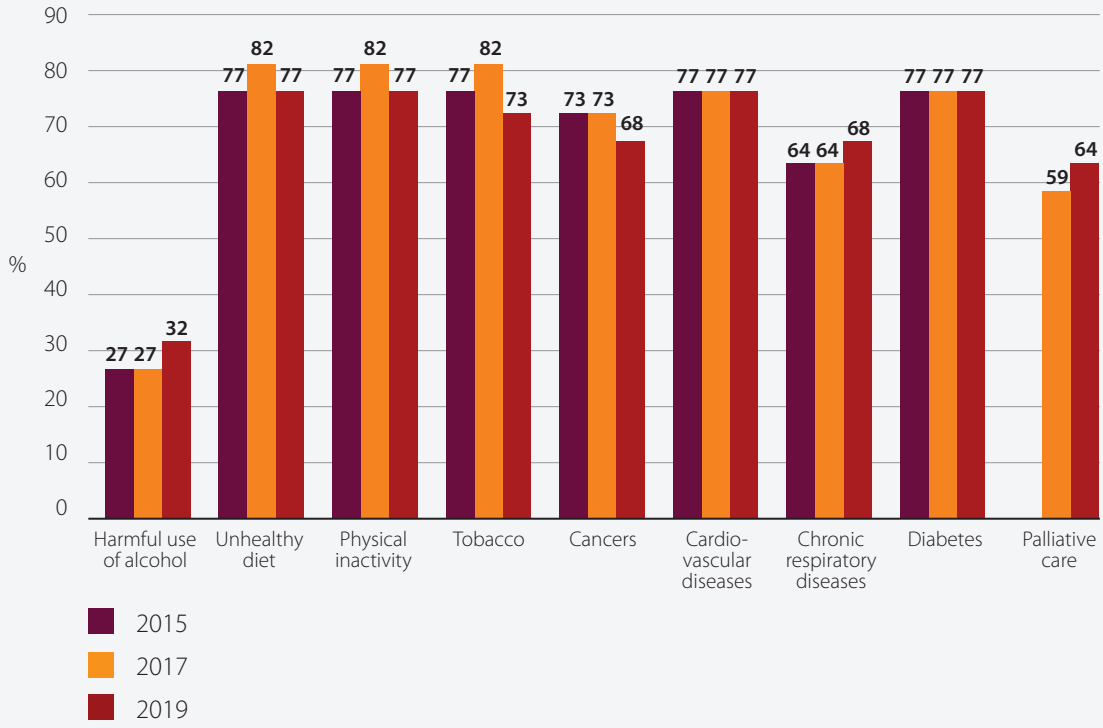


Table 31.

National NCDs approach and planning

Country group	Country/ territory	National NCD policy, strategy or action plan which integrates several NCDs and their risk factors			
		Present	Multisectoral	Multi-stakeholder	Operational
Group 1	Bahrain	√	√	√	√
	Kuwait	√	√	√	√
	Oman	√	√	√	√
	Qatar	√	√	√	√
	Saudi Arabia	√	√	√	√
	United Arab Emirates	√	√	√	√
	Total	**6**	**6**	**6**	**6**
		100%	**100%**	**100%**	**100%**
Group 2	Egypt	√	√	√	√
	Iran (Islamic Republic of)	√	√	√	√
	Iraq	√	√	√	√
	Jordan	√	√	√	
	Lebanon	√	√	√	√
	Libya	√	√	√	
	Morocco	√	√	√	√
	Occupied Palestinian territory	√	√	√	√
	Syrian Arab Republic				
	Tunisia	√	√	√	√
	Total	**9**	**9**	**9**	**7**
		90%	**90%**	**90%**	**70%**
Group 3	Afghanistan	√	√	√	√
	Djibouti				
	Pakistan				
	Somalia				
	Sudan	√	√	√	√
	Yemen				
	Total	**2**	**2**	**2**	**2**
		33.3%	**33.3%**	**33.3%**	**33.3%**
Eastern Mediterranean Region		17	17	17	15
		77.3%	**77.3%**	**77.3%**	**68.2%**

Table 32.

Inclusion of the four main NCDs and their risk factors in national integrated policies, strategies or action plans

Country group	Country/ territory	National NCDs policy, strategy or action plan addresses one or more of the following major NCDs and their risk factors								Sum of the 8 items	Palliative care for patients with NCDs
		Harmful use of alcohol	Unhealthy diet	Physical activity	Tobacco	Cancer	Cardiovascular diseases	Chronic respiratory diseases	Diabetes		
Group 1	Bahrain	√	√	√	√	√	√	√	√	8	√
	Kuwait	√	√	√	√	√	√	√	√	8	√
	Oman		√	√	√	√	√	√	√	7	√
	Qatar		√	√	√	√	√	√	√	7	√
	Saudi Arabia		√	√	√	√	√	√	√	7	√
	United Arab Emirates		√	√	√	√	√	√	√	7	√
	Total	**2**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**7[a]**	**6**
		33%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**		**100%**
Group 2	Egypt	√	√	√	√	√	√	√	√	8	√
	Iran (Islamic Republic of)	√	√	√	√	√	√	√	√	8	√
	Iraq		√	√	√	√	√	√	√	7	√
	Jordan		√	√	√		√		√	5	
	Lebanon		√	√	√	√	√	√	√	7	√
	Libya		√	√	√	√	√	√	√	7	√
	Morocco	√	√	√	√	√	√	√	√	8	√
	Occupied Palestinian territory		√	√	√		√		√	5	√
	Syrian Arab Republic									0	
	Tunisia	√	√	√	√	√	√	√	√	8	√
	Total	**4**	**9**	**9**	**9**	**7**	**9**	**7**	**9**	**6[a]**	**8**
		40%	**90%**	**90%**	**90%**	**70%**	**90%**	**70%**	**90%**		**80%**
Group 3	Afghanistan	√	√	√	√	√	√	√	√	8	
	Djibouti									0	
	Pakistan									0	
	Somalia									0	
	Sudan		√	√		√	√	√	√	6	
	Yemen									0	
	Total	**1**	**2**	**2**	**1**	**2**	**2**	**2**	**2**	**2[a]**	**0**
		17%	**33%**	**33%**	**17%**	**33%**	**33%**	**33%**	**33%**		**0%**
Eastern Mediterranean Region		7	17	17	16	15	17	15	17	5.5[a]	14
		32%	**77%**	**77%**	**73%**	**68%**	**77%**	**68%**	**77%**		**64%**

[a] Average number.

Specific policies, strategies and action plans

Within their overall strategic approach, in addition to the set of questions on integrated NCD policies, strategies or action plans, countries were also asked about topic-specific plans they had for each of the main NCDs and NCD risk factors. Table 33 shows that vertical cancer programmes were the most common, with 68% of the 22 countries and territories reporting the availability of such programmes. The next most common vertical programmes were those addressing oral health (in 64% of countries and territories) and cardiovascular diseases (in 41% of countries). However, only 18% of the countries reported the availability of a vertical programme for chronic respiratory diseases.

The availability of vertical programmes addressing NCDs varied between the different country groups; Group 3 countries were the least likely to report their establishment, compared to Group 1 and Group 2 (Fig. 15). The average number of vertical programmes addressing the four major NCDs was higher in Group 2 countries and territories (2.2 NCDs out of four), than in Group 1 (2 NCDs) and Group 3 (0.33 NCDs) (Table 33).

Tobacco use and unhealthy diet are the NCD risk factors that are most commonly addressed by the vertical programmes. Both are addressed by 64% of countries, followed by overweight and obesity with 59%. Nearly one third of the countries (six countries, or 27%) tackled the harmful use of alcohol, the majority of which were in Group 2 (four out of six) (Fig. 16 and Table 34).

The regional average number of vertical programmes addressing the five major NCD-related risk factors was 2.5 out of five, with the highest average achieved by Group 1 (4.2) and the lowest average for Group 3 (0.5) (Table 34).

The regional average number of main NCDs addressed by vertical programmes was 1.8 out of four in 2019, an increase from an average of 1.6 in 2017. Although the regional average number of vertical programmes addressing the five risk factors was the same in 2019 and 2017 at 2.5, it was higher than the regional average reported in the 2013 and 2015 surveys (2 programmes and 2.3 programmes, respectively) (Fig. 17).

Fig. 15.

Availability (%) of vertical NCD programmes, regionally and by country group

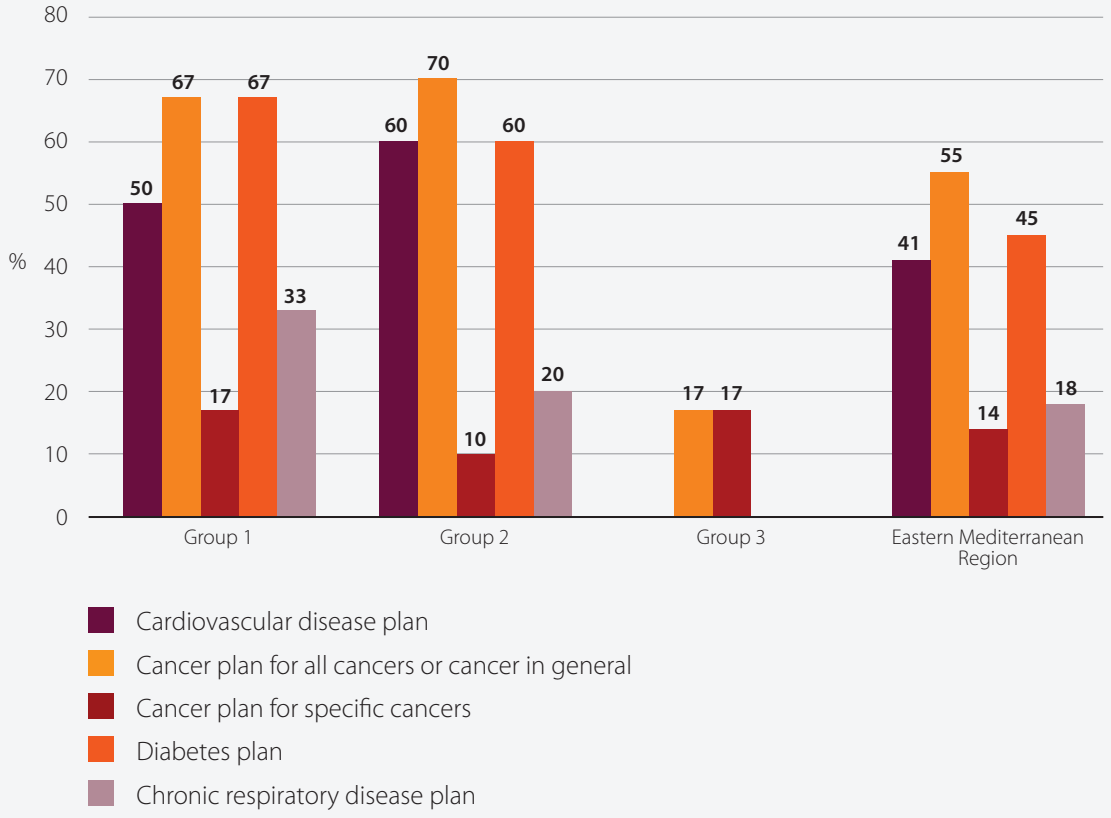


Table 33.

Availability of vertical programmes, policies, strategies and action plans addressing NCDs

Country group	Country/ territory	Cardiovascular disease plan	Cancer plan	Diabetes plan	Chronic respiratory disease plan	Total number of NCDs addressed (out of 4)	Oral health plan	Other NCDs plan
Group 1	Bahrain		√ (All cancers)			1	√	
	Kuwait	√	√ (All cancers)	√	√	4	√	√ (Mental health)
	Oman					0	√	√ (Road traffic accidents)
	Qatar		√ (All cancers)	√		2	√	√ (Mental health)
	Saudi Arabia	√	√ (All cancers)	√	√	4	√	√ (Osteoporosis)
	United Arab Emirates	√	√ (Specific cancers)	√		3	√	√ (Mental health)
	Total	**3**	**5**	**4**	**2**	**2[a]**	**6**	**5**
		50%	**83%**	**67%**	**33%**		**100%**	**83%**
Group 2	Egypt		√ (All cancers)			1		
	Iran (Islamic Republic of)	√	√ (All cancers)	√	√	4	√	√ (Newborn screening)
	Iraq	√	√ (Specific cancers)	√	√	4	√	√ (Deafness and hearing impairment)
	Jordan	√	√ (All cancers)	√		3	√	
	Lebanon			√		1		√ (Mental health)
	Libya	√				1	√	√ (Eye diseases)
	Morocco	√	√ (All cancers)	√		3	√	
	Occupied Palestinian territory		√ (All cancers)			1		
	Syrian Arab Republic		√ (All cancers)			1	√	
	Tunisia	√	√ (All cancers)	√		3	√	√ (Mental health)
	Total	**6**	**8**	**6**	**2**	**2.2[a]**	**7**	**7**
		60%	**80%**	**60%**	**20%**		**70%**	**70%**
Group 3	Afghanistan					0		
	Djibouti		√ (Specific cancers)			1		√ (Blindness)
	Pakistan					0		
	Somalia					0		
	Sudan		√ (All cancers)			1	√	
	Yemen					0		
	Total		**2**			**0.33[a]**	**√**	**√**
		0%	**33%**	**0%**	**0%**		**17%**	**17%**
Eastern Mediterranean Region		9	15	10	4	1.8[a]	14	13
		41%	**68%**	**45%**	**18%**		**64%**	**59%**

[a] Average number.

Table 34.

Vertical programmes addressing major NCD-related risk factors by country group

Country group	Country/ territory	Alcohol plan	Overweight /obesity	Physical inactivity	Unhealthy diet	Tobacco plan	Total number of risk factors addressed (out of 5)
Group 1	Bahrain		√	√	√	√	4
	Kuwait	√	√	√	√	√	5
	Oman		√	√	√		3
	Qatar		√	√	√	√	4
	Saudi Arabia		√	√	√	√	4
	United Arab Emirates	√	√	√	√	√	5
	Total	**2**	**6**	**6**	**6**	**5**	**4.2[a]**
		33%	**100%**	**100%**	**100%**	**83%**	
Group 2	Egypt		√	√	√	√	4
	Iran (Islamic Republic of)	√	√	√	√	√	5
	Iraq	√	√	√	√	√	5
	Jordan		√	√	√	√	4
	Lebanon	√					1
	Libya						0
	Morocco	√	√	√	√	√	5
	Occupied Palestinian territory		√		√		2
	Syrian Arab Republic					√	1
	Tunisia		√	√	√	√	4
	Total	**4**	**7**	**6**	**7**	**7**	**3.1[a]**
		40%	**70%**	**60%**	**70%**	**70%**	
Group 3	Afghanistan				√		1
	Djibouti						0
	Pakistan						0
	Somalia						0
	Sudan					√	1
	Yemen					√	1
	Total				**√**	**2**	**0.5[a]**
		0%	**0%**	**0%**	**17%**	**33%**	
Eastern Mediterranean Region		6	13	12	14	14	2.5[a]
		27%	**59%**	**55%**	**64%**	**64%**	

[a] Average number.

Fig. 16.

Availability (%) of vertical programmes addressing the five main NCD risk factors, regionally and by country group

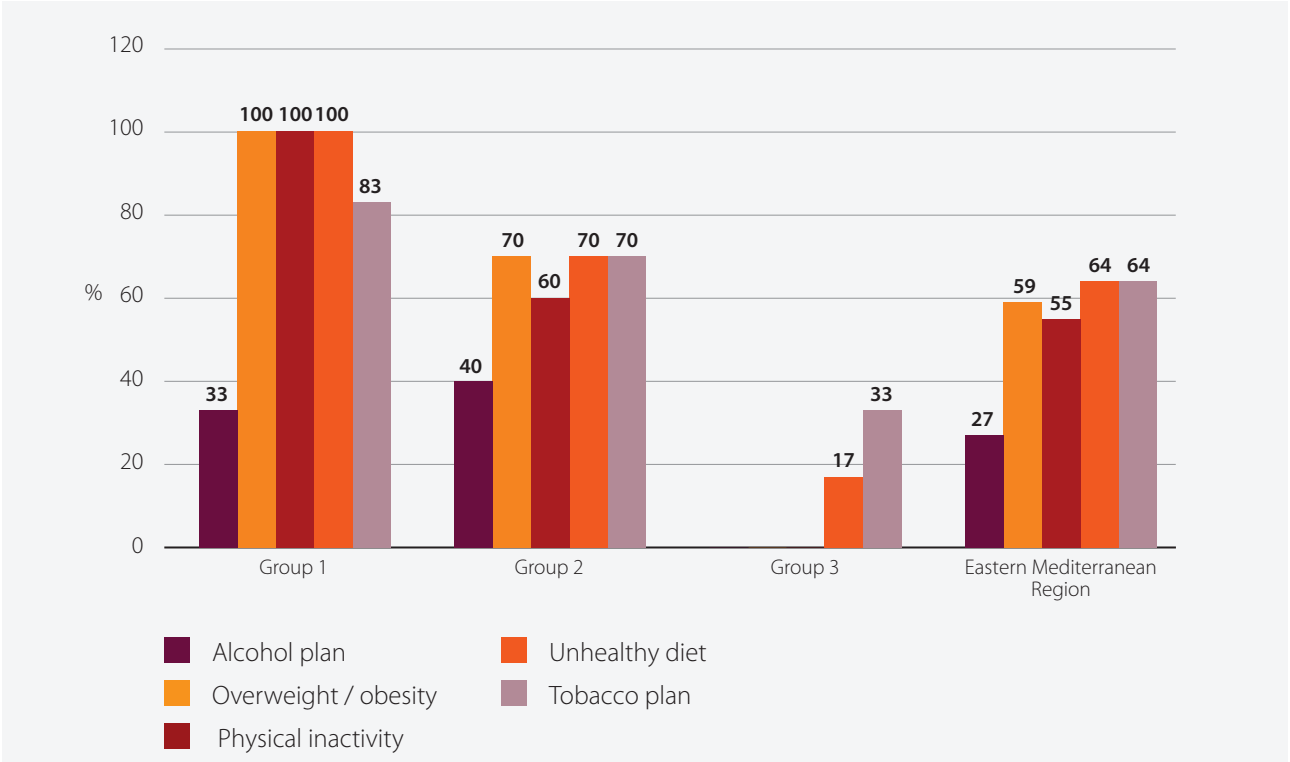
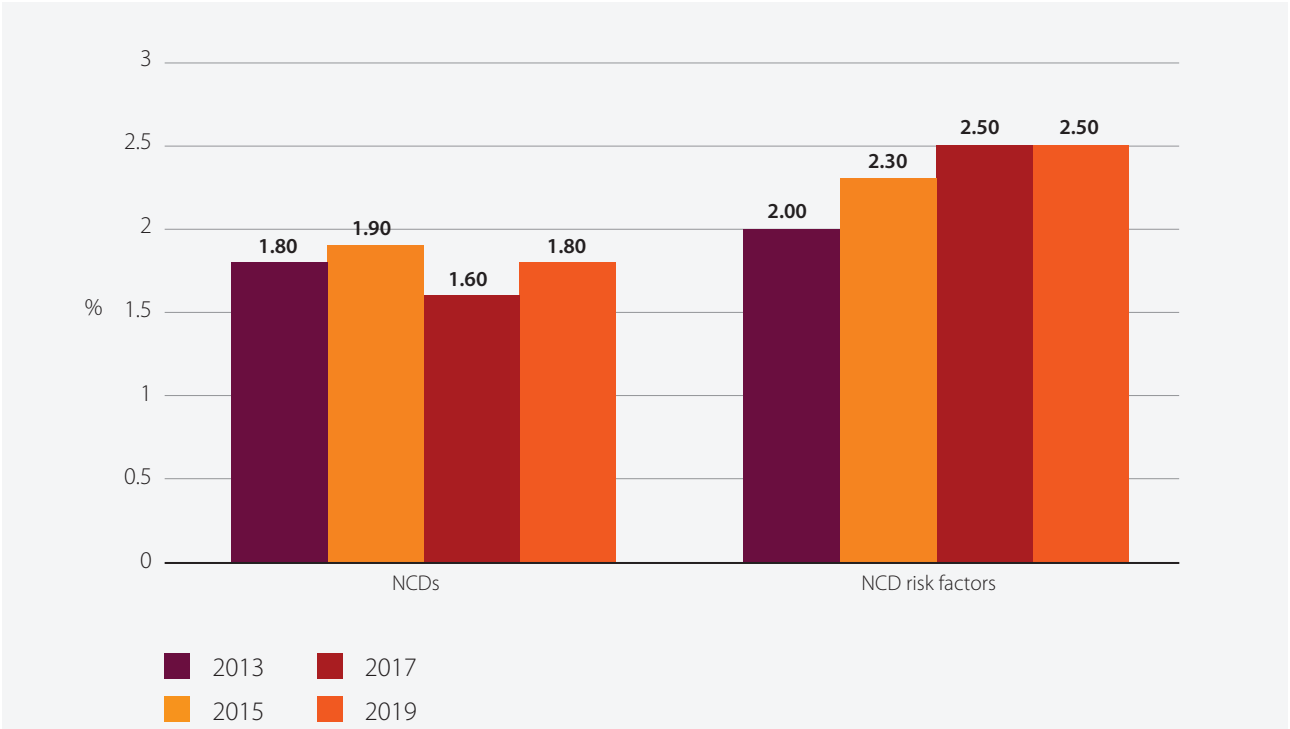


Fig. 17.

Average number of vertical programmes addressing NCD and their major risk factors, 2013–2019



Physical activity guidelines

In 2019, a question was added to the country capacity survey on the availability of national guidelines on recommended levels of physical activity for the general population, or for a specific segment. Only 45% of the 22 countries and territories (10) reported having such guidelines. Six of these 10 countries were from Group 1 while the other four were from Group 2, with no countries from Group 3 having national guidelines on levels of physical activity (Table 35).

Of those countries and territories with guidelines available, 90% had guidelines for adults, children and adolescents (5–19 years). Guidelines for older adults were less common (seven out of the 10 countries with guidelines) while guidelines for children under 5 years of age were available in only two of the 10 countries.

Similarly, 45% of countries and territories in the Region (10 countries) reported the availability of diet guidelines, with the majority of these countries in Group 1 (five countries of the 10 with guidelines) (Table 35 and Fig. 18).

Fig. 18.

Availability of physical activity and diet guidelines (%), regionally and by country group

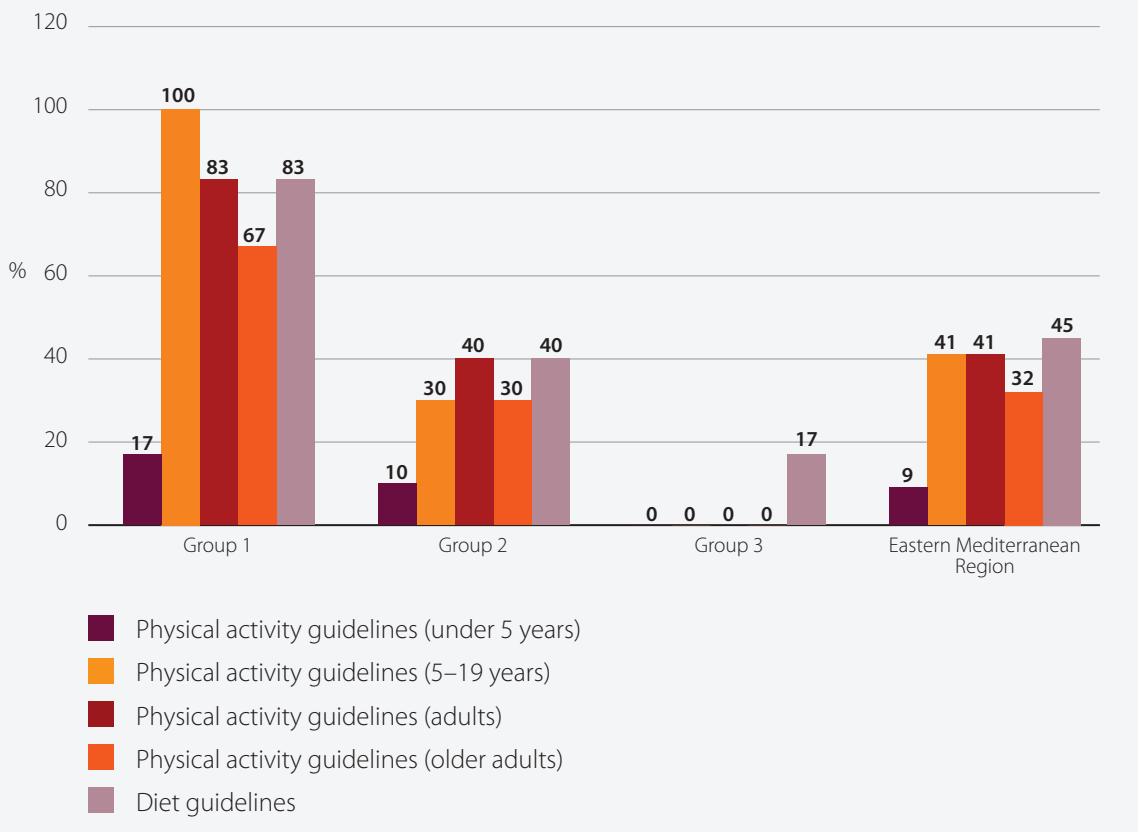


Table 35.

Availability of guidelines addressing physical activity and diet, by country group

Country group	Country/ territory	Physical activity guidelines[a]					Diet guidelines[a]
		Yes	Under 5 years	5–19 years	Adults	Older adults	
Group 1	Bahrain	√		√	√	√	
	Kuwait	√	√	√	√	√	√
	Oman	√		√	√	√	√
	Qatar	√		√	√		√
	Saudi Arabia	√		√	√	√	√
	United Arab Emirates	√		√			√
	Total	**6**	**1**	**6**	**5**	**4**	**5**
		100%	**17%**	**100%**	**83%**	**67%**	**83%**
Group 2	Egypt						
	Iran (Islamic Republic of)	√			√	√	√
	Iraq	√		√	√		√
	Jordan	√		√	√	√	
	Lebanon						√
	Libya						
	Morocco						
	Occupied Palestinian territory						
	Syrian Arab Republic						
	Tunisia	√	√	√	√	√	√
	Total	**4**	**1**	**3**	**4**	**3**	**4**
		40%	**10%**	**30%**	**40%**	**30%**	**40%**
Group 3	Afghanistan						√
	Djibouti						
	Pakistan						
	Somalia						
	Sudan						
	Yemen						
	Total						**1**
		0%	**0%**	**0%**	**0%**	**0%**	**17%**
Eastern Mediterranean Region		10	2	9	9	7	10
		45%	**9%**	**41%**	**41%**	**32%**	**45%**

[a] New question in 2019 survey.

NCD-related research

An NCD-related research policy or plan that included community-based research and an impact evaluation of interventions and policies was reported by half of the 22 countries and territories of the Region (11 countries) (Table 36). Such policies were available in all countries of Group 1 (six countries), half of Group 2 (five out of 10) and none of Group 3. All countries in Group 1 reported that their policies were operational, while only two of the five countries in Group 2 (Iran (Islamic Republic of) and Tunisia) reported operational policies.

A question was added to the 2019 survey to address the existence of national networks for NCD-related research, including community-based research and impact evaluation of interventions and policies. Only nine countries and territories (41%) had a network in place with more than half (five out of the nine) being in Group 1 (Table 36).

Table 36.

Implementation of policies on NCD-related research including community-based research and evaluation of the impact of interventions and policies

Country group	Country/ territory	NCD research plan	Stage			NCD research network[a]
			Not in effect	Operational	Under development	
Group 1	Bahrain	√		√		√
	Kuwait	√		√		√
	Oman	√		√		
	Qatar	√		√		√
	Saudi Arabia	√		√		√
	United Arab Emirates	√		√		√
	Total	**6**		**6**		**5**
		100%	**0%**	**100%**	**0%**	**83%**
Group 2	Egypt					√
	Iran (Islamic Republic of)	√		√		√
	Iraq	√			√	
	Jordan					
	Lebanon					
	Libya					
	Morocco					√
	Occupied Palestinian territory	√			√	
	Syrian Arab Republic	√	√			
	Tunisia	√		√		√
	Total	**5**	**1**	**2**	**2**	**4**
		50%	**10%**	**20%**	**20%**	**40%**
Group 3	Afghanistan					
	Djibouti					
	Pakistan					
	Somalia					
	Sudan					
	Yemen					
	Total	**0**	**0**	**0**	**0**	**0**
		0%	**0%**	**0%**	**0%**	**0%**
Eastern Mediterranean Region		11	1	8	2	9
		50%	**5%**	**36%**	**9%**	**41%**

[a] New question in 2019 survey.

Marketing to children

The NCD progress monitor tracks whether countries and territories had implemented restrictions on the marketing of unhealthy foods to children. Only four countries out of the 22 countries and territories (18%) had implemented marketing policies: two in Group 1 (Bahrain and Oman), two in Group 2 (Iran (Islamic Republic of) and Morocco) and none in Group 3 (Table 37).

Across these four countries, mandatory policies (found in three of the four countries) were more commonly implemented than voluntary policies (only in Morocco). Bahrain is the only country that has taken steps to address the effects of cross-border marketing of food and non-alcoholic beverages on children (Table 37). There was also a reduction in the number of countries that had implemented restrictions on the marketing of unhealthy foods to children in 2019 (18%) compared to 2017 (32%) (Fig. 19).

Fig. 19.

Comparison of the percentage of countries by group implementing policies to reduce the impact of the marketing to children of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt and steps taken to address the effects of cross-border marketing of food and non-alcoholic beverages on children, 2017–2019

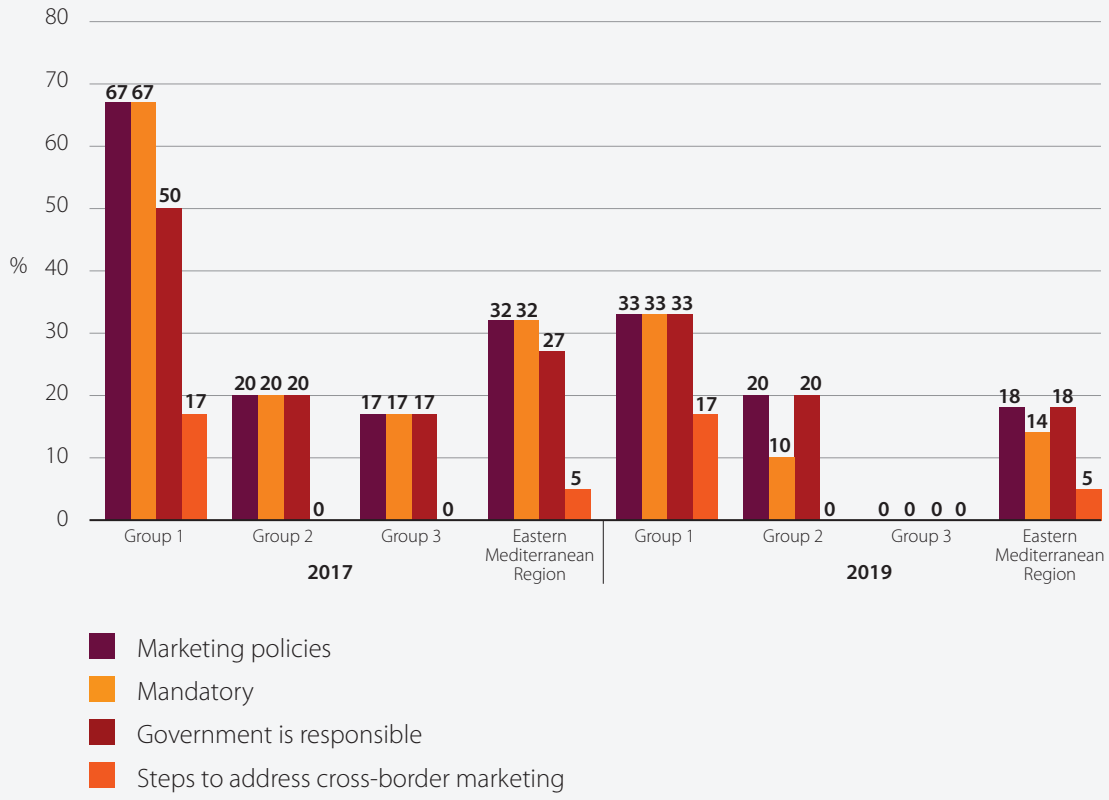


Table 37.

Implementation of policies to reduce the impact of the marketing to children of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt, and steps taken to address the effects of cross-border marketing of food and non-alcoholic beverages on children

Country group	Country/ territory	Present	Enforcement type		Agency responsible for overseeing enforcement and complaints			Steps to address the effects of cross-border marketing of food and non-alcoholic beverages on children
			Mandatory	Voluntary	Government	Industry	Other	
Group 1	Bahrain	√	√		√			√
	Kuwait							
	Oman	√	√		√	√		
	Qatar							
	Saudi Arabia							
	United Arab Emirates							
	Total	**2**	**2**		**2**	**1**		**1**
		33%	**33%**	**0%**	**33%**	**17%**	**0%**	**17%**
Group 2	Egypt							
	Iran (Islamic Republic of)	√	√		√		√ Ministry of Education in cooperation with MOHME	
	Iraq							
	Jordan							
	Lebanon							
	Libya							
	Morocco	√		√	√			
	Occupied Palestinian territory							
	Syrian Arab Republic							
	Tunisia							
	Total	**2**	**1**	**1**	**2**		**1**	
		20%	**10%**	**10%**	**20%**	**0%**	**10%**	**0%**
Group 3	Afghanistan							
	Djibouti							
	Pakistan							
	Somalia							
	Sudan							
	Yemen							
	Total							
		0%	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**
Eastern Mediterranean Region		4	3	1	4	1	1	1
		18%	**14%**	**5%**	**18%**	**5%**	**5%**	**5%**

MOHME = Ministry of Health and Medical Education.

Food regulation and policy

Countries and territories were asked about a number of policies aimed at reducing the consumption of salt and fat in the population, including a question on the implementation of front-of-pack labelling (FOPL) systems. Six countries (27%) of the 22 in the Region had implemented FOPL to identify foods high in saturated fatty acids, trans-fatty acids, free sugars or salt. These policies were mandatory in four out of the six countries. Of the total six countries, five were in Group 1, one in Group 2 (Islamic Republic of Iran) and none in Group 3 (Table 38).

Nearly half of the 22 countries and territories (10, or 45%) had policies in place to reduce the intake of saturated fatty acids. Similarly, policies to virtually eliminate trans-fatty acids from the food supply were reported by the same number (10, or 45%) (Table 39). For saturated fatty acids, these policies were mandatory in six of the 10 countries and for trans-fatty acids mandatory in four countries. Almost half of the countries and territories of the Region (10, or 45%) had policies covering both saturated fat and trans-fatty acids; two thirds (six countries) of the 10 countries with policies on both were in Group 1. A comparison of the availability of food regulations and policies in the Region by group is presented in Fig. 20.

Countries and territories were also asked to report the existence of policies to reduce salt consumption and "best buy" interventions, namely product reformulation; regulation of salt content in specific settings, such as schools and hospitals; public awareness programmes; and front-of-pack nutrition labelling.

Thirteen countries and territories (59%) reported national policies to reduce population salt consumption. Seven reported mandatory policies and five reported voluntary policies, with one country not specifying this (Table 40). A pattern showing increasing prevalence of salt policies with rising socioeconomic level was evident; 100% of Group 1 countries, 70% of Group 2 and none in Group 3 (Table 40). Afghanistan (in Group 3) reported having salt policies in 2017 but was omitted from the results in 2019 upon validation (Fig. 21).

Fig. 20.

Comparison of the availability of food regulations and policies in the Region, by country group

Sat = saturated.

FOPL = front-of-pack labelling.

Table 38.

Implementation of national policies on front-of-pack labelling to identify foods high in saturated fatty acids, trans-fatty acids, free sugars or salt, by country group

Country group	Country/ territory	FOPL policy	FOPL policy: enforcement		Agency responsible for overseeing enforcement and complaints	
		Present	Mandatory	Voluntary	Government	Industry
Group 1	Bahrain	√	√		√	
	Kuwait	√		√	√	
	Oman	√	√		√	
	Qatar					
	Saudi Arabia	√	√		√	
	United Arab Emirates	√		√	√	
	Total	**5**	**3**	**2**	**5**	
		83%	**50%**	**33%**	**83%**	**0%**
Group 2	Egypt					
	Iran (Islamic Republic of)	√	√		√	
	Iraq					
	Jordan					
	Lebanon					
	Libya					
	Morocco					
	Occupied Palestinian territory					
	Syrian Arab Republic					
	Tunisia					
	Total	**1**	**1**		**1**	
		10%	**10%**	**0%**	**10%**	**0%**
Group 3	Afghanistan					
	Djibouti					
	Pakistan					
	Somalia					
	Sudan					
	Yemen					
	Total					
		0%	**0%**	**0%**	**0%**	**0%**
Eastern Mediterranean Region		6	4	2	6	0
		27%	**18%**	**9%**	**27%**	**0%**

FOPL = front-of-pack labelling.

Table 39.

Implementation of national policies that limit saturated fatty acids and virtually eliminate industrially produced trans-fatty acids in the food supply, by country group

Country group	Country/ territory	Saturated fatty acids policy	Saturated fatty acids policy: enforcement		Trans-fatty acids policy	Trans-fatty acids policy: enforcement	
		Present	Mandatory	Voluntary	Present	Mandatory	Voluntary
Group 1	Bahrain	√	√		√	√	
	Kuwait	√		√	√		√
	Oman	√		√	√	√	
	Qatar	√		√	√	√	
	Saudi Arabia	√	√		√	√	
	United Arab Emirates	√		√	√		√
	Total	**6**	**2**	**4**	**6**	**4**	**2**
		100%	**33%**	**67%**	**100%**	**67%**	**33%**
Group 2	Egypt						
	Iran (Islamic Republic of)	√	√		√	√	
	Iraq	√	√				
	Jordan				√	√	
	Lebanon						
	Libya						
	Morocco	√		√	√		√
	Occupied Palestinian territory						
	Syrian Arab Republic						
	Tunisia	√		√	√		√
	Total	**4**	**2**	**2**	**4**	**2**	**2**
		40%	**20%**	**20%**	**40%**	**20%**	**20%**
Group 3	Afghanistan						
	Djibouti						
	Pakistan						
	Somalia						
	Sudan						
	Yemen						
	Total						
		0%	**0%**	**0%**	**0%**	**0%**	**0%**
Eastern Mediterranean Region		10	4	6	10	6	4
		45%	**18%**	**27%**	**45%**	**27%**	**18%**

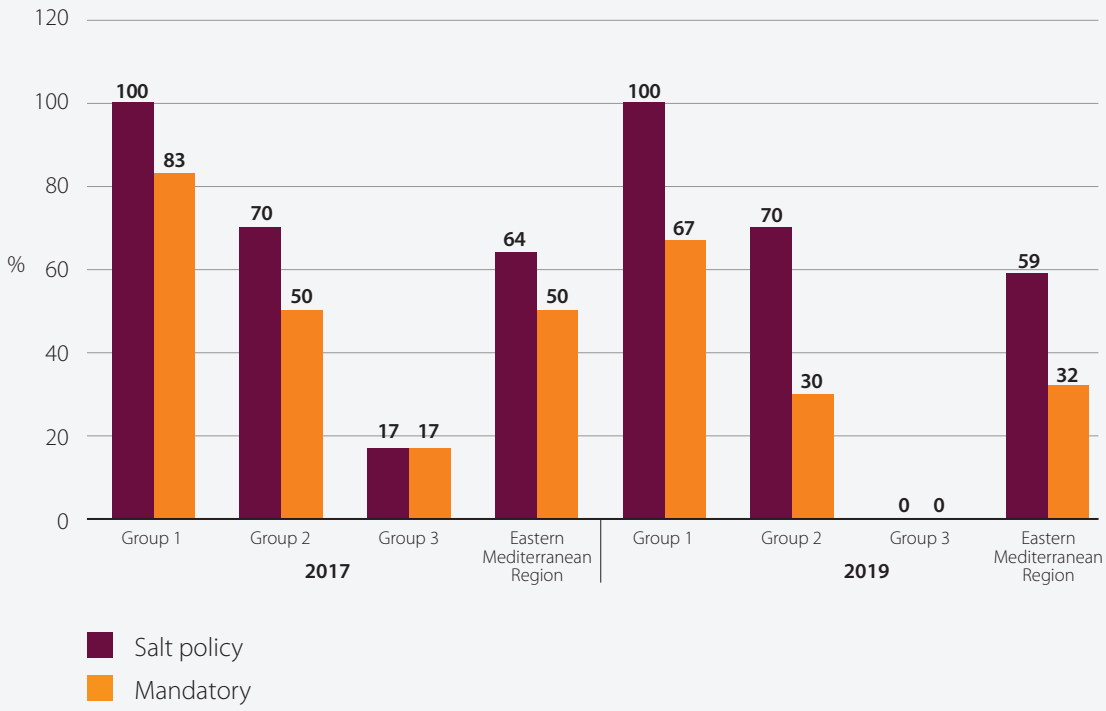
Table 40.

Implementation of national policies to reduce population salt consumption

Country group	Country/ territory	Salt policy	Salt policy: intervention				Salt policy: enforcement	
			Product reformulation by industry	Regulation of salt content	Public awareness programme	Front-of-pack nutrition labelling	Mandatory	Voluntary
Group 1	Bahrain	√	√	√	√	√	√	
	Kuwait	√	√	√	√	√		√
	Oman	√	√	√	√	√	√	
	Qatar	√	√	√	√		√	
	Saudi Arabia	√	√	√	√	√	√	
	United Arab Emirates	√	√	√	√	√		√
	Total	**6**	**6**	**6**	**6**	**5**	**4**	**2**
		100%	**100%**	**100%**	**100%**	**83%**	**67%**	**33%**
Group 2	Egypt	√		√	√			√
	Iran (Islamic Republic of)	√	√	√	√	√	√	
	Iraq	√		√	√			
	Jordan	√		√	√		√	
	Lebanon							
	Libya							
	Morocco	√	√		√			√
	Occupied Palestinian territory	√	√	√	√	√	√	
	Syrian Arab Republic							
	Tunisia	√	√		√	√		√
	Total	**7**	**4**	**5**	**7**	**3**	**3**	**3**
		70%	**40%**	**50%**	**70%**	**30%**	**30%**	**30%**
Group 3	Afghanistan							
	Djibouti							
	Pakistan							
	Somalia							
	Sudan							
	Yemen							
	Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**
		0%	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**
Eastern Mediterranean Region		13	10	11	13	8	7	5
		59%	**45%**	**50%**	**59%**	**36%**	**32%**	**23%**

Fig. 21.

Comparison of the percentage of countries and territories (%) implementing salt policies, by group, 2017–2019



Public awareness campaigns and mass participation events

Table 41 shows the percentage of countries and territories that have implemented a public awareness campaign on diet and physical activity during the past 2 years. Around one half of the 22 countries and territories in the Region have implemented both types of campaign during this period (12 and 11 countries, respectively).

A strong relationship was observed between country groups and the likelihood of either type of campaign being implemented. None of the countries in Group 3 had implemented any campaigns on diet or physical activity, whereas 83% of the countries in Group 1 had implemented campaigns around diet, and 100% of such countries had implemented campaigns on physical activity.

A question was added in the 2019 survey which asked countries and territories whether any national or subnational mass participation events had taken place during the past 2 years. Nearly one half of the countries (10, or 45%) reported having implemented at least one mass participation event during this period. The overall pattern was similar to physical activity awareness campaigns, with Group 1 countries at 100% compared to Group 2 and Group 3 (40% and 0%, respectively).

Table 41.

Implementation of national public awareness campaigns on diet and physical activity and any national or subnational mass participation events in the past 2 years

Country group	Country/territory	Diet public awareness programme	Physical activity public awareness programme	Physical activity public awareness programme: integrated community-based programme	Physical activity public awareness programme: supported by environmental changes[a]	Physical activity public awareness programme: addresses social, environmental and economic benefits[a]	Mass participation event[a]
Group 1	Bahrain	√	√	√	√	√	√
	Kuwait	√	√	√	√	√	√
	Oman		√	√	√	√	√
	Qatar	√	√	√	√	√	√
	Saudi Arabia	√	√	√	√	√	√
	United Arab Emirates	√	√	√	√	√	√
	Total	**5**	**6**	**6**	**6**	**6**	**6**
		83%	**100%**	**100%**	**100%**	**100%**	**100%**
Group 2	Egypt	√	√	√	√	√	√
	Iran (Islamic Republic of)	√	√	√		√	
	Iraq	√	√	√			√
	Jordan						
	Lebanon	√					
	Libya						
	Morocco	√	√	√	√	√	√
	Occupied Palestinian territory						
	Syrian Arab Republic						
	Tunisia	√	√	√	√	√	√
	Total	**6**	**5**	**5**	**3**	**4**	**4**
		60%	**50%**	**50%**	**30%**	**40%**	**40%**
Group 3	Afghanistan	√					
	Djibouti						
	Pakistan						
	Somalia						
	Sudan						
	Yemen						
	Total	**0**	**0**	**0**	**0**	**0**	**0**
		0%	**0%**	**0%**	**0%**	**0%**	**0%**
Eastern Mediterranean Region		12	11	11	9	10	10
		55%	**50%**	**50%**	**41%**	**45%**	**45%**

[a] New question in 2019 survey.

Mobile health (mHealth) initiatives

Another new question in the 2019 survey asked countries and territories to report on any NCD-related mHealth initiatives implemented during the past 2 years. This question refers to programmes using mobile and wireless technologies to support the achievement of health objectives, such as tobacco cessation or cervical cancer screening awareness.

Less than half of the 22 countries and territories in the Region (nine, or 41%) reported implementing mHealth initiatives recently, with clear disparities between country groups. Of the nine, four were in Group 1 (Bahrain, Kuwait, Saudi Arabia and the United Arab Emirates), four were in Group 2 (Egypt, Iran (Islamic Republic of), Morocco and Tunisia) and one was in Group 3 (Sudan) (Table 42).

Table 42.

Implementation of any national NCD-related mHealth initiatives[a] within the past 2 years

Country group	Country/territory	mHealth initiatives	Details
Group 1	Bahrain	√	Ministry of Health is committed to providing multiple channels, in cooperation with the information and eGovernment authority, through monitoring customer needs and requirements of online services and their demanded channels: 1. Ministry of Health website www.health.gov.bh 2. eGovernment Portal (bahrain.bh) 3. Smart devices apps 4. National contact centre 5. Services centres and eGovernment kiosks 6. SMS services. Related websites include the followings: www.moh.gov.bh
	Kuwait	√	Dasman Diabetes Institute implemented two mHealth initiatives: diabetes awareness and prevention; and awareness and healthy lifestyle education for prediabetics.
	Oman		
	Qatar		
	Saudi Arabia	√	mHealth technologies were developed to be key enablers of the Saudi digital transformation process. The future of the mHealth industry in Saudi Arabia is very promising. Doctors can track their patients and if any change occurs in the records the doctor can get in touch to give further instructions.
	United Arab Emirates	√	Mobile application to promote physical activity among adults; it locates physical activity location in the country, tracks activity and uses social media features to encourage other individuals to be active.
	Total	**4**	
		67%	

[a] Such as tobacco cessation, hypertension management, cervical cancer screening awareness and promotion of physical activity.

Table 42. *(continued)*

Country group	Country/territory	mHealth initiatives	Details
Group 2	Egypt	√	Three phases of mHealth programme (mDiabetes) running since 2016.
	Iran (Islamic Republic of)	√	mHealth has been developed based on the IraPEN risk scoring tool. Everybody can enter their details and receive a risk assessment and advice.
	Iraq		
	Jordan		
	Lebanon		
	Libya		
	Morocco	√	*Organisation des compagnes pour les MNTs (cancer, HTA, diabète).*
	Occupied Palestinian territory		
	Syrian Arab Republic		
	Tunisia	√	Telephone health promotion projects: mTobaccoCessation project since 2017, mRamadan project in 2018, and mDiabetes being launched.
	Total	**4**	
		40%	
Group 3	Afghanistan		
	Djibouti		
	Pakistan		
	Somalia		
	Sudan	√	Sudan signed the tobacco initiative and the mHealth plan with its three components – diabetes, breast cancer and cervical cancer – in October 2018. The implementation of the tobacco initiative and mDiabetes started at the end of 2018. However, breast cancer and cervical cancer are yet to be started.
	Yemen		
	Total	**1**	
		17%	
Eastern Mediterranean Region		9	
		41%	

Surveillance

Surveillance responsibility

Responsibility for the surveillance of NCDs and their risk factors was most commonly carried out by a department or administrative division within the ministry of health, exclusively dedicated to NCD surveillance (nine countries/territories out of 22, or 41%). However, a significant number of countries/territories reported that responsibility for the surveillance of NCDs and their risk factors was shared across several offices/departments/administrative divisions within the ministry of health (eight, or 36%).

Coordination of surveillance by an external agency, such as a nongovernmental organization or statistical organization, was far less prevalent with only 5% of countries/territories reporting this (Table 43). Only two countries (Somalia and Yemen), both in Group 3, reported the lack of any form of national surveillance structure, which is consistent with the findings of the 2017 survey.

Table 43.

Body responsible for surveillance of NCDs and their risk factors

Country group	Country/ territory	Exclusively dedicated department in MOH	Department in MOH not exclusively dedicated	External agency	No one	Shared responsibility across several departments in MOH
Group 1	Bahrain					√
	Kuwait					√
	Oman	√				
	Qatar			√		
	Saudi Arabia	√				
	United Arab Emirates	√				
	Total	**3**		**1**		**2**
		50%	**0%**	**17%**	**0%**	**33%**
Group 2	Egypt	√				
	Iran (Islamic Republic of)	√				
	Iraq	√				
	Jordan	√				
	Lebanon					√
	Libya					√
	Morocco	√				
	Occupied Palestinian territory		√			
	Syrian Arab Republic	√				
	Tunisia					√
	Total	**6**	**1**			**3**
		60%	**10%**	**0%**	**0%**	**30%**
Group 3	Afghanistan					√
	Djibouti		√			
	Pakistan					√
	Somalia				√	
	Sudan					√
	Yemen				√	
	Total		**1**		**2**	**3**
		0%	**17%**	**0%**	**33%**	**50%**
Eastern Mediterranean Region		9	2	1	2	8
		41%	**9%**	**5%**	**9%**	**36%**

MOH = ministry of health.

Civil and vital registration systems reporting mortality by cause

The availability of a civil/vital registration system for collecting mortality data by cause of death was reported by a majority of the 22 countries and territories (16, or 73%). A sample registration system was reported in less than a quarter (five, or 23%). While all Group 1 and 90% of Group 2 countries/territories had systems in place to collect mortality data, in Group 3 just one country (17%) had such a system in place (Table 44). The results in 2019 are consistent with the 2015 and 2017 country capacity surveys, which also showed that Afghanistan, Djibouti, Libya, Pakistan, Somalia and Yemen lack mortality registration systems (Table 44, Fig. 22; see also Fig. 24 below).

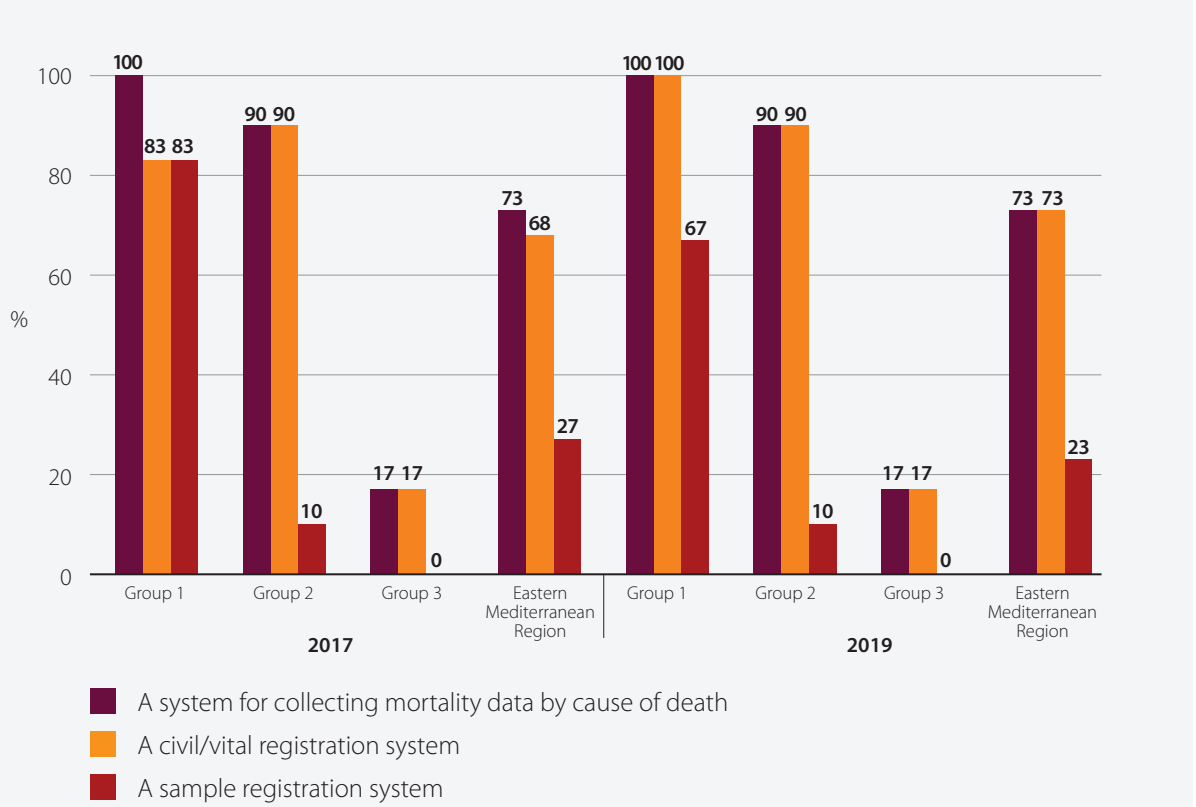
Table 44.

Availability and characteristics of mortality registration systems, by country group

Country group	Country/ territory	A system for collecting mortality data by cause of death	A civil/vital registration system	A sample registration system	Latest data (year)	Deaths registered (%)
Group 1	Bahrain	√	√		2017	75% or more
	Kuwait	√	√	√	2018	75% or more
	Oman	√	√	√	2017	75% or more
	Qatar	√	√	√	2017	75% or more
	Saudi Arabia	√	√		2018	75% or more
	United Arab Emirates	√	√	√	2017	75% or more
	Total	**6**	**6**	**4**		
		100%	**100%**	**67%**		
Group 2	Egypt	1	1	0	2015	75% or more
	Iran (Islamic Republic of)	√	√		2017	75% or more
	Iraq	√	√		2018	75% or more
	Jordan	√	√		2015	50–74%
	Lebanon	√	√		2017	75% or more
	Libya					
	Morocco	√	√		2016	
	Occupied Palestinian territory	√	√		2017	75% or more
	Syrian Arab Republic	√	√	√	2010	
	Tunisia	√	√		2013	20–49%
	Total	**9**	**9**	**1**		
		90%	**90%**	**10%**		
Group 3	Afghanistan					
	Djibouti					
	Pakistan					
	Somalia					
	Sudan	√	√		2017	<20%
	Yemen					
	Total	**1**	**1**			**<20%**
		17%	**17%**	**0%**		
Eastern Mediterranean Region		16	16	5		
		73%	**73%**	**23%**		

Fig. 22.

Comparison of the percentage of countries and territories by group that have mortality registration systems, 2017–2019



Cancer registries

Twenty countries and territories (91%) reported having a cancer registry; however, a population-based cancer registry was less commonly implemented (15, or 68%). Cancer registries were available in all Group 1 and Group 2 countries and territories, and two thirds (67%) of Group 3 countries (Afghanistan, Pakistan, Sudan and Yemen).

Six countries and territories in the Region (27%) reported national cancer registry coverage: 50% of Group 1 countries (Bahrain, Kuwait and Qatar), 30% of Group 2 countries (Iran (Islamic Republic of), Jordan and Syrian Arab Republic), and none of the Group 3 countries (Table 45). There was a notable improvement in the proportion of countries reporting cancer registries in 2019 compared to the 2017, 2015 and 2013 survey findings (86%, 82% and 77%, respectively) (Fig. 23 and 24).

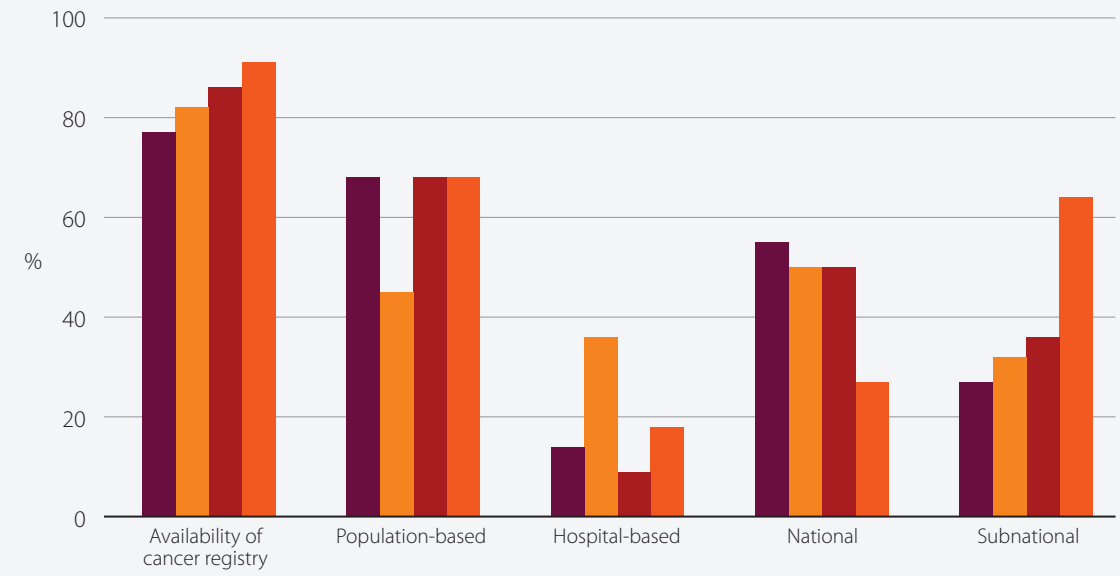
Table 45.

Availability and characteristics of cancer registries

Country group	Country/ territory	Cancer registry	Data type (population versus hospital)			Coverage		Latest data (year)
			Hospital-based	Population-based	Other	National	Sub national	
Group 1	Bahrain	√		√		√		2018
	Kuwait	√		√		√		2016
	Oman	√		√			√	2015
	Qatar	√		√		√		2015
	Saudi Arabia	√		√			√	2015
	United Arab Emirates	√		√			√	2015
	Total	**6**	**0**	**6**	**0**	**3**	**3**	
		100%	**0%**	**100%**	**0%**	**50%**	**50%**	
Group 2	Egypt	√		√			√	2016
	Iran (Islamic Republic of)	√		√		√		2015
	Iraq	√		√			√	2016
	Jordan	√		√		√		2016
	Lebanon	√		√			√	2015
	Libya	√	√				√	2018
	Morocco	√		√			√	2012
	Occupied Palestinian territory	√	√				√	2016
	Syrian Arab Republic	√	√			√		2016
	Tunisia	√		√			√	2009
	Total	**10**	**3**	**7**	**0**	**3**	**7**	
		100%	**30%**	**70%**	**0%**	**30%**	**70%**	
Group 3	Afghanistan	√		√			√	2017
	Djibouti							
	Pakistan	√			Pakistan Health Research Council		√	2018
	Somalia							
	Sudan	√		√			√	2014
	Yemen	√	√				√	2011
	Total	4	1	2	1		4	
		67%	**17%**	**33%**	**17%**	**0%**	**67%**	
Eastern Mediterranean Region		20	4	15	1	6	14	
		91%	**18%**	**68%**	**5%**	**27%**	**64%**	

Fig. 23.

Comparison of regional availability and characteristics of cancer registries, 2013–2019



	Availability of cancer registry	Population-based	Hospital-based	National	Subnational
2013	77%	68%	14%	55%	27%
2015	82%	45%	36%	50%	32%
2017	86%	68%	9%	50%	36%
2019	91%	68%	18%	27%	64%

Diabetes registries

Over half of the 22 countries and territories in the Region (13, or 59%) reported having a diabetes registry, the majority of which were hospital-based (nine, or 41%) (Table 46). Across country/territory groups, diabetes registries were most prevalent in Group 1 countries (five out of six countries in the group, or 83%), and least prevalent in Group 3 countries (one country out of six, or 17%).

Only five of the 13 countries and territories with registries achieved national coverage (Bahrain, Iran (Islamic Republic of), Iraq, Saudi Arabia and Syrian Arab Republic), with subnational coverage in the remaining seven (Jordan, Libya, occupied Palestinian territory, Oman, Pakistan, Qatar and the United Arab Emirates).

There has been a notable increase in the number of countries and territories with diabetes registries in 2019, compared to 2017 when only 41% (nine countries/territories) answered affirmatively (Iran (Islamic Republic of), Iraq, Libya, occupied Palestinian territory, Oman, Pakistan, Qatar, Saudi Arabia and the United Arab Emirates) compared to 59% of the countries in 2019 (Fig. 24).

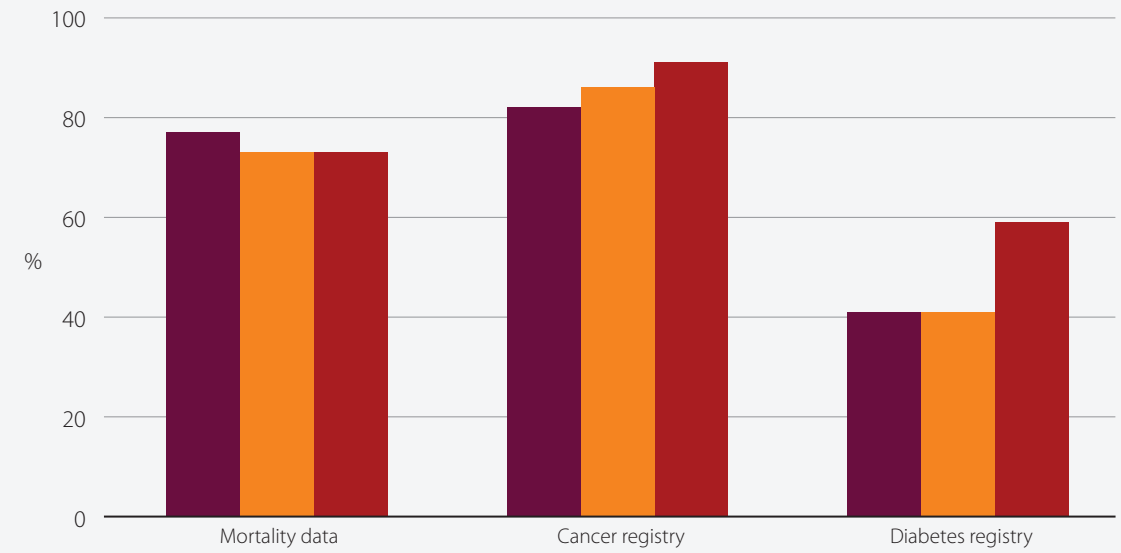
Table 46.

Availability and characteristics of diabetes registries by country group

Country group	Country/ territory	Diabetes registry	Data type			Coverage		Data on chronic complications	Latest data (year)
			Hospital-based	Population-based	Other	National	Subnational		
Group 1	Bahrain	√	√			√			2018
	Kuwait								
	Oman	√	√				√	√	2017
	Qatar	√	√				√	√	2017
	Saudi Arabia	√	√			√		√	2016
	United Arab Emirates	√		√			√	√	Started January 2019 – in progress
	Total	**5**	**4**	**1**	**0**	**2**	**3**	**4**	
		83%	**67%**	**17%**	**0%**	**33%**	**50%**	**67%**	
Group 2	Egypt	√							2016
	Iran (Islamic Republic of)	√			Target group (high-risk individuals)	√			2018
	Iraq	√	√			√			2018
	Jordan	√	√				√	√	
	Lebanon								
	Libya	√	√				√		2018
	Morocco								
	Occupied Palestinian territory	√	√				√	√	2016
	Syrian Arab Republic	√	√			√		√	2018
	Tunisia								
	Total	**7**	**5**	**0**	**1**	**3**	**3**	**3**	
		70%	**50%**	**0%**	**10%**	**30%**	**30%**	**30%**	
Group 3	Afghanistan								
	Djibouti								
	Pakistan	√			Private sector in one province (Sindh)		√		2018
	Somalia								
	Sudan								
	Yemen								
	Total	**1**	**0**	**0**	**1**		**1**	**0**	
		17%	**0%**	**0%**	**17%**	**0%**	**17%**	**0%**	
Eastern Mediterranean Region		13	9	1	2	5	7	7	
		59%	**41%**	**5%**	**9%**	**23%**	**32%**	**32%**	

Fig. 24.

Regional availability (%) of mortality registration systems, and cancer and diabetes registries, 2015–2019



2015	77%	82%	41%
2017	73%	86%	41%
2019	73%	91%	59%

System for recording patient information

Eighteen countries and territories in the Region (82%) reported having a system for recording patient information that includes NCD status (Table 47). This is an increase from 15 (68%) in 2017. The 2019 result included all the six countries from Group 1, nine out of 10 in Group 2, and three out of six Group 3 countries. Of these, 14 countries and territories said that an electronic patient information system was used. Eleven reported that their registry had national coverage.

Table 47.

Availability and characteristics of patient information systems

Country group	Country/ territory	Patient information system including NCD status	Patient information system: electronic	Patient information system coverage	
				National	Subnational
Group 1	Bahrain	√	√	√	
	Kuwait	√	√	√	
	Oman	√	√		√
	Qatar	√	√		√
	Saudi Arabia	√	√	√	
	United Arab Emirates	√	√	√	
	Total	**6**	**6**	**4**	**2**
		100%	**100%**	**67%**	**33%**
Group 2	Egypt	√	√	√	
	Iran (Islamic Republic of)	√	√	√	
	Iraq	√			√
	Jordan	√	√		√
	Lebanon	√	√		√
	Libya				
	Morocco	√	√	√	
	Occupied Palestinian territory	√	√		√
	Syrian Arab Republic	√	√	√	
	Tunisia	√	√	√	
	Total	**9**	**8**	**5**	**4**
		90%	**80%**	**50%**	**40%**
Group 3	Afghanistan	√		√	
	Djibouti				
	Pakistan	√			√
	Somalia				
	Sudan	√		√	
	Yemen				
	Total	**3**	**0**	**2**	**1**
		50%	**0%**	**33%**	**17%**
Eastern Mediterranean Region		18	14	11	7
		82%	**64%**	**50%**	**32%**

Service availability and readiness

Nearly half of the 22 countries and territories (10, or 45%) had conducted a facility survey to assess service availability and readiness for NCDs, and nine of those 10 countries (90%) had conducted the survey at the national level (Table 48).

Table 48.

Service availability and readiness

Country group	Country/ territory	Service availability and readiness assessment (SARA) survey for NCDs	Last survey (year)	SARA survey: coverage	
				National	Subnational
Group 1	Bahrain				
	Kuwait	√	2017	√	
	Oman				
	Qatar				
	Saudi Arabia	√	2013	√	
	United Arab Emirates	√	2018	√	
	Total	**3**		**3**	**0**
		50%		**50%**	**0%**
Group 2	Egypt	√	2018	√	
	Iran (Islamic Republic of)				
	Iraq				
	Jordan				
	Lebanon				
	Libya	√	2017	√	
	Morocco	√	2018	√	
	Occupied Palestinian territory				
	Syrian Arab Republic	√	2018	√	
	Tunisia	√	2015	√	
	Total	**5**		**5**	**0**
		50%		**50%**	**0%**
Group 3	Afghanistan				0
	Djibouti	√	2015	√	
	Pakistan				
	Somalia				
	Sudan	√	2016		√
	Yemen				
	Total	**2**		**1**	**1**
		33%		**17%**	**17%**
Eastern Mediterranean Region		10		9	1
		45%		**41%**	**5%**

Risk factor surveys

Adult surveys

The WHO STEPwise approach to surveillance (STEPS) is the most used adult survey conducted in the Region. It surveys nine NCD risk factors: harmful alcohol use, unhealthy diet, physical inactivity, tobacco use, overweight and obesity, raised blood pressure, raised blood glucose, raised cholesterol and sodium intake.

In 2019, adult surveys were used to gather data on an average 8.3 of the nine risk factors in Group 1 countries; on 8.6 of the risk factors in Group 2 countries; and on 5 of the nine risk factors in Group 3 countries and territories.

The most surveyed risk factors were unhealthy diet, physical inactivity, tobacco use, overweight and obesity, and raised blood pressure; each of these was surveyed by 91% of countries and territories. Salt intake was the least surveyed risk factor (64%) (Table 49).

Fig. 25 shows that 16 countries and territories in the Region (five out of six in Group 1, nine out of 10 in Group 2 and two out of six in Group 3) have collected recent information on the nine main NCD risk factors.

Comparing the results of the 2019 country capacity survey with that of 2017, there has been a notable increase in the number of countries and territories reporting the implementation of NCD risk factor surveys among adults (Fig. 26 and 27).

Fig. 25.

Number of countries and territories covering 0–9 NCD risk factors in recent national adult surveys

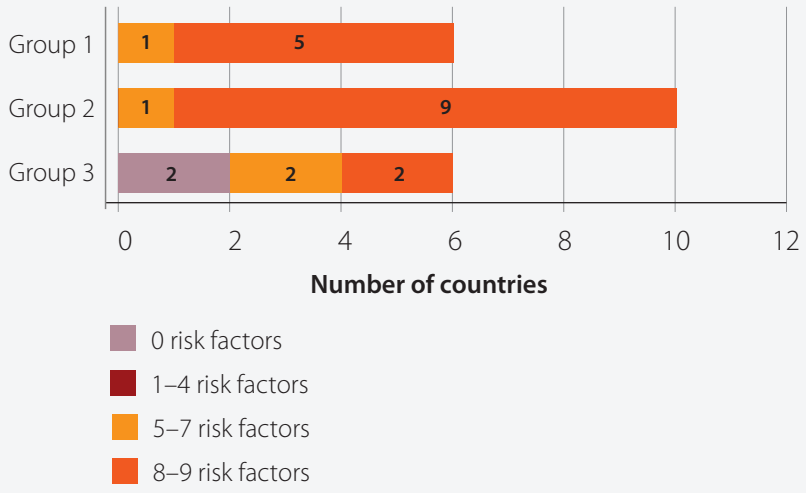


Table 49.

Surveys of NCD risk factors among adults

Country group	Country/ territory	Harmful use of alcohol	Unhealthy diet	Physical inactivity	Tobacco use	Overweight/obesity	Glucose	Cholesterol	Blood pressure	Salt	Total number of risk factors (out of 9)
Group 1	Bahrain		√	√	√	√	√	√	√		7
	Kuwait	√	√	√	√	√	√	√	√	√	9
	Oman	√	√	√	√	√	√	√	√	√	9
	Qatar		√	√	√	√	√	√	√	√	8
	Saudi Arabia		√	√	√	√	√	√	√	√	8
	United Arab Emirates	√	√	√	√	√	√	√	√	√	9
	Total	**3**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**5**	**8.3[a]**
		50%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**83%**	
Group 2	Egypt	√	√	√	√	√	√	√	√	√	9
	Iran (Islamic Republic of)	√	√	√	√	√	√	√	√	√	9
	Iraq	√	√	√	√	√	√	√	√	√	9
	Jordan	√	√	√	√	√	√	√	√	√	9
	Lebanon	√	√	√	√	√	√	√	√	√	9
	Libya	√	√	√	√	√	√	√	√		8
	Morocco	√	√	√	√	√	√	√	√	√	9
	Occupied Palestinian territory		√	√	√	√	√	√	√		7
	Syrian Arab Republic	√	√	√	√	√	√	√	√		8
	Tunisia	√	√	√	√	√	√	√	√	√	9
	Total	**9**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**7**	**8.6[a]**
		90%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**70%**	
Group 3	Afghanistan	√	√	√	√	√	√	√	√	√	9
	Djibouti										0
	Pakistan		√	√	√	√	√		√		6
	Somalia	√	√	√	√	√			√		6
	Sudan	√	√	√	√	√	√	√	√	√	9
	Yemen										0
	Total	**3**	**4**	**4**	**4**	**4**	**3**	**2**	**4**	**2**	**5[a]**
		50%	**67%**	**67%**	**67%**	**67%**	**50%**	**33%**	**67%**	**33%**	
Eastern Mediterranean Region		15	20	20	20	20	19	18	20	14	7.5[a]
		68%	**91%**	**91%**	**91%**	**91%**	**86%**	**82%**	**91%**	**64%**	

[a] Average number.

Fig. 26.

Percentage comparison NCD surveys among adults, using independent data on risk factors, 2015–2019

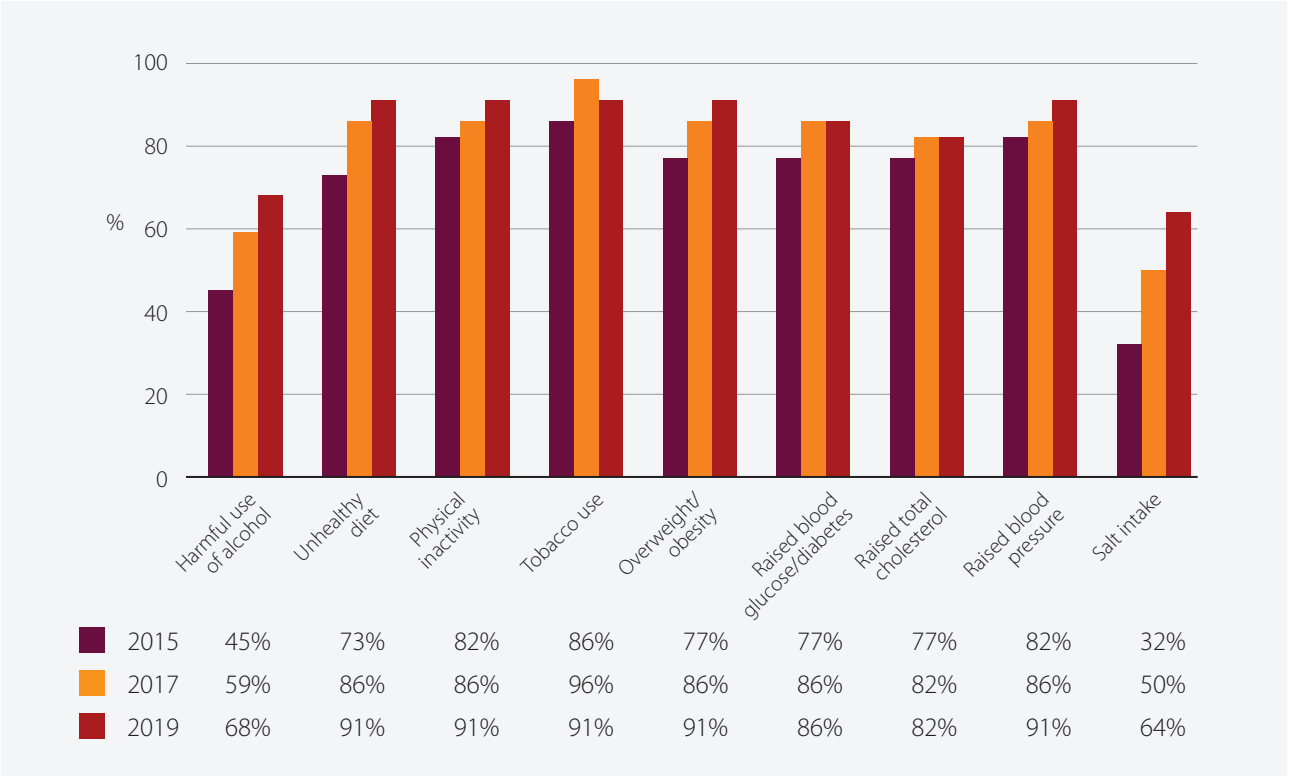
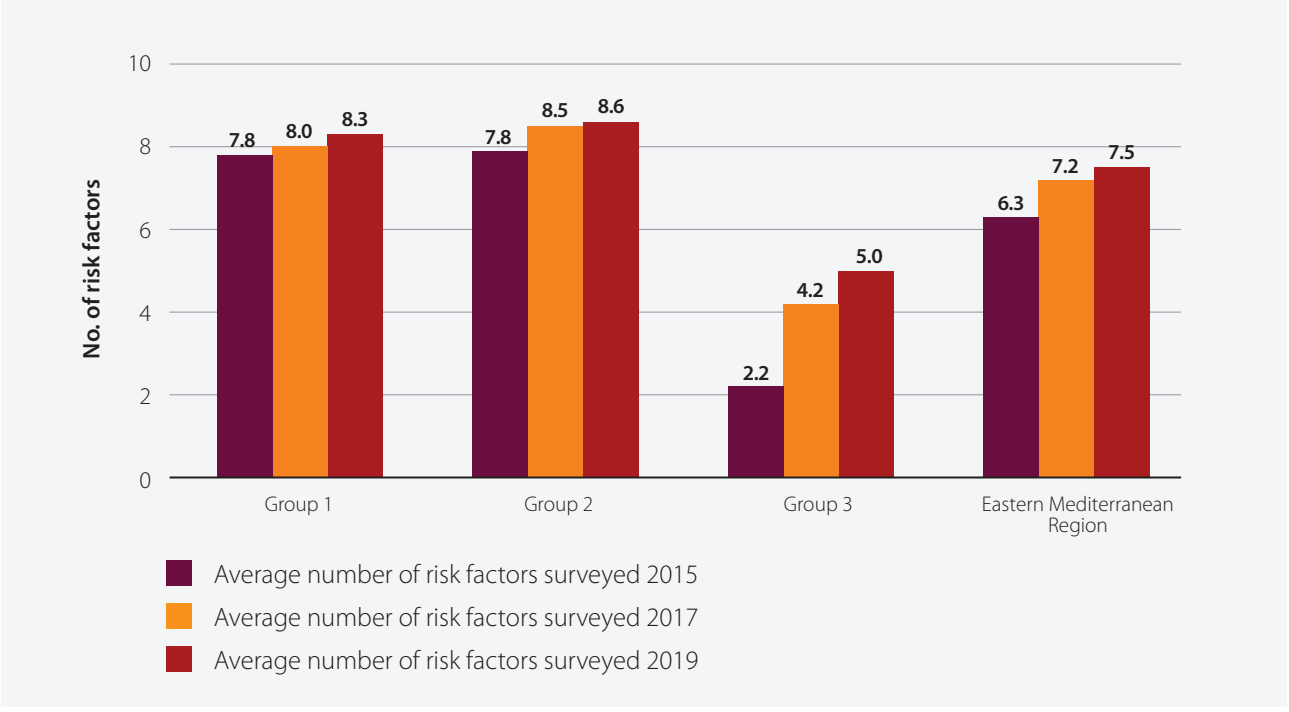


Fig. 27.

Comparison of average number of NCD disease risk factors surveyed[a] by country group, 2015–2019



[a] Maximum number of risk factors surveyed = nine.

Adolescent surveys

For adolescents, the 22 countries and territories were questioned on surveys addressing five of the key risk factors for NCDs: harmful alcohol use, unhealthy diet, physical inactivity, tobacco use, and overweight and obesity. The average number of risk factors reported was 4.2 in Group 1 countries, 4.6 in Group 2, and 3.5 in Group 3. Surveys on adolescent tobacco use were conducted by all countries and territories (100%).

The vast majority of countries and territories have also conducted surveys on unhealthy diet, physical inactivity, and overweight and obesity (21, or 95%). Seven (32%) reported collecting data on the harmful use of alcohol in adolescent surveys: Qatar in Group 1, and Jordan, Lebanon, Morocco, occupied Palestinian territory, Syrian Arab Republic and Tunisia in Group 2 (Table 50).

Fig. 28 shows 21 of the 22 countries and territories (95%) in the Region (all six in Group 1, all 10 in Group 2, and five of the six in Group 3) have collected recent information on the five main NCD risk factors.

A comparison of the 2019 country capacity survey results with those of the 2015 and 2017 shows a slight increase in the number of countries and territories reporting the implementation of NCD risk factor surveys among adolescents in 2019 (Fig. 29 and 30).

Fig. 28.

Number of countries and territories covering 0–5 risk factors in recent national adolescent NCD surveys

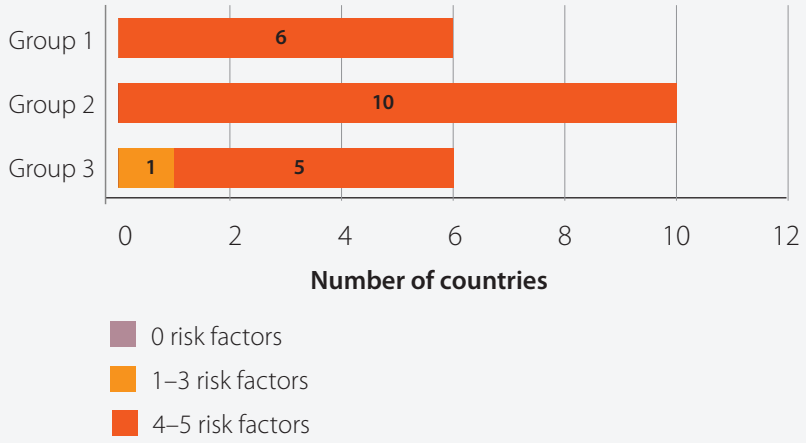


Table 50.

Surveys of NCD risk factors among adolescents

Country group	Country/ territory	Harmful use of alcohol	Unhealthy diet	Physical inactivity	Tobacco use	Overweight/obesity	Total number of risk factors (out of 5)
Group 1	Bahrain		√	√	√	√	4
	Kuwait		√	√	√	√	4
	Oman		√	√	√	√	4
	Qatar	√	√	√	√	√	5
	Saudi Arabia		√	√	√	√	4
	United Arab Emirates		√	√	√	√	4
	Total	**1**	**6**	**6**	**6**	**6**	**4.2[a]**
		17%	**100%**	**100%**	**100%**	**100%**	
Group 2	Egypt		√	√	√	√	4
	Iran (Islamic Republic of)		√	√	√	√	4
	Iraq		√	√	√	√	5
	Jordan	√	√	√	√	√	5
	Lebanon	√	√	√	√	√	4
	Libya		√	√	√	√	5
	Morocco	√	√	√	√	√	5
	Occupied Palestinian territory	√	√	√	√	√	4
	Syrian Arab Republic	√	√	√	√	√	5
	Tunisia	√	√	√	√	√	5
	Total	**6**	**10**	**10**	**10**	**10**	**4.6[a]**
		60%	**100%**	**100%**	**100%**	**100%**	
Group 3	Afghanistan		√	√	√	√	4
	Djibouti		√	√	√	√	4
	Pakistan		√	√	√	√	1
	Somalia				√		4
	Sudan		√	√	√	√	4
	Yemen		√	√	√	√	4
	Total	**0**	**5**	**5**	**6**	**5**	**3.5[a]**
		0%	**83%**	**83%**	**100%**	**83%**	
Eastern Mediterranean Region		7	21	21	22	21	4.2[a]
		32%	**95%**	**95%**	**100%**	**95%**	

[a] Average number.

Fig. 29.

Comparison of adolescent NCD risk factor surveys implemented in the Eastern Mediterranean Region, by risk factor, 2015–2019

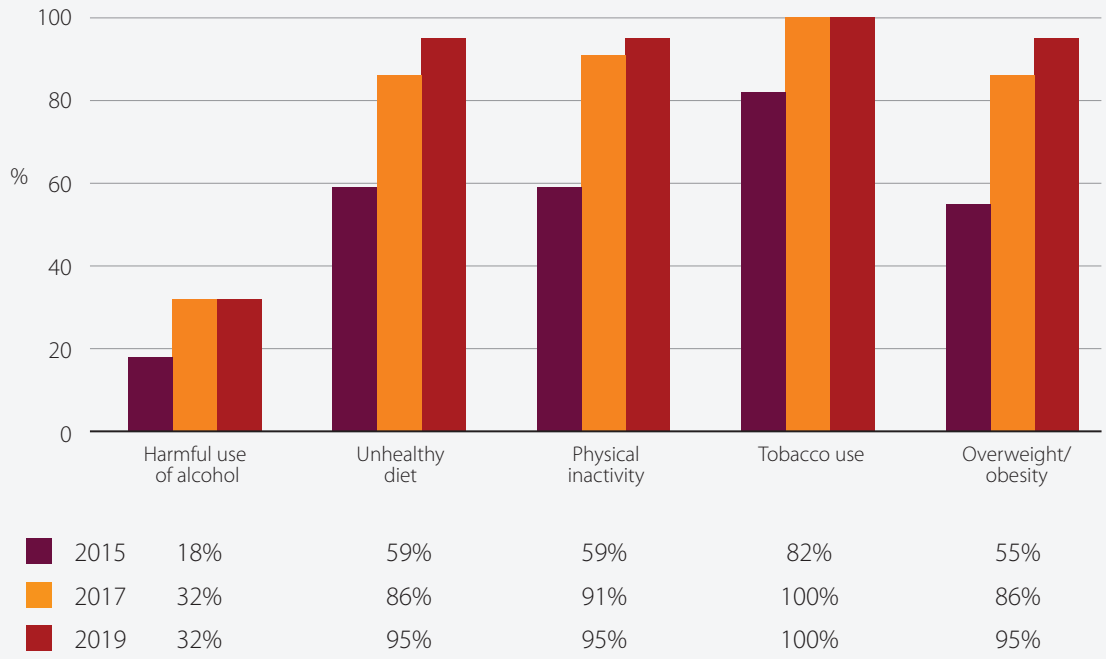
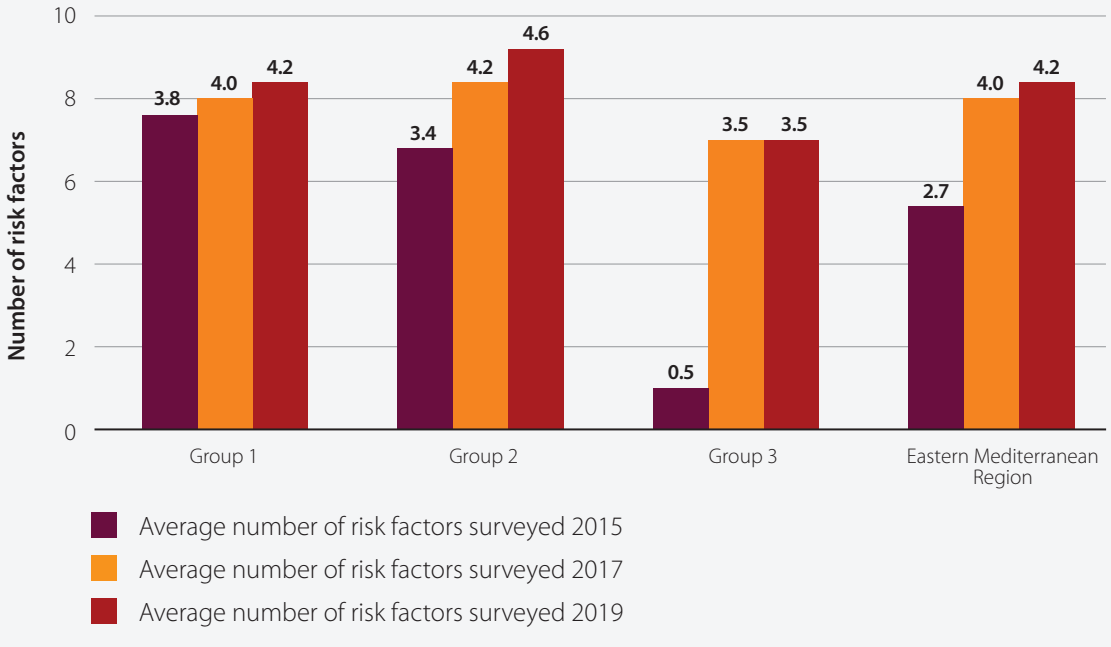


Fig. 30.

Comparison of the average number of five adolescent NCD risk factors surveyed, by country group, 2015–2019



Surveys of children

In the 2019 survey, countries and territories were asked for the first time about any surveillance activities they had conducted on physical inactivity and on overweight and obesity among children – two important areas of information to help address the rise in childhood obesity.

Less than half (nine out of 22, or 41%) had conducted recent national surveys on overweight and obesity among children, and only three (14%) had carried out such surveys on physical inactivity (Table 51). There was a marked disparity according to country group: all Group 3 countries lacked a recent national survey on these risk factors.

Table 51.

Surveys of NCD risk factors among children[a]

Country group	Country/ territory	Physical inactivity	Overweight/obesity
Group 1	Bahrain		√
	Kuwait		√
	Oman		
	Qatar		√
	Saudi Arabia	√	√
	United Arab Emirates		√
	Total	**1**	**5**
		17%	**83%**
Group 2	Egypt	√	√
	Iran (Islamic Republic of)	√	√
	Iraq		√
	Jordan		
	Lebanon		
	Libya		
	Morocco		
	Occupied Palestinian territory		
	Syrian Arab Republic		√
	Tunisia		
	Total	**2**	**4**
		20%	**40%**
Group 3	Afghanistan		
	Djibouti		
	Pakistan		
	Somalia		
	Sudan		
	Yemen		
	Total	**0**	**0**
		0%	**0%**
Eastern Mediterranean Region		3	9
		14%	**41%**

[a] New question in 2019 survey.

Health system capacity

NCD guidelines

The survey questionnaire asked about the availability of evidenced-based national guidelines/protocols/standards for the management of the four main NCDs (cardiovascular disease, diabetes, cancer and chronic respiratory diseases), and whether they were used in at least 50% of health care facilities, and included referral criteria.

More than half of the 22 countries and territories reported having guidelines for the four main NCDs. These guidelines are for the management of cardiovascular disease, diabetes and cancer were the most commonly used (16 countries and territories, or 73%) and guidelines for chronic respiratory disease were the least used (13, or 59%).

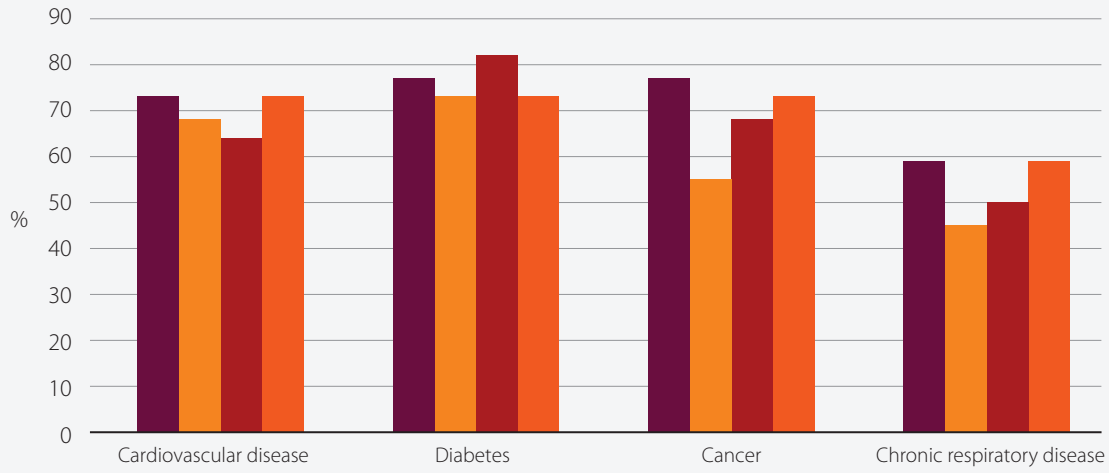
Guidelines for cardiovascular disease and diabetes were most likely to be reported as used in at least 50% of health care facilities (14 countries and territories, or 64%) and chronic respiratory disease guidelines were the least commonly used (10, or 45%). Notably, none of the Group 3 countries reported that any of the guidelines were used in at least 50% of health care facilities.

Countries and territories were also asked if the guidelines included criteria for the referral of patients from primary health care to a higher level of care. Over two thirds of existing guidelines on cardiovascular disease, diabetes and cancer had referral criteria (between 68% and 73%), while those for chronic respiratory diseases had the least, with 59% having referral criteria. A higher percentage of Group 1 countries had referral guidelines than Group 2 and Group 3, in all disease categories (Table 52).

Furthermore, Fig. 31 shows there has been clear progress in the number of countries and territories reporting the availability of evidenced-based national guidelines since 2013.

Fig. 31.

Comparison of availability of evidence-based national guidelines/protocols/ standards for the management of the four main NCDs through a primary care approach, recognized/approved by government or competent authorities, 2013–2019



	Cardiovascular disease	Diabetes	Cancer	Chronic respiratory disease
2013	73%	77%	77%	59%
2015	68%	73%	55%	45%
2017	64%	82%	68%	50%
2019	73%	73%	73%	59%

Table 52.

Availability of evidence-based national guidelines/protocols/standards for the management (diagnosis and treatment) of the four major NCDs through a primary care approach, recognized/approved by government or competent authorities

Country group	Country/ territory	Guidelines available				Guidelines used in 50% of facilities				Guidelines including referral criteria			
		CVD	Diabetes	Cancer	CRD	CVD	Diabetes	Cancer	CRD	CVD	Diabetes	Cancer	CRD
Group 1	Bahrain	√	√	√	√	√	√	√	√	√	√	√	√
	Kuwait	√	√	√	√	√	√	√	√	√	√	√	√
	Oman	√	√	√	√	√	√	√	√	√	√	√	√
	Qatar	√	√	√	√	√	√	√	√	√	√	√	√
	Saudi Arabia	√	√	√	√	√	√	√	√	√	√	√	√
	United Arab Emirates	√	√	√	√	√	√	√	√	√	√	√	√
	Total	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
		100%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Group 2	Egypt	√	√	√	√	√	√	√	√	√	√	√	√
	Iran (Islamic Republic of)	√	√	√	√	√	√	√	√	√	√	√	√
	Iraq	√	√	√	√	√	√	√		√	√		√
	Jordan	√	√	√		√	√	√		√	√	√	
	Lebanon	√	√	√	√	√	√	√	√	√	√	√	√
	Libya	√	√		√					√	√		√
	Morocco	√	√	√		√	√	√		√	√	√	
	Occupied Palestinian territory	√	√		√	√	√		√	√	√		√
	Syrian Arab Republic	√	√	√		√	√	√		√	√	√	
	Tunisia			√								√	
	Total	**9**	**9**	**8**	**6**	**8**	**8**	**7**	**4**	**9**	**9**	**7**	**6**
		90%	**90%**	**80%**	**60%**	**80%**	**80%**	**70%**	**40%**	**90%**	**90%**	**70%**	**60%**
Group 3	Afghanistan												
	Djibouti			√								√	
	Pakistan												
	Somalia												
	Sudan	√	√	√	√					√		√	√
	Yemen												
	Total	**1**	**1**	**2**	**1**	**0**	**0**	**0**	**0**	**1**		**2**	**1**
		17%	**17%**	**33%**	**17%**	**0%**	**0%**	**0%**	**0%**	**17%**	**0%**	**33%**	**17%**
Eastern Mediterranean Region		16	16	16	13	14	14	13	10	16	15	15	13
		73%	**73%**	**73%**	**59%**	**64%**	**64%**	**59%**	**45%**	**73%**	**68%**	**68%**	**59%**

CVD = cardiovascular disease; CRD = chronic respiratory disease.

NCD risk factor guidelines

In a new set of questions added to the 2019 survey, countries and territories were asked if they had guidelines for the management of the four major NCD risk factors (alcohol dependence, tobacco dependence, overweight/obesity and physical inactivity). As with questions on NCD management guidelines, countries and territories were asked to report if their risk factor management guidelines were used in at least 50% of health care facilities, and if they included referral criteria.

Guidelines for the management of tobacco dependence, overweight and obesity were most widely reported (nine countries and territories, or 41%), followed by physical inactivity (five, or 23%) and finally guidelines to manage alcohol dependence (three, or 14%).

A similar pattern of responses were received for questions on guideline usage in at least 50% of health care facilities and inclusion of referral criteria. Tobacco guidelines were the most likely to satisfy both conditions, and alcohol dependence guidelines the least likely to do so (Table 53). There was a major disparity between Group 1 and 2 countries, all of which reported availability of some guidelines, and Group 3 countries, none of which reported the availability of any guidelines.

Table 53.

Availability of evidence-based national guidelines/protocols/standards for the management (diagnosis and treatment) of NCD risk factors through a primary care approach, recognized/approved by government or competent authorities[a]

Country group	Country/ territory	Guidelines available				Guidelines used in at least 50% of facilities				Guidelines include referral criteria			
		Alcohol	Tobacco	Overweight/ obesity	Physical inactivity	Alcohol	Tobacco	Overweight/ obesity	Physical inactivity	Alcohol	Tobacco	Overweight/ obesity	Physical inactivity
Group 1	Bahrain	√	√	√	√	√	√	√	√	√	√	√	√
	Kuwait		√	√			√	√			√	√	
	Oman												
	Qatar		√	√	√		√	√	√		√		
	Saudi Arabia		√	√	√		√	√	√		√	√	
	United Arab Emirates		√	√			√				√	√	
	Total	**1**	**5**	**5**	**3**	**1**	**5**	**4**	**3**	**1**	**5**	**4**	**1**
		17%	**83%**	**83%**	**50%**	**17%**	**83%**	**67%**	**50%**	**17%**	**83%**	**67%**	**17%**
Group 2	Egypt												
	Iran (Islamic Republic of)	√	√	√	√	√	√	√	√	√	√	√	√
	Iraq		√	√	√							√	
	Jordan												
	Lebanon			√								√	
	Libya												
	Morocco	√	√			√	√			√	√		
	Occupied Palestinian territory												
	Syrian Arab Republic												
	Tunisia		√	√							√	√	
	Total	**2**	**4**	**4**	**2**	**2**	**2**	**1**	**1**	**2**	**3**	**4**	**1**
		20%	**40%**	**40%**	**20%**	**20%**	**20%**	**10%**	**10%**	**20%**	**30%**	**40%**	**10%**
Group 3	Afghanistan												
	Djibouti												
	Pakistan												
	Somalia												
	Sudan												
	Yemen												
	Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
		0%	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**
Eastern Mediterranean Region		3	9	9	5	3	7	5	4	3	8	8	2
		14%	**41%**	**41%**	**23%**	**14%**	**32%**	**23%**	**18%**	**14%**	**36%**	**36%**	**9%**

[a] New question in 2019 survey.

Availability of the 12 basic tests and procedures for early detection, diagnosis and monitoring of NCDs

Most of the basic tests and procedures for early detection, diagnosis and monitoring of NCDs were reported as being generally available in primary health care facilities of public and private health sectors, by most countries and territories (Tables 54 and 55).

Blood pressure measurement was generally available in all 22 countries and territories; weight, height and blood glucose were available in 20 of the 22 (91%). Foot vibration, spirometry and fundus examination were reported as being generally available by markedly fewer countries and territories in both the public and private health sectors.

The availability of tests and procedures for early detection, diagnosis and monitoring of NCDs in primary health care facilities in the public health sector was highly variable across country groups, with much lower availability in Group 3 countries than in Groups 1 and 2. The average number of basic technologies available was highest in Group 1 (11.8 out of 12) compared to Group 2 (7.3) and Group 3 (4.8) (Table 54).

A similar pattern was observed when analysing the availability of the same basic tests and procedures in primary health care facilities within the private health sector (Table 55).

Table 54.

Availability of 12 basic technologies for early detection, diagnosis and monitoring of NCDs at primary health care facilities in the public health sector

Group	Country/ territory	Weight	Height	Blood glucose	OGT test	HbA1c test	Dilated fundus	Foot vibration	Urine strips for glucose and ketone	Blood pressure	Total cholesterol	Urine strips for albumin assay	Spirometry	Number of basic technologies available
Group 1	Bahrain	√	√	√	√	√	√	√	√	√	√	√	√	12
	Kuwait	√	√	√	√	√	√	√	√	√	√	√		11
	Oman	√	√	√	√	√	√	√	√	√	√	√	√	12
	Qatar	√	√	√	√	√	√	√	√	√	√	√	√	12
	Saudi Arabia	√	√	√	√	√	√	√	√	√	√	√	√	12
	United Arab Emirates	√	√	√	√	√	√	√	√	√	√	√	√	12
	Total	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**5**	**11.8[a]**
		100%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**83%**	
Group 2	Egypt	√	√	√		√				√		√		6
	Iran (Islamic Republic of)	√	√	√	√	√				√	√	√		8
	Iraq	√	√	√						√			√	5
	Jordan	√	√	√					√	√				5
	Lebanon	√	√	√	√	√	√	√	√	√	√	√		11
	Libya	√	√	√					√	√	√			6
	Morocco	√	√	√	√	√	√			√			√	8
	Occupied Palestinian territory	√	√	√	√	√				√	√			7
	Syrian Arab Republic	√	√	√	√	√	√	√	√	√	√	√		11
	Tunisia	√	√	√					√	√		√		6
	Total	**10**	**10**	**10**	**5**	**6**	**3**	**2**	**5**	**10**	**5**	**5**	**2**	**7.3[a]**
		100%	**100%**	**100%**	**50%**	**60%**	**30%**	**20%**	**50%**	**100%**	**50%**	**50%**	**20%**	
Group 3	Afghanistan	√	√							√			√	4
	Djibouti	√	√	√			√		√	√		√		7
	Pakistan	√	√	√						√				4
	Somalia	√	√	√	√	√	√		√	√	√	√		10
	Sudan			√					√	√				3
	Yemen									√				1
	Total	**4**	**4**	**4**	**1**	**1**	**2**	**0**	**0**	**6**	**1**	**2**	**1**	**4.8[a]**
		67%	**67%**	**67%**	**17%**	**17%**	**33%**	**0%**	**0%**	**100%**	**17%**	**33%**	**17%**	
Eastern Mediterranean Region		20	20	20	12	13	11	8	14	22	12	13	8	7.9[a]
		91%	**91%**	**91%**	**55%**	**59%**	**50%**	**36%**	**64%**	**100%**	**55%**	**59%**	**36%**	

[a] Average number.

OGT test = oral glucose tolerance test; HbA1c test = haemoglobin A1c test.

Table 55.

Availability of 12 basic technologies for early detection, diagnosis and monitoring of NCDs at primary health care facilities in the private health sector

Group	Country/ territory	Weight	Height	Blood glucose	OGT test	HbA1c test	Dilated fundus	Foot vibration	Urine strips for glucose and ketone	Blood pressure	Total cholesterol	Urine strips for albumin assay	Spirometry	Number of basic technologies available
Group 1	Bahrain	√	√	√	√	√	√	√	√	√	√	√	√	12
	Kuwait	√	√	√	√	√	√	√	√	√	√	√	√	12
	Oman	√	√	√	√	√	√	√	√	√	√	√	√	12
	Qatar	√	√	√	√	√			√	√	√	√	√	10
	Saudi Arabia	√	√	√	√	√	√	√	√	√	√	√	√	12
	United Arab Emirates	√	√	√	√	√	√	√	√	√	√	√	√	12
	Total	**6**	**6**	**6**	**6**	**6**	**5**	**5**	**6**	**6**	**6**	**6**	**6**	**11.7[a]**
		100%	**100%**	**100%**	**100%**	**100%**	**83%**	**83%**	**100%**	**100%**	**100%**	**100%**	**100%**	
Group 2	Egypt	√	√	√		√				√	√			6
	Iran (Islamic Republic of)	√	√	√	√	√	√			√	√	√		9
	Iraq	√	√	√		√	√	√	√	√	√	√		10
	Jordan	√	√	√	√	√	√	√	√	√	√	√	√	12
	Lebanon	√	√	√	√	√	√	√	√	√	√	√	√	12
	Libya	√	√	√	√	√	√		√	√	√	√	√	11
	Morocco	√	√	√	√	√	√	√	√	√	√	√	√	12
	Occupied Palestinian territory	√	√	√	√	√				√	√			7
	Syrian Arab Republic	√	√	√	√	√	√	√	√	√	√	√	√	12
	Tunisia	√	√	√		√			√	√	√	√		8
	Total	**10**	**10**	**10**	**7**	**10**	**7**	**5**	**7**	**10**	**10**	**8**	**5**	**9.9[a]**
		100%	**100%**	**100%**	**70%**	**100%**	**70%**	**50%**	**70%**	**100%**	**100%**	**80%**	**50%**	
Group 3	Afghanistan	√	√							√			√	4
	Djibouti	√	√	√					√	√		√		6
	Pakistan	√	√	√						√	√	√		6
	Somalia	√	√	√	√	√	√	√	√	√	√	√	√	12
	Sudan			√		√			√	√	√	√		6
	Yemen					√				√	√			3
	Total	**4**	**4**	**4**	**1**	**3**	**1**	**1**	**3**	**6**	**4**	**4**	**2**	**6.2[a]**
		67%	**67%**	**67%**	**17%**	**50%**	**17%**	**17%**	**50%**	**100%**	**67%**	**67%**	**33%**	
Eastern Mediterranean Region		20	20	20	14	19	13	11	16	22	20	18	13	9.4[a]
		91%	**91%**	**91%**	**64%**	**86%**	**59%**	**50%**	**73%**	**100%**	**91%**	**82%**	**59%**	

[a] Average number.

OGT test = oral glucose tolerance test; HbA1c test = haemoglobin A1c test.

Cancer screening programmes

Breast cancer screening

The availability of breast cancer screening programmes was reported by 77% (17 of the 22 countries and territories in the Region) (Fig. 32). As shown on Table 56, availability was highest in Group 1 (100% of the group's six countries) followed by Group 2 (90%). In contrast, only 33% of countries in Group 3 reported the existence of such a programme; the same figure as in the 2017 survey.

Breast cancer screening was more likely to be offered through an organized, population-based programme (10 countries and territories, or 45%) than by opportunistic programmes (six, or 27%). Organized, population-based programmes were more prevalent in Groups 1 and 2 than in Group 3 countries.

Mammography was the most reported method of screening and was used by more than half the countries and territories in the Region that had breast cancer screening programmes, (10 out of 17 or 45%).

For screening coverage, most countries and territories reported that their programmes covered just 10–50% of the target population, with only Egypt reporting 70% or more.

Fig. 32.

Comparison of national screening programmes for breast cancer, 2017–2019

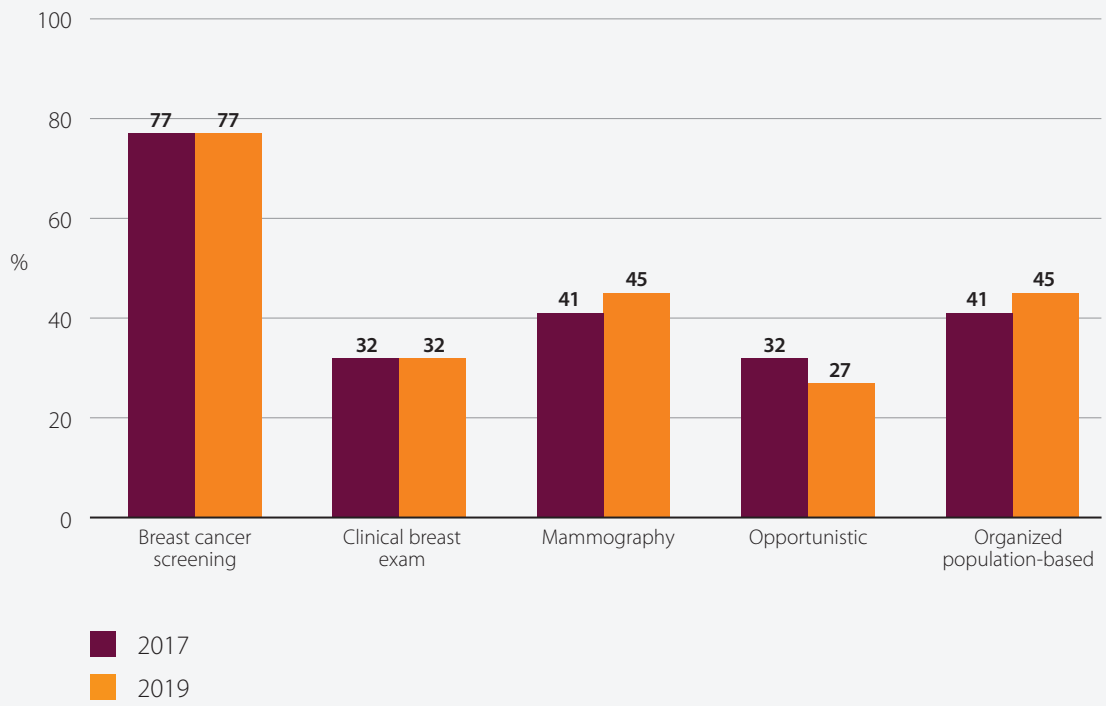


Table 56.

Availability of national screening programmes for breast cancer

Country group	Country/ territory	Present	Method		Programme type		Coverage			
			Clinical breast exam	Mammography	Opportunistic	Organized population-based	<10%	10–50%	>50% and <70%	70% or more
Group 1	Bahrain	√		√		√	√			
	Kuwait	√		√	√			√		
	Oman	√	√			√	√			
	Qatar	√		√		√		√		
	Saudi Arabia	√		√	√		√			
	United Arab Emirates	√		√	√			√		
	Total	**6**	**1**	**5**	**3**	**3**	**3**	**3**		
		100%	**17%**	**83%**	**50%**	**50%**	**50%**	**50%**	**0%**	**0%**
Group 2	Egypt	√		√		√				√
	Iran (Islamic Republic of)	√	√			√	√			
	Iraq	√		√		√		√		
	Jordan	√	√		√			√		
	Lebanon	√		√		√			√	
	Libya									
	Morocco	√	√			√	√			
	Occupied Palestinian territory	√	√		√			√		
	Syrian Arab Republic	√		√	√					
	Tunisia	√	√			√		√		
	Total	**9**	**5**	**4**	**3**	**6**	**2**	**4**	**1**	**1**
		90%	**50%**	**40%**	**30%**	**60%**	**20%**	**40%**	**10%**	**10%**
Group 3	Afghanistan									
	Djibouti	√		√		√		√		
	Pakistan									
	Somalia	√	√							
	Sudan									
	Yemen									
	Total	**2**	**1**	**1**		**1**		**1**		
		33%	**17%**	**17%**	**0%**	**17%**	**0%**	**17%**	**0%**	**0%**
Eastern Mediterranean Region		17	7	10	6	10	5	8	1	1
		77%	**32%**	**45%**	**27%**	**45%**	**23%**	**36%**	**5%**	**5%**

Cervical cancer screening

Less than half of the 22 countries and territories (10, or 45%) reported having a national screening programme for cervical cancer, most of which (six countries or 27%) were organized population-based programmes. At the group level, 50% of Groups 1 and 2 had cervical cancer screening and 33% of Group 3 countries.

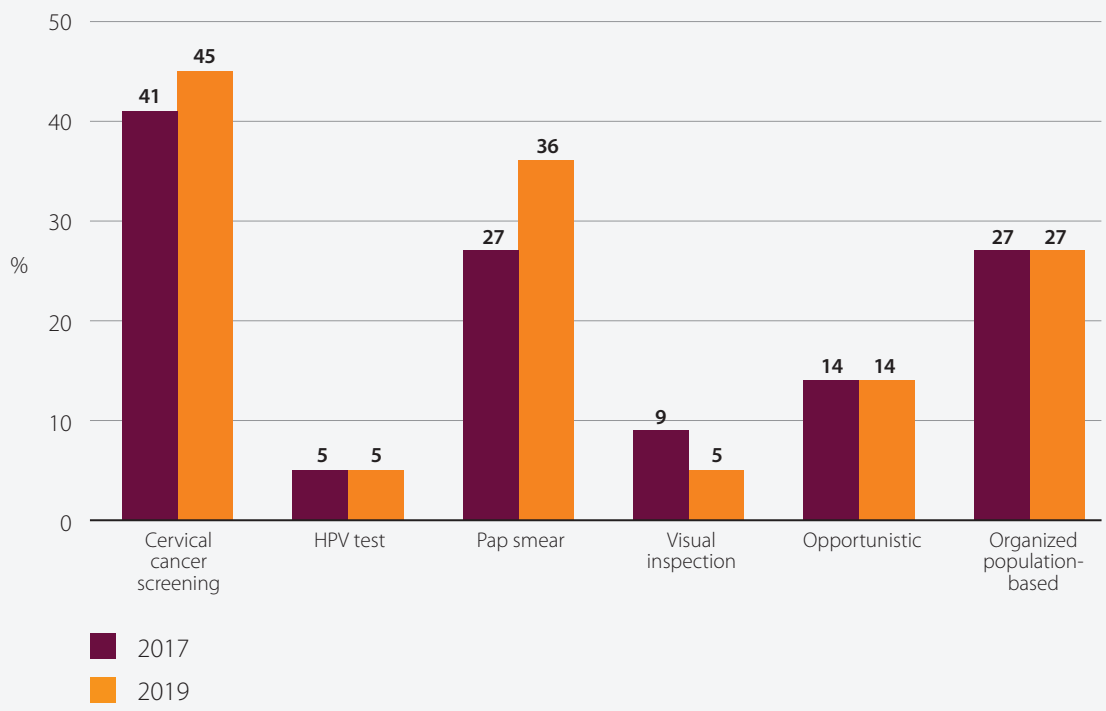
A Pap smear was the most reported method of screening; it is used by 80% (eight countries and territories) of those that had cervical cancer screening programmes, or 36% of all countries and territories in the Region.

Half of the countries and territories reporting availability of cervical cancer screening (five) stated their programme coverage was less than 10% of the target population (Table 57). All of the Group 1 countries with screening programmes (three countries, or 60% of those with programmes) were at less than 10% coverage. Some countries and territories in Groups 2 and 3 reported higher levels of coverage, including Djibouti in Group 3 which managed 10–50% coverage, and Lebanon in Group 2 which achieved 51–69%.

Somalia reported the availability of cervical cancer screening programmes for the first time in 2019 (Fig. 33) meaning that one additional country reported this compared to the 2017 survey. Although Somalia stated that initial screening used the Pap smear method, no data on the screening programme's coverage was given.

Fig. 33.

Comparison of national screening programmes for cervical cancer, 2017–2019



HPV = human papillomavirus.

Table 57.

Availability of national screening programmes for cervical cancer

Country group	Country/ territory	Present	Method			Programme type		Coverage		
			HPV test	Pap smear	Visual inspection	Opportunistic	Organized population-based	<10%	10–50%	>50% and <70%
Group 1	Bahrain	√		√		√		√		
	Kuwait									
	Oman									
	Qatar	√		√			√	√		
	Saudi Arabia									
	United Arab Emirates	√		√		√		√		
	Total	**3**		**3**		**2**	**1**	**3**		
		50%	**0%**	**50%**	**0%**	**33%**	**17%**	**50%**	**0%**	**0%**
Group 2	Egypt									
	Iran (Islamic Republic of)	√	√				√	√		
	Iraq									
	Jordan									
	Lebanon	√		√		√				√
	Libya									
	Morocco	√			√		√	√		
	Occupied Palestinian territory									
	Syrian Arab Republic	√		√			√			
	Tunisia	√		√			√		√	
	Total	**5**	**1**	**3**	**1**	**1**	**4**	**2**	**1**	**1**
		50%	**10%**	**30%**	**10%**	**10%**	**40%**	**20%**	**10%**	**10%**
Group 3	Afghanistan									
	Djibouti	√		√			√		√	
	Pakistan									
	Somalia	√		√						
	Sudan									
	Yemen									
	Total	**2**		**2**			**1**		**1**	
		33%	**0%**	**33%**	**0%**	**0%**	**17%**	**0%**	**17%**	**0%**
Eastern Mediterranean Region		10	1	8	1	3	6	5	2	1
		45%	**5%**	**36%**	**5%**	**14%**	**27%**	**23%**	**9%**	**5%**

HPV = human papillomavirus.

Colon and prostate cancer screening

The availability of a national colon cancer screening programme was reported by 45% of the 22 countries and territories (10), including 100% of Group 1, 30% of Group 2 and 17% of Group 3 countries and territories.

Organized population-based screening programmes and opportunistic programmes were nearly equally prevalent, present in four and five countries and territories, respectively. Furthermore, 60% (six) of the countries and territories with colon cancer screening reported programme coverage of less than 10% of the target population (Table 58).

On prostate cancer screening, only Bahrain reported the availability of an opportunistic programme that uses a rectal exam and serum prostate-specific antigen (PSA) as screening methods (Table 58).

The proportion of countries and territories that reported the availability of national screening programmes for colon and prostate cancers in 2017 and 2019 is illustrated in Fig. 34. The number reporting colon cancer screening has increased significantly, but there is no change in the prostate cancer screening numbers.

Fig. 34.

Comparison of availability of national screening programmes for cancers of the colon and prostate, 2017–2019

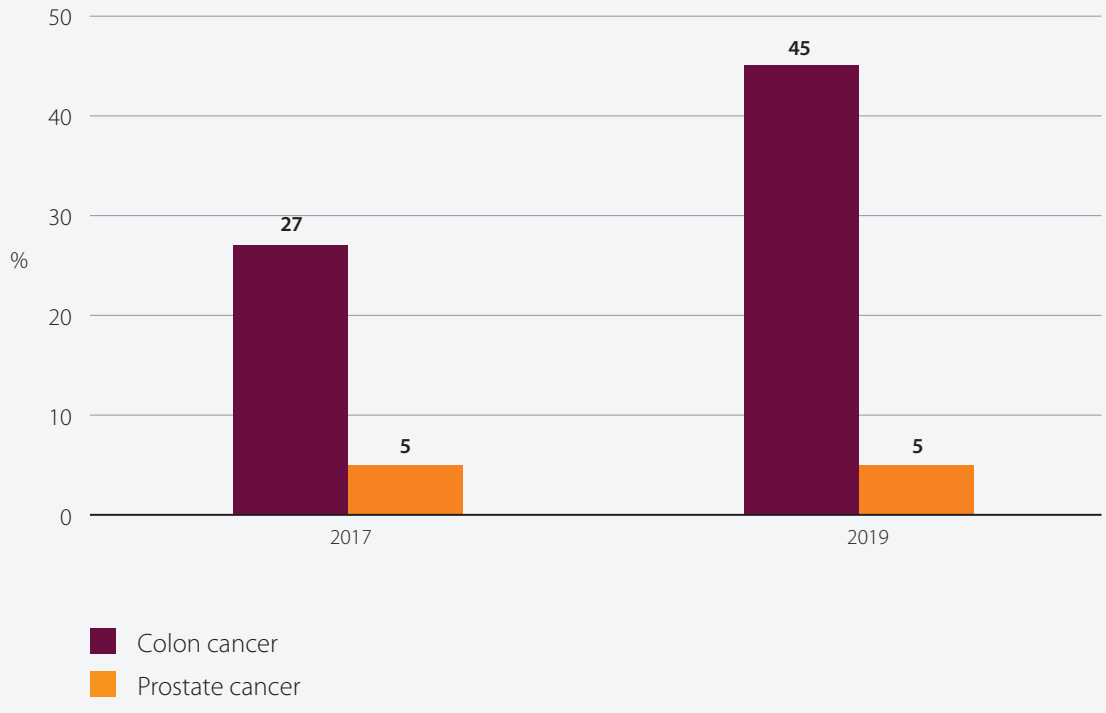


Table 58.

Availability of national screening programmes for cancers of the colon and prostate

Country group	Country/ territory	Colon cancer							Prostate cancer		
		Present	Method		Programme type		Coverage		Present	Method	Programme type
			Colonoscopy/ sigmoidoscopy	Faecal test	Opportunistic	Organized population-based	<10%	10–50%		Rectal exam and serum PSA	Opportunistic
Group 1	Bahrain	√		√		√			√	√	√[a]
	Kuwait	√	√		√			√			
	Oman	√		√	√		√				
	Qatar	√	√			√	√				
	Saudi Arabia	√		√	√		√				
	United Arab Emirates	√		√	√		√				
	Total	**6**	**2**	**4**	**4**	**2**	**4**	**1**	**1**	**1**	**1**
		100%	**33%**	**67%**	**67%**	**33%**	**67%**	**17%**	**17%**	**17%**	**17%**
Group 2	Egypt										
	Iran (Islamic Republic of)	√		√		√	√				
	Iraq										
	Jordan										
	Lebanon	√		√	√			√			
	Libya										
	Morocco										
	Occupied Palestinian territory										
	Syrian Arab Republic										
	Tunisia	√		√		√	√				
	Total	**3**		**3**	**1**	**2**	**2**	**1**			
		30%	**0%**	**30%**	**10%**	**20%**	**20%**	**10%**	**0%**	**0%**	**0%**
Group 3	Afghanistan										
	Djibouti										
	Pakistan										
	Somalia	√	√								
	Sudan										
	Yemen										
	Total	**1**	**1**								
		17%	**17%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**
Eastern Mediterranean Region		10	3	7	5	4	6	2	1	1	1
		45%	**14%**	**32%**	**23%**	**18%**	**27%**	**9%**	**5%**	**5%**	**5%**

[a] In progress to become an organized, population-based screening programme through primary health care.

PSA = prostate-specific antigen.

Early detection of cancers

A significant proportion of the 22 countries and territories in the Region (16, or 73%) reported that early detection of breast cancer was integrated into primary health care services, but a lower number reported such integration for cancers of the cervix (11, or 50%), colon (eight, or 36%) and other cancers (three, or 14%).

In 2019, a new question was added on the integration of childhood cancers into primary health care services. Only two countries (Bahrain and Tunisia) reported early detection of childhood cancers at this level.

A clearly defined referral system for suspected cancer cases, from primary health care to secondary and tertiary health care, was more widely available for each type of cancer than early detection integration into primary health care services: 77% (17 countries and territories) reported referral systems for breast cancer, 59% (13) for cervical cancer, 50% (11) for colon cancer, and 36% (eight) for childhood cancers.

In general, early detection programmes/guidelines for all cancer types and the presence of clearly defined referral systems were increasingly available with rising socioeconomic level: for example, breast cancer guidelines were available in all Group 1 countries, in 90% of Group 2 countries and territories, and in only 17% of Group 3 countries (Table 59).

There was a slight increase in the number of countries and territories that reported early detection of breast, cervical and colon cancers, through primary health care service integration, in 2019 compared to 2017 (Fig. 35).

In addition, national HPV vaccination programmes were reported as absent in almost all countries and territories of the Region, with the exception of Qatar and the United Arab Emirates (Table 60).

Fig. 35.

Comparison of primary health care service integration of early detection of cancers (breast, cervix and colon) 2017–2019

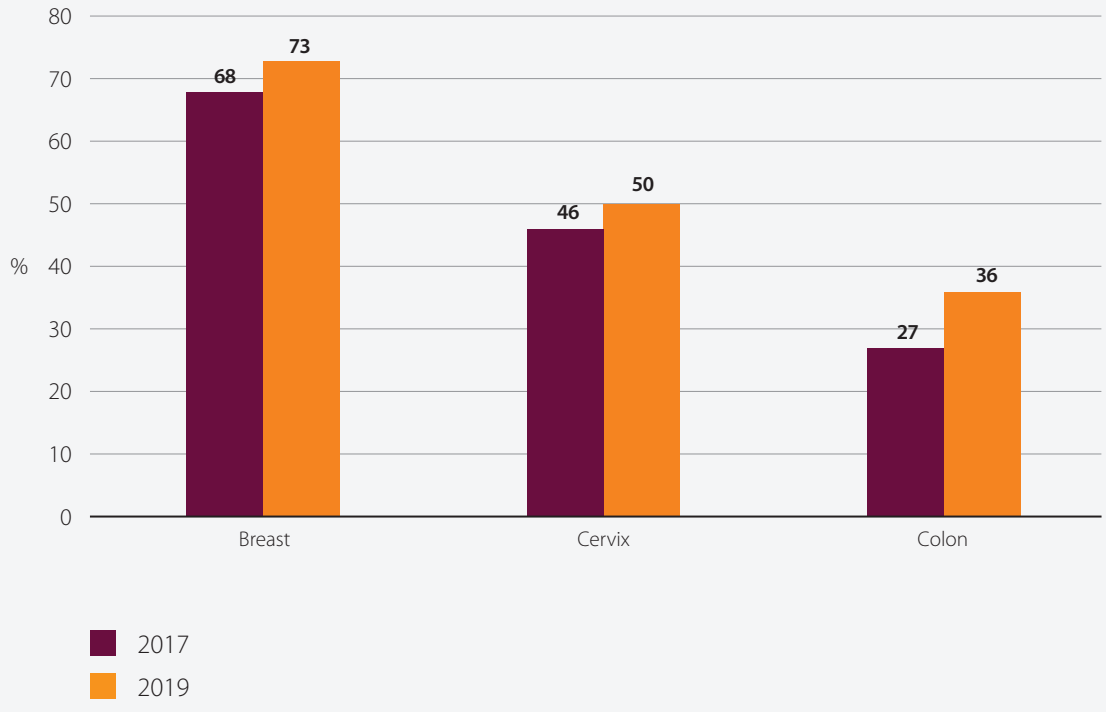


Table 59.

Primary health care service integration of early cancer detection

Country group	Country/ territory	Early detection of cancers					Defined referral systems				
		Breast	Cervix	Colon	Other	Childhood cancers[a]	Breast	Cervix	Colon	Other	Childhood cancers[a]
Group 1	Bahrain	√	√	√	√ (Prostate)	√	√	√	√ by rapid identification of first symptoms	√	√
	Kuwait	√	√	√			√	√	√		√
	Oman	√					√		√		√
	Qatar	√	√	√			√	√	√	√	√
	Saudi Arabia	√		√			√		√		
	United Arab Emirates	√	√	√			√	√	√	√	√
	Total	**6**	**4**	**5**	**1**	**1**	**6**	**4**	**6**	**3**	**5**
		100%	**67%**	**83%**	**17%**	**17%**	**100%**	**67%**	**100%**	**50%**	**83%**
Group 2	Egypt	√					√				
	Iran (Islamic Republic of)	√	√	√			√	√	√		
	Iraq	√	√				√	√			
	Jordan	√			√ (All)		√	√	√	√	√
	Lebanon	√	√	√			√	√	√		
	Libya										
	Morocco	√	√				√	√			
	Occupied Palestinian territory	√					√				
	Syrian Arab Republic	√	√				√	√			
	Tunisia	√	√	√		√	√	√	√		√
	Total	**9**	**6**	**3**	**1**	**1**	**9**	**7**	**4**	**1**	**2**
		90%	**60%**	**30%**	**10%**	**10%**	**90%**	**70%**	**40%**	**10%**	**20%**
Group 3	Afghanistan										
	Djibouti				√ (Cervical)						
	Pakistan										
	Somalia						√	√	√	√	√
	Sudan	√	√		√ (Oral)		√	√		√	
	Yemen										
	Total	**1**	**1**		**2**		**2**	**2**	**1**	**2**	**1**
		17%	**17%**	**0%**	**33%**	**0%**	**33%**	**33%**	**17%**	**33%**	**17%**
Eastern Mediterranean Region		16	11	8	3	2	17	13	11	6	8
		73%	**50%**	**36%**	**14%**	**9%**	**77%**	**59%**	**50%**	**27%**	**36%**

[a] New question in 2019 survey.

Table 60.

Implementation of national HPV vaccination programmes

Country group	Country/ territory	HPV included in the national immunization schedule	HPV vaccination coverage 80% or more
Group 1	Bahrain		
	Kuwait		
	Oman		
	Qatar	√	
	Saudi Arabia		
	United Arab Emirates	√	√
	Total	**2**	**1**
		33%	**17%**
Group 2	Egypt		
	Iran (Islamic Republic of)		
	Iraq		
	Jordan		
	Lebanon		
	Libya		
	Morocco		
	Occupied Palestinian territory		
	Syrian Arab Republic		
	Tunisia		
	Total	**0**	**0**
		0%	**0%**
Group 3	Afghanistan		
	Djibouti		
	Pakistan		
	Somalia		
	Sudan		
	Yemen		
	Total	**0**	**0**
		0%	**0%**
Eastern Mediterranean Region		2	1
		9%	**5%**

HPV = human papillomavirus.

Availability of 15 essential NCD medicines in the public health sector

Table 61 shows the number of countries and territories in the Region reporting on the general availability of 15 essential NCD-related medicines. "Generally available" was defined as being available in 50% or more pharmacies in the primary health care facilities of the public health sector.

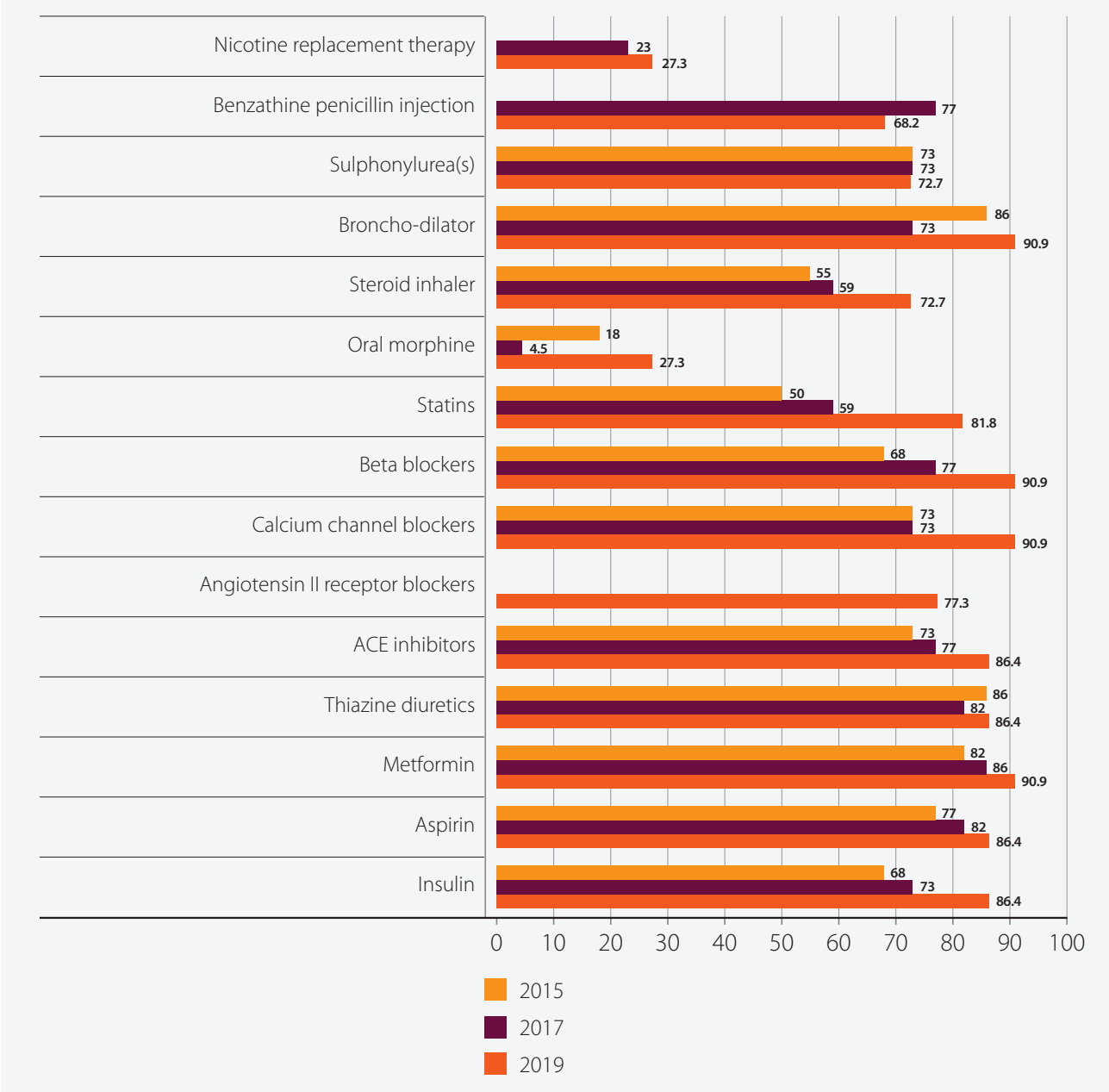
The most widely available medicines were metformin, calcium channel blockers, beta blockers and bronchodilators (all available in 20 countries and territories, or 91%). The least available medicines were nicotine replacement therapy and oral morphine, both of which were available in less than a third of countries and territories (six, or 27%).

Disparities in availability of the 15 essential medicines, at public sector primary health care level, across the three country/territory groups were evident: the average number of essential medicines available was highest in Group 1 countries (14 medicines), followed by Group 2 (12.3 medicines) and least in Group 3 countries (7.2 medicines).

It is notable that there has been a general improvement in the availability of NCD medicines at primary health care facilities in the public health sector between 2015 and 2017, and then again from 2017 to 2019, as shown in Fig. 36.

Fig. 36.

Comparison of the availability of essential NCD medicines, at primary health care facilities in the public health sector, 2015–2019



ACE = angiotensin-converting enzyme.

Table 61.

Availability of 15 essential NCD medicines at primary health care facilities in the public health sector

Group	Country/territory	Insulin	Aspirin	Metformin	Thiazide diuretics	ACE inhibitors	ARBs[a]	Calcium channel blockers	Beta blockers	Statins	Oral morphine	Steroid inhaler	Bronchodilator	Sulphonylurea(s)	Benzathine penicillin injection	Nicotine replacement therapy	Total number of medicines available (out of 15)
Group 1	Bahrain	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	15
	Kuwait	√	√	√	√	√	√	√	√	√		√	√	√	√		13
	Oman	√	√	√	√	√	√	√	√	√		√	√	√	√		13
	Qatar	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	15
	Saudi Arabia	√	√	√	√	√	√	√	√	√		√	√	√	√	√	14
	United Arab Emirates	√	√	√	√	√	√	√	√	√		√	√	√	√	√	14
	Total	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**2**	**6**	**6**	**6**	**6**	**4**	**14.0[b]**
		100%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**33%**	**100%**	**100%**	**100%**	**100%**	**67%**	
Group 2	Egypt	√	√	√	√	√	√	√	√	√			√	√	√		12
	Iran (Islamic Republic of)	√	√	√	√	√	√	√	√	√		√	√	√	√		13
	Iraq	√	√	√	√	√	√	√	√	√		√	√	√	√		13
	Jordan	√	√	√	√	√	√	√	√	√		√	√	√		√	13
	Lebanon	√	√	√	√	√	√	√	√	√		√	√	√			12
	Libya	√	√	√		√		√	√	√		√	√	√			10
	Morocco	√	√	√	√	√	√	√		√	√		√		√		11
	Occupied Palestinian territory	√	√	√	√	√	√	√	√	√	√	√	√	√	√		14
	Syrian Arab Republic	√	√	√	√	√	√	√	√	√		√	√	√	√		13
	Tunisia	√		√	√	√	√	√	√	√		√	√		√	√	12
	Total	**10**	**9**	**10**	**9**	**10**	**9**	**10**	**9**	**10**	**2**	**8**	**10**	**8**	**7**	**2**	**12.3[b]**
		100%	**90%**	**100%**	**90%**	**100%**	**90%**	**100%**	**90%**	**100%**	**20%**	**80%**	**100%**	**80%**	**70%**	**20%**	
Group 3	Afghanistan		√	√	√	√	√	√	√		√	√	√	√	√		12
	Djibouti	√	√	√	√	√		√	√				√				8
	Pakistan								√								1
	Somalia	√	√	√	√	√	√	√	√	√	√	√	√	√	√		14
	Sudan	√	√	√	√			√	√	√			√				8
	Yemen																0
	Total	**3**	**4**	**4**	**4**	**3**	**2**	**4**	**5**	**2**	**2**	**2**	**4**	**2**	**2**		**7.2[b]**
		50%	**67%**	**67%**	**67%**	**50%**	**33%**	**67%**	**83%**	**33%**	**33%**	**33%**	**67%**	**33%**	**33%**	**0%**	
Eastern Mediterranean Region		19	19	20	19	19	17	20	20	18	6	16	20	16	15	6	11.4[b]
		86%	**86%**	**91%**	**86%**	**86%**	**77%**	**91%**	**91%**	**82%**	**27%**	**73%**	**91%**	**73%**	**68%**	**27%**	

[a] New question in 2019 survey.

[b] Average number.

ARB = angiotensin II receptor blocker; ACE = angiotensin-converting enzyme.

Procedures for treating NCDs

The 22 countries and territories were asked to report on the availability of seven key procedures for treating NCDs in the publicly funded health system. "Generally available" was defined as reaching at least 50% of patients in need.

Renal replacement by dialysis and thrombolytic therapy (17 countries and territories, or 77%) were most widely reported as being generally available. Retinal photocoagulation, stenting and coronary bypass were reported by over 50% of countries and territories as being generally available (ranging between 59% and 68%). Renal replacement by transplantation and bone marrow transplant were the least available procedures in the Region (available in 50% and 32% of countries and territories, respectively).

Disparities in the availability of key procedures for treating NCDs were once again evident across the three country groups. The average number of available procedures was highest in Group 1 countries (6.3 procedures) followed by Group 2 (5.4 procedures) and then Group 3 (0.5 procedures) (Table 62).

A comparison of regional availability of these procedures in public health systems in 2015, 2017 and 2019 is shown in Fig. 37.

Fig. 37.

Comparison of the availability of specific procedures for treating NCDs in public health systems, 2015–2019

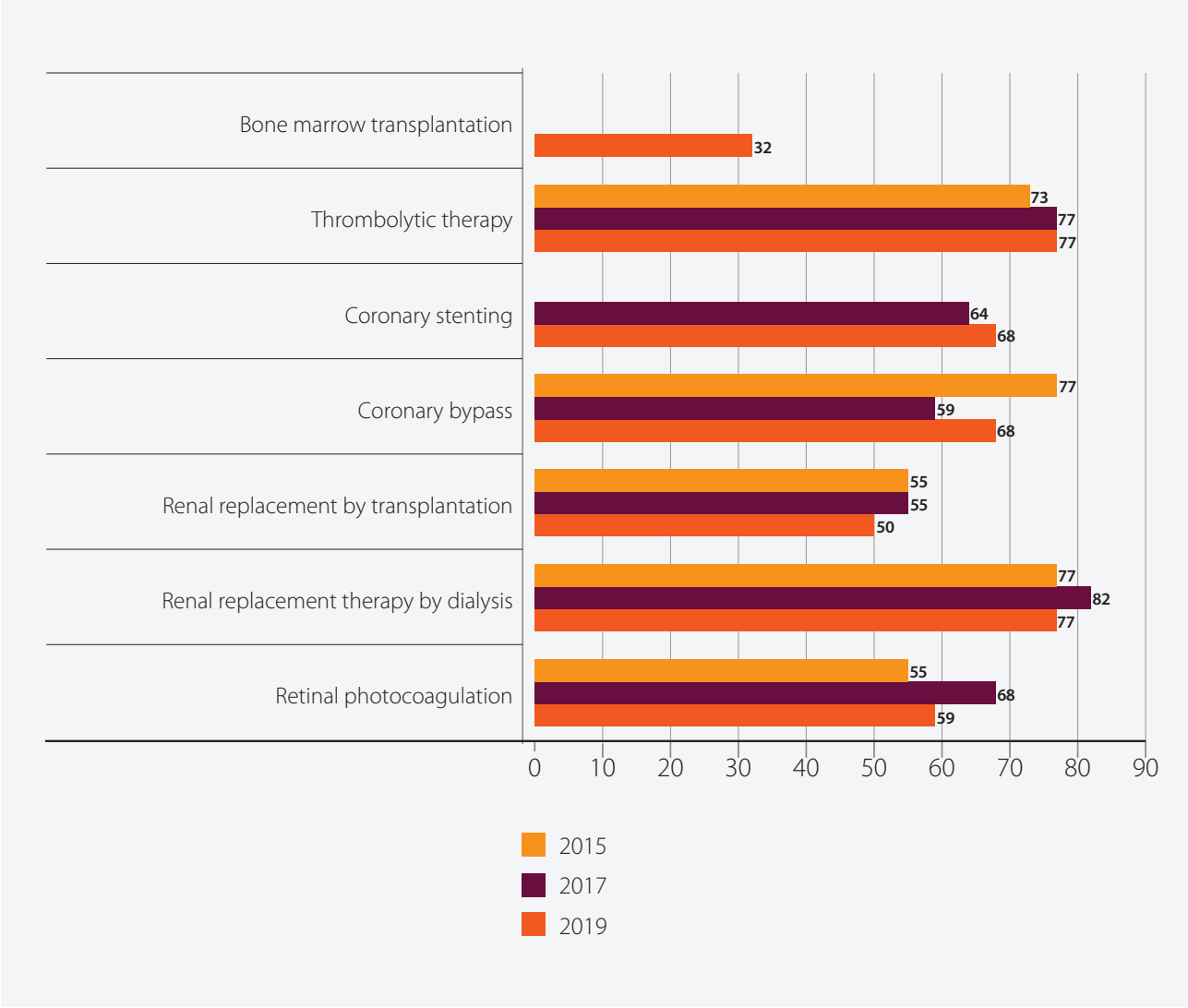


Table 62.

Availability of specific procedures for treating NCDs in publicly funded health systems

Group	Country/territory	Retinal photocoagulation	Renal replacement therapy by dialysis	Renal replacement by transplantation	Coronary bypass	Coronary stenting	Thrombolytic therapy	Bone marrow transplantation[a]	Total number of procedures available (out of 7)
Group 1	Bahrain	√	√	√	√	√	√	√	7
	Kuwait	√	√	√	√	√	√		6
	Oman	√	√	√	√	√	√	√	7
	Qatar	√	√	√	√	√	√		6
	Saudi Arabia	√	√	√	√	√	√	√	7
	United Arab Emirates	√	√		√	√	√		5
	Total	**6**	**6**	**5**	**6**	**6**	**6**	**3**	**6.3[b]**
		100%	**100%**	**83%**	**100%**	**100%**	**100%**	**50%**	
Group 2	Egypt			√	√	√	√	√	5
	Iran (Islamic Republic of)	√	√	√	√	√	√	√	7
	Iraq	√	√		√	√	√		5
	Jordan		√				√		2
	Lebanon		√		√	√	√		4
	Libya	√	√		√	√	√		5
	Morocco	√	√	√	√	√	√	√	7
	Occupied Palestinian territory	√	√	√	√	√	√		6
	Syrian Arab Republic	√	√	√	√	√	√		6
	Tunisia	√	√	√	√	√	√	√	7
	Total	**7**	**9**	**6**	**9**	**9**	**10**	**4**	**5.4[b]**
		70%	**90%**	**60%**	**90%**	**90%**	**100%**	**40%**	
Group 3	Afghanistan								0
	Djibouti								0
	Pakistan						√		1
	Somalia		√						1
	Sudan								0
	Yemen		√						1
	Total		**2**				**1**		**0.5[b]**
		0%	**33%**	**0%**	**0%**	**0%**	**17%**	**0%**	
Eastern Mediterranean Region		13	17	11	15	15	17	7	4.3[b]
		59%	**77%**	**50%**	**68%**	**68%**	**77%**	**32%**	

[a] New question in 2019 survey.

[b] Average number.

Cancer diagnosis and treatment

Countries and territories were asked to report on the availability of the following cancer diagnosis and treatment services in the public sector: cancer centres at the tertiary level; pathology services (laboratories); cancer surgery; chemotherapy; and radiotherapy. As noted above, "generally available" was defined as reaching 50% or more of the patients in need.

Pathology services for diagnosis and treatment were the most widely available (20 countries and territories out of 22, or 91%). Cancer centres at a tertiary level, cancer surgery and chemotherapy were reported as being generally available in the public health sector by 19 countries and territories (86%). Radiotherapy was the least available cancer treatment service, reported as available in 15 countries and territories (68%).

All cancer diagnosis and treatment services were reported as being generally available in 100% of Group 1 countries, 80–100% of Group 2 countries and territories and 17–67% of Group 3 countries (Table 63). A comparison of regional availability of these cancer diagnosis and treatment services in 2017 and 2019 is shown in Fig. 38.

Fig. 38.

Comparison of the availability of cancer diagnosis and treatment services in the public sector, 2015–2019

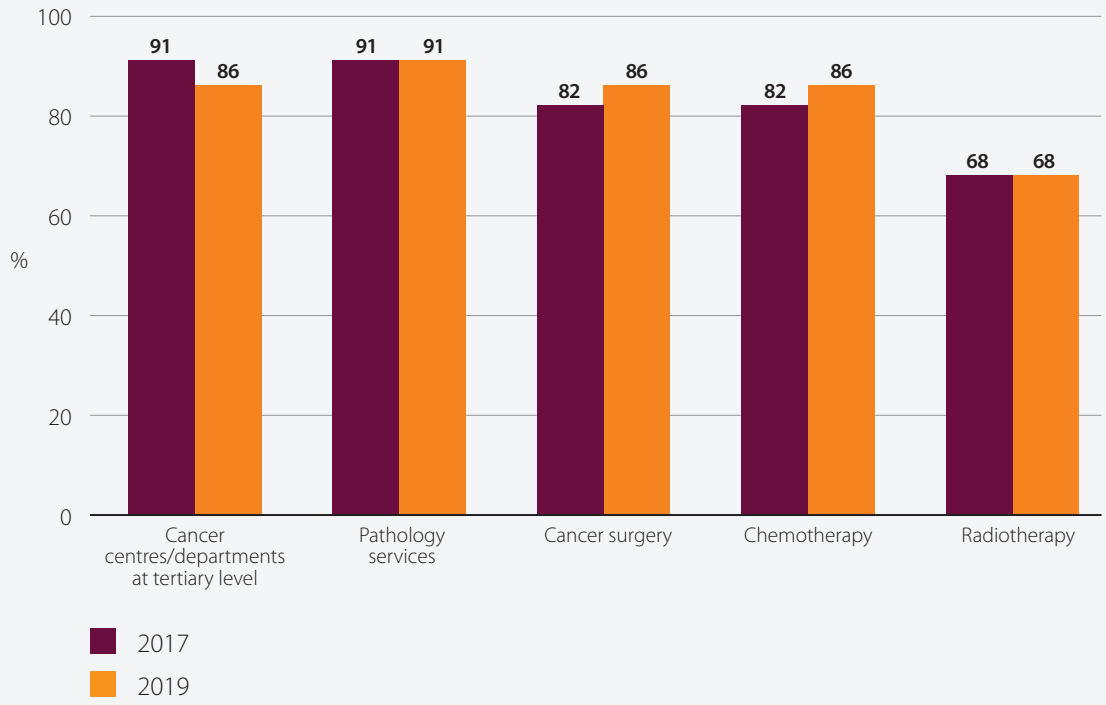


Table 63.

Availability of cancer diagnosis and treatment services in the public sector

Group	Country/territory	Cancer centres at tertiary level	Pathology services	Cancer surgery	Chemotherapy	Radiotherapy
Group 1	Bahrain	√	√	√	√	√
	Kuwait	√	√	√	√	√
	Oman	√	√	√	√	√
	Qatar	√	√	√	√	√
	Saudi Arabia	√	√	√	√	√
	United Arab Emirates	√	√	√	√	√
	Total	**6**	**6**	**6**	**6**	**6**
		100%	**100%**	**100%**	**100%**	**100%**
Group 2	Egypt	√	√	√	√	√
	Iran (Islamic Republic of)	√	√	√	√	√
	Iraq	√	√	√	√	√
	Jordan	√	√	√	√	√
	Lebanon	√	√	√	√	
	Libya	√	√	√	√	√
	Morocco	√	√	√	√	√
	Occupied Palestinian territory	1	1	1	1	0
	Syrian Arab Republic	√	√	√	√	√
	Tunisia	√	√	√	√	√
	Total	**10**	**10**	**10**	**10**	**8**
		100%	**100%**	**100%**	**100%**	**80%**
Group 3	Afghanistan					
	Djibouti		√	√		
	Pakistan	√	√	√	√	
	Somalia		√			
	Sudan	√		√	√	√
	Yemen	√	√		√	
	Total	**3**	**4**	**3**	**3**	**1**
		50%	**67%**	**50%**	**50%**	**17%**
Eastern Mediterranean Region		19	20	19	19	15
		86%	**91%**	**86%**	**86%**	**68%**

Palliative care

Palliative care for patients with NCDs in public health systems was not widely available in the Region. It was reported as being generally available in primary health care settings, (reaching at least 50% of patients in need), in less than a quarter of the 22 countries and territories (23%): Bahrain, Oman and the United Arab Emirates in Group 1; Syrian Arab Republic in Group 2; and Yemen in Group 3.

Palliative care was more generally available in a primary health care setting (five countries, or 23%) than in a community or home-based care setting (four countries, or 18%) (Table 64). Since the 2015 survey was carried out, there has been a substantial increase in the availability of palliative care in both primary health care and in community or home-based care settings (Fig. 39).

Fig. 39.

Comparison of palliative care availability for patients with NCDs in public health systems, 2015–2019

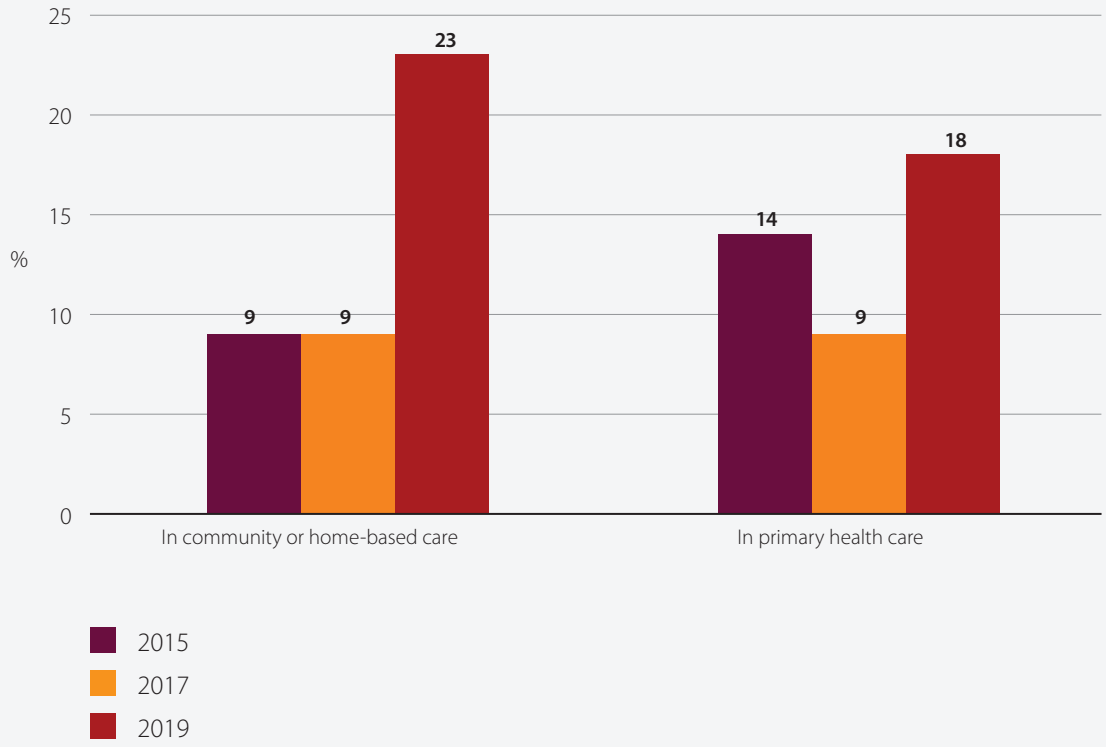


Table 64.

Availability of palliative care for patients with NCDs in public health systems

Group	Country/territory	Palliative care availability in primary health care	Palliative care availability in community/home-based care
Group 1	Bahrain	√	√
	Kuwait		
	Oman	√	√
	Qatar		
	Saudi Arabia		
	United Arab Emirates	√	√
	Total	**3**	**3**
		50%	**50%**
Group 2	Egypt		√
	Iran (Islamic Republic of)		
	Iraq		
	Jordan		
	Lebanon		
	Libya		
	Morocco		
	Occupied Palestinian territory		
	Syrian Arab Republic	√	
	Tunisia		
	Total	**1**	**1**
		10%	**10%**
Group 3	Afghanistan		
	Djibouti		
	Pakistan		
	Somalia		
	Sudan		
	Yemen	√	
	Total	**1**	
		17%	**0%**
Eastern Mediterranean Region		5	4
		23%	**18%**

Cardiovascular risk stratification

More than three quarters (17, or 77%) of the 22 countries and territories reported that cardiovascular risk stratification was offered at primary health care facilities; however, the availability reported within these countries and territories varied widely. While nearly half of them (eight of 17, or 47%) reported that risk stratification was available at over 50% of health care facilities, over one third (six, or 35%) reported that it was available at fewer than 25% of facilities, and the remaining 18% (three) reported that it was available at 25–50% of facilities (Table 65).

Among the eight countries/territories that reported that risk stratification was available at over 50% of health care facilities, five were in Group 1 (83% of group), three were in Group 2 (30% of group) and none were in Group 3.

Among those countries and territories that could report the availability of cardiovascular risk stratification in their health care facilities, the majority (10 countries, or 45%) reported that the WHO/International Society of Hypertension (WHO/ISH) prediction charts were used for this purpose. Nearly two thirds of countries and territories (15, or 68%) reported the availability of care for acute stroke patients. These included all countries in Group 1, 80% in Group 2 and 17% in Group 3.

Over half of the countries and territories in the Region (12, or 55%) reported the availability of rehabilitation services for stroke patients. A country/territory group availability distribution pattern, similar to that for cardiovascular risk stratification, was observed for this type of care. Only Bahrain and Kuwait reported a register of patients who have had rheumatic fever and rheumatic heart disease; systems for follow-up/recall to deliver long-term penicillin prophylaxis were only available in Bahrain (Table 65).

A comparison of the regional availability of these services in 2017 and 2019 is shown in Fig. 40.

Fig. 40.

Percentage comparison of primary health care facilities offering cardiovascular risk stratification for the management of high-risk patients to prevent heart attacks and strokes, 2017–2019

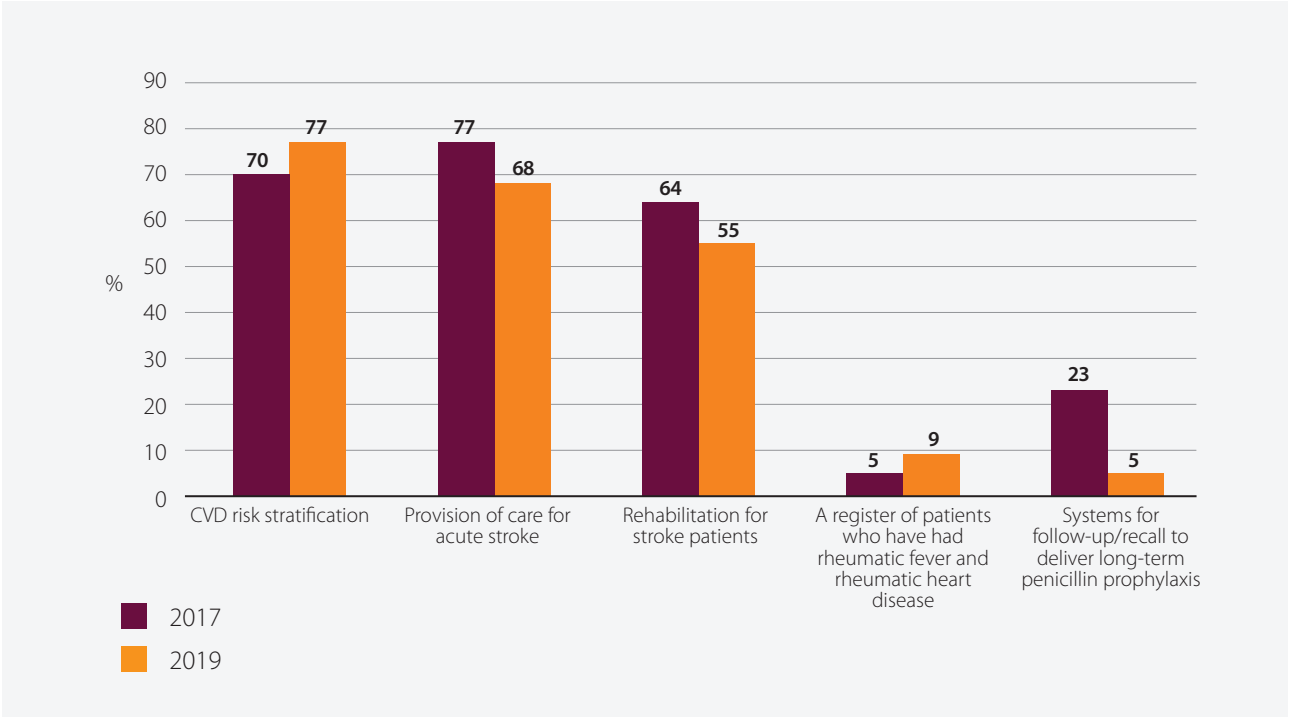


Table 65.

Availability of services in public health systems for high-risk patients to prevent heart attacks and strokes

Group	Country/territory	Proportion of primary health care facilities offering CVD risk stratification				CVD risk scoring chart used			Stroke services: care for acute stroke (generally available)	Stroke services: rehabilitation (generally available)	Rheumatic fever/heart disease register	Systems for follow-up/recall to deliver penicillin
		None	<25%	25–50%	>50%	WHO/ISH	Others	Specify				
Group 1	Bahrain				√	√			√	√	√	√
	Kuwait				√		√	Framingham scoring	√	√	√	
	Oman				√	√			√	√		
	Qatar		√			√			√	√		
	Saudi Arabia				√	√			√	√		
	United Arab Emirates				√	√			√	√		
	Total		**1**		**5**	**5**	**1**		**6**	**6**	**2**	**1**
		0%	**17%**	**0%**	**83%**	**83%**	**17%**		**100%**	**100%**	**33%**	**17%**
Group 2	Egypt		√			√						
	Iran (Islamic Republic of)				√		√	Global risk scoring	√	√		
	Iraq			√		√			√			
	Jordan	√							√	√		
	Lebanon				√	√			√			
	Libya		√				√	European scoring	√			
	Morocco		√				√	Global HEARTS scoring	√	√		
	Occupied Palestinian territory				√	√						
	Syrian Arab Republic			√			√	Framingham scoring	√	√		
	Tunisia		√						√	√		
	Total	**1**	**4**	**2**	**3**	**4**	**4**		**8**	**5**		
		10%	**40%**	**20%**	**30%**	**40%**	**40%**		**80%**	**50%**	**0%**	**0%**
Group 3	Afghanistan			√								
	Djibouti	√							√	√		
	Pakistan	√										
	Somalia	√										
	Sudan		√			√						
	Yemen	√										
	Total	**4**	**1**	**1**		**1**			**1**	**1**		
		67%	**17%**	**17%**	**0%**	**17%**	**0%**		**17%**	**17%**	**0%**	**0%**
Eastern Mediterranean Region		5	6	3	8	10	5		15	12	2	1
		23%	**27%**	**14%**	**36%**	**45%**	**23%**		**68%**	**55%**	**9%**	**5%**

CVD = cardiovascular disease; WHO/ISH: WHO/International Society of Hypertension.

Discussion

Key findings

Infrastructure, governance and financing

A significant majority of the 22 countries and territories in the Region (20, or 91%) reported the availability of a unit, branch or department within the ministry of health for NCDs and NCD risk factors, which had at least one full-time technical/professional staff member. The two exceptions were Lebanon and Yemen. However, this figure has remained unchanged since the 2013 survey.

Staffing for specific NCDs or NCD risk factors within dedicated NCD departments was widely reported for tobacco use (91%), cancer (82%) and diabetes (82%), but was limited for oral diseases (50%) and the harmful use of alcohol (23%).

The 2019 survey findings showed disparities across the three regional country groups on this issue, with Group 3 countries reporting lower levels of staffing for NCDs or NCD risk factors.

The data show that funding for the eight key NCD activities or functions has remained fairly stable since 2017, with funding for palliative care and NCD research still lagging behind all other NCD activities, and funding for health care and treatment continuing to be the most prevalent overall. This echoes the conclusion reached in 2017, that allocative inefficiency is still a key challenge in health system financing in some countries and territories in the Region, with more resources allocated to curative care and fewer for promotional and preventive services.

Government revenues remained the largest reported source of NCD funding for almost all countries and territories (86%). There are some group disparities regarding NCD funding sources: as in the 2017 survey, international donations were reported by a larger proportion of Group 3 countries (50%) than those in Group 2 (40%) or Group 1 (33%). Two countries in Group 3 (Somalia and Yemen) did not report any regular funding sources for NCDs and their risk factors, which will impede national efforts to combat this epidemic.

Taxation on tobacco was the most widespread fiscal intervention reported by almost all countries and territories of the Region (91%). Taxation on sugar-sweetened beverages was adopted by over one third of countries and territories (32%), a slight increase from the 2017 figure of 27%. However, funds earmarked for health promotion or health service provision have grown in importance since 2017: nearly a quarter of countries and territories (23%) reported this fiscal intervention in the 2019 survey, compared to only 9% in 2017.

Multisectoral commissions, agencies or mechanisms to oversee NCD engagement, policy coherence and accountability of sectors beyond health had been instituted by substantially more countries and territories in 2019 (73%) than in 2017 (55%), with three quarters of such commissions, agencies or mechanisms reported to be operational. The regional increase in NCD commissions in 2019 is attributed to Group 2 and Group 3 countries and territories (reporting 70% and 50%, respectively compared to 50% and 17%, respectively in 2017).

Policies, action plans and strategies

Regionally, a high proportion of countries and territories included NCDs in their national health plans (91%) and a slightly lower proportion (77%) included NCDs in their national development agendas. This is an increase from 68% who included NCDs in their national health plans in 2015 and 82% in 2017.

Additionally, since 2017, there has been a slight increase in countries and territories adopting national NCD targets, up from 59% in 2017 to 64% in 2019.

Over three quarters of countries and territories (77%) have integrated NCD plans that are multisectoral and multi-stakeholder, with the majority of these integrated plans being operational (88%). The inclusion of the eight NCDs and NCD risk factors in the integrated plans was accomplished by the majority of Group 1 countries, who on average included seven of the eight items, followed by Group 2 with an average of six and Group 3 with an average of two. As in the 2017 survey, the harmful use of alcohol and the existence of palliative care were the least included aspects of integrated NCD plans (32% and 64% of countries and territories, respectively).

The availability of vertical programmes for NCDs and their major risk factors has been relatively stable since 2015, with notable inequalities observed between the three country/territory groups. The proportion of countries and territories reporting the availability of vertical NCD programmes ranged between 18% for chronic respiratory diseases and 68% for cancer. For NCD risk factors, the proportion of countries and territories ranged between 27% for the harmful use of alcohol and 64% for tobacco use and unhealthy diet.

Of the eight NCDs and NCD risk factors, cancer, unhealthy diet and tobacco use were most commonly addressed by operational policies, strategies or action plans, whether they were topic-specific plans tackling only that issue or covered as part of the integrated NCD plan of the country. Chronic respiratory diseases remained the least likely of the four main NCDs to be addressed by an operational policy, showing no progress since 2017 (18%). However, there has been major progress on policies addressing oral health since 2017, with nearly twice as many countries and territories reporting policy implementation in 2019 (64%) than in 2017 (36%). Nearly all of these (13 out of 14) were in Group 1 and Group 2.

The data show a regional regression regarding policies on marketing to children and food regulation. Only four countries in the Region (18%) reported policies to reduce the impact on children of marketing foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars or salt in 2019, compared to seven (32%) in 2017.

There were similar findings on national policies that limit saturated fatty acids and virtually eliminate industrially produced trans-fatty acids from the food supply, with 45% of countries and territories reporting such policies in 2019 compared to 55% in 2017. The proportion of countries and territories that had policies to reduce population salt/sodium consumption has also decreased from 64% in 2017 to 59% in 2019.

In the area of physical activity, a new question in the 2019 survey revealed that 45% of countries and territories had relevant guidelines available, predominantly aimed at younger adults, children or adolescents with fewer specifically targeting older adults. Marked disparities were evident in the Region with more than half of countries and territories with guidelines (60%) in Group 1, 40% in Group 2 and none in Group 3.

Around one half of the countries and territories reported the implementation of both diet and physical activity campaigns in the past 2 years (55% and 50%, respectively). Among Group 3 countries, none had implemented any campaigns on diet or physical activity, whereas 83% of Group 1 countries had implemented campaigns on diet and 100% had implemented campaigns for physical activity.

Finally, NCD-related mHealth initiatives were reported for the first time in 2019 and were implemented by less than half of the countries and territories in the Region (41%). Disparity between country groups was again evident: mHealth initiatives were implemented by a higher number of Group 1 countries than Group 2 and by even fewer in Group 3.

NCD surveillance

While the vast majority of countries and territories (20, or 91%) had NCD surveillance covered by one or more departments in the ministry of health (or equivalent), two Group 3 countries (Somalia and Yemen) reported a lack of any national surveillance structure, a situation that has remained unchanged since the 2017 survey.

A system for collecting mortality data by cause of death on a routine basis was present in the majority of countries and territories (73%), but accurate cause-specific mortality reporting remains a challenge in almost all countries in Group 3. The proportion of Group 3 countries (17%) reporting the availability of a system for collecting mortality data by cause of death remains unchanged since 2017.

As noted above, there was a clear gradient in the availability of cancer and diabetes registries across country groups. More countries in Group 1 reported their availability, followed by Group 2, with Group 3 countries the least likely to have such registries. However, it is worth highlighting that the proportion of countries in Group 3 that reported the availability of cancer registries has significantly increased since the previous survey, up from 50% in 2017 to 67% in 2019. In addition, the number of countries and territories in the Region with registries for cancer and diabetes had slightly increased in 2019 compared to 2017; 91% of countries and territories had cancer registries in 2019, up from 86% in 2017, while 59% had diabetes registries in 2019 compared to 41% in the previous survey.

Assessments of service availability and readiness were conducted by nearly half of all countries and territories in the Region. The proportion of countries and territories that had conducted such surveys had more than doubled (45% in 2019 compared to 18% in 2017). More than 90% of these surveys were implemented on a national scale.

Slight progress has been made in surveying NCD risk factors among adults. Over 80% of the countries and territories had conducted surveys addressing unhealthy diet, physical inactivity, tobacco use, overweight and obesity, raised blood glucose, raised total cholesterol and raised blood pressure; and over 60% had conducted surveys addressing harmful use of alcohol and salt intake. The average number of surveys conducted on the eight NCD risk factors was higher for Group 1, followed by Group 2 and then Group 3 countries/territories. A similar disparity was found with adolescent surveys, but with an overall higher proportion of countries and territories reporting they had carried out such surveys: over 95% of the 22 had conducted surveys addressing unhealthy diet, physical inactivity and tobacco use in adolescents.

Questions on risk factor surveys addressing physical activity and overweight/obesity among children were included for the first time in the 2019 survey. The results showed these surveys were more prevalent in Group 1 than in Group 2, while no surveys were carried out by Group 3 countries.

NCD management

More than half of the 22 countries and territories in the Region reported having guidelines for each of the four main NCDs. Guidelines for the management of cardiovascular disease, diabetes and cancer were the most common (used in 73% of countries and territories) and guidelines for chronic respiratory disease were the least used (59%). There were no significant variations from the findings reported in the 2017 survey.

New questions on the availability of risk factor management guidelines found that those for tobacco dependence and overweight/obesity were most widely reported, with 41% of countries and territories having them for both, followed by physical inactivity management

guidelines (23%) and then guidelines for the management of alcohol dependence (14%). Consistent with previous findings, there were disparities across all risk factors, with Group 1 and Group 2 countries and territories reporting the availability of these guidelines, but none in Group 3 reporting guidelines of any kind.

Most of the basic tests and procedures for early detection, diagnosis and monitoring of NCDs were reported as being generally available at primary health care facilities in the public and private health sectors, by most countries and territories. Of the 12 technologies used for early detection, diagnosis and monitoring of NCDs, blood pressure measurement was reported as being generally available by all countries, and weight, height, blood glucose and total cholesterol measurements by 91% of countries and territories.

Over two thirds of countries and territories reported the availability of national breast cancer screening programmes, and nearly half reported the availability of such programmes for cervical and colon cancers, but only Bahrain reported the availability of national programmes for prostate cancer screening. The number of countries and territories reporting breast cancer screening has remained the same since 2017, while those reporting cervical and colon cancer screening has increased over the past 2 years (from 41% to 45% for cervical cancer, and from 27% to 45% for colon cancer). Screening programmes continued to be more population-based than opportunistic, and more likely to cover only a minority of the target population.

A significant proportion of countries and territories (73%) reported that early detection of breast cancer was integrated into primary health care services, but lower numbers reported such integration for cancers of the cervix (50%) and colon (8%). In 2019, a new question was added about the integration of early detection of childhood cancers into primary health care services: only two countries (Bahrain and Tunisia) reported the implementation of such integration.

The most widely available NCD medicines were metformin, calcium channel blockers, beta blockers and bronchodilators (all available in 91% of countries and territories); the least available were nicotine replacement therapy and oral morphine, which were reported as available by less than a third of countries and territories in the Region (27%).

Disparities in availability of the 15 essential NCD medicines at the public sector primary health care level, across the three country/territory groups, were evident: the average number of essential medicines available was highest in Group 1 countries, followed by Group 2 and then by Group 3. It is also notable that there has been a general improvement in the availability of NCD medicines at public health sector primary health care facilities since the 2017 survey.

Disparities were also revealed in the availability of procedures for treating NCDs, as well as in cancer diagnosis and treatment services, with little progress since 2017. Palliative care availability remained low, regardless of the setting in which it was provided. Cardiovascular risk stratification also remained widely under-utilized, with only 36% of countries and territories reporting that it was offered at the majority of health care facilities. The addition of a question on bone marrow transplantation in the 2019 survey revealed yet another procedure with very limited availability: just 32% of countries and territories in the Region reported bone marrow transplantation as being generally available.

Survey strengths and limitations

Key strengths of the NCD country capacity survey are the use of an evidence-based, standardized tool and a rigorous methodology for the collection, validation, analysis and interpretation of survey findings. The survey is conducted at regular two-year intervals, which provides ample information on the progress countries have made in preventing and controlling NCDs. It also highlights strengths and weaknesses in the NCD-related capacities of individual countries or territories, groups of countries and territories at similar socioeconomic levels, and of the Region as a whole. This not only underscores the progress countries and territories have made over time but also enables cross-country comparisons, which can help motivate countries and territories to adopt measures that have proved successful elsewhere in order to enhance their own national NCD-related capacities.

Limitations of the survey relate mainly to the validation process. This process included exhaustive review of the supporting documents (which were sometimes in a different language) and checking the consistency of responses compared to the 2017 survey. The supporting documents for validation of some items were in some cases not available or not accessible to the country/territory focal point.

Furthermore, many data sources were dependent on the focal point's' knowledge, expertise and degree of liaison with other sectors. However, the WHO NCD Document Repository *(25)* contains all the supporting documents received during other rounds of the country capacity survey, which helped to address such gaps.

The respondents' understanding and interpretation of the survey questions is another potential limitation relevant to the accuracy of the reporting process. However, all efforts were made to mitigate this potential problem by providing a detailed glossary of the terms used in the survey as an annex (Annex 2 of this document). When a misunderstanding of the question was suspected, staff from the WHO Regional Office contacted the country/territory focal point for verification and confirmation.

Conclusion

Since its adoption in 2015, the 2030 Agenda for Sustainable Development has provided a blueprint for shared prosperity in a sustainable world. The year 2030 is now less than a decade away, and reducing the NCD burden is a global development imperative. Sustainable Development Goal 3 includes target 3.4, to reduce premature mortality from NCDs by a third: progress towards this target will be key in determining the success of at least nine other SDGs *(26)*.

The results of the 2019 NCD country capacity survey highlight the progress many countries and territories in the Eastern Mediterranean Region have made in preventing and controlling these diseases. However, they also underscore a number of missed opportunities that need prompt action from countries and territories to accelerate their progress towards achieving the NCD targets outlined in the SDGs.

Specific priority actions to enhance national efforts for the prevention and control of NCDs are listed below:

- Secure and maintain a high level of political commitment and support to ensure effective policies/regulations are adopted and implemented to halt the rise in NCDs.
- Develop and implement fiscal interventions such as taxation on sugar-sweetened beverages and unhealthy foods. Fiscal measures should be directed toward incentivizing healthy diets and lifestyles, encouraging sustainable consumption and production, and providing the revenue to accelerate scale-up of universal health coverage; these policies can, and should, be designed to achieve equity, and to promote health and well-being through the provision of equitable access to healthier choices *(26)*.
- Allocate more financing for national NCD responses (through domestic, bilateral and multilateral channels, as well as innovative financing mechanisms), which is imperative to sustain the response to the NCD epidemic.
- Strengthen and operationalize multisectoral mechanisms and prioritize full implementation of integrated multisectoral policies/strategies or action plans: such mechanisms support policy coherence, oversee broad engagement among a wide range of entities, and promote sustained NCD action in countries and territories.
- Develop multisectoral policies/strategies/action plans with national targets across government sectors through a Health in All Policies approach *(27)* to address NCDs and their risk factors. A comprehensive multisectoral plan, with a clear budget and an integrated monitoring framework, makes possible the coherent national policy response required to attain national targets.
- Adopt and implement NCD "best buys", a set of evidence-based, cost-effective and affordable interventions that have proved to be effective in preventing and controlling NCDs *(16)*; in addition, implement other recommended interventions. Most premature deaths from NCDs can be prevented, avoided or delayed by implementing these best buys and other recommended interventions.
- Strengthen the institutional and regulatory capability of national health authorities to establish regulations relating to NCD risk factors (tobacco, alcohol, regulating salt content), including the development of fiscal policies. Legislation and executive actions are essential for NCD prevention and control. However, governments face major obstacles to using legislation effectively, including a lack of trained personnel, lobbying by powerful industry groups and uncertainty about the extent of their country's obligations under trade and investment agreements *(28)*.
- Strengthen and institutionalize national surveillance systems for NCDs and their risk factors. Surveillance systems should be capable of producing timely, systematic and standardized data through key information sources – such as civil registration and vital statistics systems, population-based surveys, NCD registries, and health facility-based information systems – to track trends and evaluate interventions.
- Strengthen national health systems, which are key to NCD prevention and control. Integrated health services should be delivered to ensure that people living with NCDs receive a full continuum of health care. This includes health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care services as needed.
- Strengthen national screening programmes for the main types of cancer to achieve national coverage with high-quality screening.

- Promote implementation of evidence-based clinical practice guidelines, standards or protocols for the leading NCDs and their main risk factors.
- Improve the availability of essential medicines and technologies for diagnosis and treatment of NCDs, particularly in the public sector.
- Promote the use of cardiovascular disease risk stratification at the primary health care level to improve management of patients with, or at high risk of, cardiovascular disease.

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Annexes

Annex 1. Questionnaire

2019

Country profile of capacity and response to noncommunicable diseases (NCDs)

Modules:

I Public health infrastructure, partnerships and multisectoral collaboration for NCDs and their risk factors

II Status of NCDs-relevant policies, strategies and action plans

III Health information systems, monitoring, surveillance and surveys for NCDs and their risk factors

IV Capacity for NCDs early detection, treatment and care within the health system

Purpose

- The purpose of this survey is to gauge your country's capacity for responding to noncommunicable diseases (NCDs). It will guide Member States, WHO regional offices and WHO headquarters in planning future actions and technical assistance required to address NCDs and their risk factors. This is also the basis for ongoing assessment of changes in country capacity and response. Responses to the survey enable reporting against NCD Global action plan process indicators and UN High-level Meeting national commitment progress indicators.
- The information collected through this survey will also be used to produce some of the indicators that Member States have agreed to monitor and will be held accountable to the United Nations General Assembly and the World Health Assembly.
- Use of standardized questions allows comparisons of country capacities and responses. We have divided this survey into four modules, assessing key aspects of NCD prevention and control.
- The four main types of NCDs are cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes. The survey also captures information on policies related to other NCDs of importance to countries such as oral health.
- The main risk factors for NCDs are harmful use of alcohol, tobacco use, unhealthy diet and physical inactivity. Capacity assessment related to some specific risk factors is also captured in other topic-specific assessments such as tobacco, alcohol and nutrition, which may be used to cross-validate some survey items.

Process

- The survey is intended to assess national level capacity and response to NCDs. If responsibility for health is decentralized to subnational levels, it can also be applied at subnational levels.
- A focal point or survey coordinator will need to be identified to coordinate and ensure survey completion. However, to provide a complete response, a group of respondents with expertise in the topics covered in the modules will be needed. Please use the table provided to indicate the names and titles of all of those who have completed the survey and which sections they have completed. Please also add any additional information on other sources you may have consulted in developing your response.
- Please note that while there is space to indicate "Don't know" for most questions, there should be very few of these. If someone is filling in numerous "Don't knows", another person who is more aware of this information should be found to complete this section.
- To validate responses, documentation will be requested for affirmative responses throughout the questionnaire. Please make every effort to provide electronic copies of the requested documentation. If documentation has been provided previously and is available in the NCD Document Repository (https://extranet.who.int/ncdccs/documents) please indicate this. If you are unable to provide electronic copies through the provided links, please ask your regional focal point for an alternative means to submit documentation.

Information on those who completed the survey

Who is the focal point for completion of this survey?

Name:

Position:

Contact Information:

Sections completed:

Name and contact information of others completing survey	Sections completed

Additional information sources consulted:

I: Public health infrastructure, partnerships and multisectoral collaboration for NCDs and their risk factors

This module includes questions related to the presence of a unit or division in the ministry of health dedicated to NCDs and risk factors, staff and funding. It also includes an assessment of the existence of fiscal interventions as incentives to influence health behaviour and/or to raise funds for health-related activities. Finally, it assesses the existence of a formal multisectoral mechanism to coordinate NCD-related activities in sectors outside of health.

1) Is there a unit/branch/department in the ministry of health or equivalent with responsibility for NCDs and their risk factors?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 2

1a) Please indicate the number of full-time-equivalent technical/professional staff in the unit/branch/department.

◯ 0 ◯ 1 ◯ 2–5
◯ 6–10 ◯ 11 or more ◯ Don't know

1b) Are there technical/professional staff in the unit/branch/ department dedicating a significant proportion of their time to:

i.	Harmful use of alcohol	◯ Yes	◯ No	◯ Don't Know
ii.	Unhealthy diet	◯ Yes	◯ No	◯ Don't Know
iii.	Physical inactivity	◯ Yes	◯ No	◯ Don't Know
iv.	Tobacco use	◯ Yes	◯ No	◯ Don't Know
v.	Cancer	◯ Yes	◯ No	◯ Don't Know
vi.	Cardiovascular diseases	◯ Yes	◯ No	◯ Don't Know
vii.	Chronic respiratory diseases	◯ Yes	◯ No	◯ Don't Know
viii.	Diabetes	◯ Yes	◯ No	◯ Don't Know
ix.	Oral diseases	◯ Yes	◯ No	◯ Don't Know

2) Is there dedicated funding allocated in the government budget for the following NCD and risk factor activities/functions?

i.	Primary prevention	◯ Yes	◯ No	◯ Don't Know
ii.	Health promotion	◯ Yes	◯ No	◯ Don't Know
iii.	Early detection/screening	◯ Yes	◯ No	◯ Don't Know
iv.	Health care and treatment	◯ Yes	◯ No	◯ Don't Know
v.	Surveillance, monitoring and evaluation	◯ Yes	◯ No	◯ Don't Know
vi.	Capacity building	◯ Yes	◯ No	◯ Don't Know
vii.	Palliative care	◯ Yes	◯ No	◯ Don't Know
viii.	Research	◯ Yes	◯ No	◯ Don't Know

If at least one Yes to above questions:

2a) What are the major sources of regular funding for NCDs and their risk factors? More than one can apply, rank order them where:
1 = Largest source; 2 = Next largest; 3 = Others

◯ General government revenues
◯ Health insurance
◯ International / national donors
◯ Earmarked taxes on alcohol, tobacco, etc.
◯ Other (specify) .....
◯ Don't Know

3) Is your country implementing any of the following fiscal interventions? (for taxes, please respond "Yes" only if excise taxes and/or special VAT/sales tax rates are applied)

Taxation on alcohol	◯ Yes	◯ No	◯ Don't Know
Taxation on tobacco (excise and non-excise taxes)	◯ Yes	◯ No	◯ Don't Know
Taxation on sugar sweetened beverages	◯ Yes	◯ No	◯ Don't Know
Taxation on foods high in fat, sugar or salt	◯ Yes	◯ No	◯ Don't Know
Price subsidies for healthy foods	◯ Yes	◯ No	◯ Don't Know
Taxation incentives to promote physical activity	◯ Yes	◯ No	◯ Don't Know
Others (specify)	◯ Yes	◯ No	◯ Don't Know

If Yes to at least one of the above, other than price subsidies:

3a) Are any of these funds earmarked for health promotion or health service provision?

◯ Yes ◯ No ◯ Don't Know

4) Is there a national multisectoral commission, agency or mechanism to oversee NCD engagement, policy coherence and accountability of sectors beyond health?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to MODULE II

4a) Indicate its stage:

◯ Operational
◯ Under development
◯ Not in effect
◯ Don't know

If "Operational" or "Under development":

4b) Please provide name: .....

4c) Please provide year of establishment: .....

4d) Who leads or chairs the commission/agency/mechanisms (provide name):

.....

4e) Which of the following are members?

(Check all that apply)

◯ Other Government Ministries (non-health, e.g. ministry of sport, ministry of education)
◯ United Nations Agencies
◯ Other international institutions
◯ Academia (including research centres)
◯ Nongovernmental organizations/community-based organizations/civil society
◯ Private sector
◯ Other (specify) .....
◯ Don't know

IF "Private sector" is one of the members:

4f) Is the tobacco industry's participation in the consultations and decision-making process excluded from the national multisectoral commission?

◯ Yes ◯ No ◯ Don't Know

II: Status of NCD-relevant policies, strategies and action plans

This module includes questions relating to the presence of policies, strategies or action plans – the questions differentiate between integrated policies/strategies/action plans that address several risk factors or diseases, and policies/strategies/action plans that address a specific disease or risk factor. Additional questions address the existence of specific policies related to the cost-effective interventions for NCDs.

1a) Are NCDs included in the outcomes or outputs of your current national health plan?

◯ Yes ◯ No ◯ Don't Know

1b) Are NCDs included in the outcomes or outputs of your current national development agenda?

◯ Yes ◯ No ◯ Don't Know

2) Are there a set of time-bound national targets for NCDs based on the 9 voluntary global targets from the WHO *Global Monitoring Framework for NCDs*?

◯ Yes ◯ No ◯ Don't Know

If Yes:

2a) Are there a set of national indicators for these targets based on the indicators from the WHO *Global Monitoring Framework for NCDs*?

◯ Yes ◯ No ◯ Don't Know

II a: Integrated policies, strategies and action plans

3) Does your country have a national NCDs policy, strategy or action plan which integrates several NCDs and their risk factors?

Please note that this may be a stand-alone NCD policy, strategy or action plan, or a national health policy, strategy or action plan where NCDs comprise a significant proportion of the document. Also note that disease- and risk-factor-specific policies, strategies and action plans will be reported in other questions later in this module.

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 4

If yes:

Is it multisectoral?	◯ Yes	◯ No	◯ Don't Know
Is it multi-stakeholder?	◯ Yes	◯ No	◯ Don't Know

Please provide the following information about the policy, strategy or action plan:

3a) Title: .....

3b) Does it address one or more of the following major risk factors?

Harmful use of alcohol	◯ Yes	◯ No	◯ Don't Know
Unhealthy diet	◯ Yes	◯ No	◯ Don't Know
Physical inactivity	◯ Yes	◯ No	◯ Don't Know
Tobacco	◯ Yes	◯ No	◯ Don't Know

3c) Does it include early detection, treatment and care for:

Cancer	◯ Yes	◯ No	◯ Don't Know
Cardiovascular diseases	◯ Yes	◯ No	◯ Don't Know
Chronic respiratory diseases	◯ Yes	◯ No	◯ Don't Know
Diabetes	◯ Yes	◯ No	◯ Don't Know

3d) Does it include palliative care for patients with NCDs?

◯ Yes ◯ No ◯ Don't Know

3e) Indicate its stage:

◯ Operational
◯ Under development
◯ Not in effect
◯ Don't know

If "operational":

3e-i) What was the first year of implementation? .....

3e-ii) What year will it expire? .....

II b: Policies, strategies and action plans for specific key NCDs

The questions in this subsection only refer to policies, strategies and action plans that are specific to key NCDs. If your integrated policy, strategy or action plan addresses the NCD, you do not need to re-enter that information.

4) Is there a policy, strategy, or action plan for cardiovascular diseases in your country?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 5

If yes:

4a) Write the title .....

4b) Indicate its stage:

◯ Operational
◯ Under development
◯ Not in effect
◯ Don't know

If "operational":

4b-i) What was the first year of implementation? .....

4b-ii) What year will it expire? .....

5) Is there a policy, strategy, or action plan for cancer or some particular cancer types in your country?

◯ Yes for all cancers or cancer in general
◯ Yes but only for specific cancers (specify: .....)
◯ No
◯ Don't Know

IF NO: Go to Question 6

If yes, provide the following for the general cancer policy/strategy/action plan or, if there isn't one, for the most important specific cancer policy/strategy/action plan:

5a) Write the title .....

5b) Indicate its stage:

- ◯ Operational
- ◯ Under development
- ◯ Not in effect
- ◯ Don't know

If "operational":

5b-i) What was the first year of implementation? .....

5b-ii) What year will it expire? .....

6) Is there a policy, strategy, or action plan for diabetes in your country?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 7

If yes:

6a) Write the title .....

6b) Indicate its stage:

- ◯ Operational
- ◯ Under development
- ◯ Not in effect
- ◯ Don't know

If "operational":

6b-i) What was the first year of implementation? .....

6b-ii) What year will it expire? .....

7) Is there a policy, strategy, or action plan for chronic respiratory diseases in your country?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 8

If yes:

7a) Write the title .....

7b) Indicate its stage:

◯ Operational
◯ Under development
◯ Not in effect
◯ Don't know

If "operational":

7b-i) What was the first year of implementation? .....

7b-ii) What year will it expire? .....

8) Is there a policy, strategy, or action plan for oral health in your country?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 9

If yes:

8a) Write the title .....

8b) Indicate its stage:

◯ Operational
◯ Under development
◯ Not in effect
◯ Don't know

If "operational":

8b-i) What was the first year of implementation? .....

8b-ii) What year will it expire? .....

9) Is there a policy, strategy or action plan for another NCD of importance in your country?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 10

If yes:

Please provide the following information about the policy / strategy / action plan. If there is more than one, please provide the information for the most recent one.

Please specify which NCD: .....

9a) Write the title .....

9b) Indicate its stage:

◯ Operational
◯ Under development
◯ Not in effect
◯ Don't know

If "operational":

9b-i) What was the first year of implementation? .....

9b-ii) What year will it expire? .....

II c: Policies, action plans and strategies for NCD risk factors

The questions in this subsection only refer to policies, strategies and action plans that are specific to an NCD risk factor. If your integrated policy, strategy or action plan addresses the risk factor, you do not need to re-enter that information.

10) Is there a policy, strategy or action plan for reducing the harmful use of alcohol in your country?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 11

If yes:

10a) Write the title .....

10b) Indicate its stage:

◯ Operational
◯ Under development
◯ Not in effect
◯ Don't know

If "operational":

10b-i) What was the first year of implementation? .....

10b-ii) What year will it expire? .....

11) Is there a policy, strategy, or action plan for reducing overweight /obesity in your country?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 12

If yes:

11a) Write the title .....

11b) Indicate its stage:

- ◯ Operational
- ◯ Under development
- ◯ Not in effect
- ◯ Don't know

If "operational":

11b-i) What was the first year of implementation? .....

11b-ii) What year will it expire? .....

12) Is there a policy, strategy, or action plan for reducing physical inactivity and/or promoting physical activity in your country?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 13

If yes:

12a) Write the title .....

12b) Indicate its stage:

- ◯ Operational
- ◯ Under development
- ◯ Not in effect
- ◯ Don't know

If "operational":

12b-i) What was the first year of implementation? .....

12b-ii) What year will it expire? .....

13) Are there national guidelines which provide recommended levels of physical activity for the population or a specific segment of the population?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 14

If yes:

13a) Are there guidelines specifically addressing any of the following age groups:

Children under 5 years	◯ Yes	◯ No	◯ Don't Know
Children and adolescents (ages 5–19)	◯ Yes	◯ No	◯ Don't Know
Adults	◯ Yes	◯ No	◯ Don't Know
Older adults	◯ Yes	◯ No	◯ Don't Know

14) Is there a policy, strategy, or action plan for reducing unhealthy diet related to NCDs and/or promoting a healthy diet in your country?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 15

If yes:

14a) Write the title .....

14b) Indicate its stage:

◯ Operational
◯ Under development
◯ Not in effect
◯ Don't know

If "operational":

14b-i) What was the first year of implementation? .....

14b-ii) What year will it expire? .....

15) Are there national food-based dietary guidelines for the population or a specific segment of the population?

◯ Yes ◯ No ◯ Don't Know

16) Is there a policy, strategy or action plan to decrease tobacco use in your country?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 17

If yes:

16a) Write the title .....

16b) Indicate its stage:

- ◯ Operational
- ◯ Under development
- ◯ Not in effect
- ◯ Don't know

If "operational":

16b-i) What was the first year of implementation? .....

16b-ii) What year will it expire? .....

II d: Selected cost-effective policies for NCDs and related risk factors

NB: Only selected policies are captured here as information on some policy measures, e.g. for tobacco and alcohol, are included in other assessment tools.

17) Is there a policy and/or plan on NCD-related research including community-based research and evaluation of the impact of interventions and policies?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 16

If Yes:

17a) Indicate its stage:

- ◯ Operational
- ◯ Under development
- ◯ Not in effect
- ◯ Don't know

18) Is there a national network for NCD-related research including community-based research and evaluation of the impact of interventions and policies?

◯ Yes ◯ No ◯ Don't Know

19) Is your country implementing any policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fatty acids, *trans*-fatty acids, free sugars or salt?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 20

If yes:

19a) Are the policies:

- ◯ Voluntary
- ◯ Mandatory
- ◯ Don't know

19b) Who is responsible for overseeing enforcement and complaints?

- ◯ Government
- ◯ Food Industry
- ◯ Independent regulator
- ◯ Other, please specify: .....

19c) Do they include steps taken to address the effects of cross-border marketing of food and non-alcoholic beverages on children?

◯ Yes ◯ No ◯ Don't Know

19c-i) If yes, please provide details: .....

20) Is your country implementing any policies on front-of-pack labelling to identify foods high in saturated fatty acids, *trans*-fatty acids, free sugars or salt?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 21

If yes:

20a) Are the policies:

- ◯ Voluntary
- ◯ Mandatory
- ◯ Don't know

20b) Who is responsible for overseeing enforcement and complaints?

- ◯ Government
- ◯ Food Industry
- ◯ Other, please specify: .....

21) Is your country implementing any national policies to reduce population saturated fatty acid intake?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 22

21a) If Yes, are the policies:

◯ Voluntary
◯ Mandatory
◯ Don't know

22) Is your country implementing any national policies to eliminate industrially produced *trans*-fatty acids (i.e. partially hydrogenated oils) in the food supply?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 23

22a) If Yes, are the policies:

◯ Voluntary
◯ Mandatory
◯ Don't know

23) Is your country implementing any policies to reduce population salt consumption?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 24

If Yes:

23a) Are these targeted at:

Product reformulation by industry across the food supply	◯ Yes	◯ No	◯ Don't Know
Regulation of salt content of food served in specific settings such as hospitals, schools, workplaces	◯ Yes	◯ No	◯ Don't Know
Public awareness programme	◯ Yes	◯ No	◯ Don't Know
Front-of-pack nutrition labelling	◯ Yes	◯ No	◯ Don't Know

23b) If Yes to "Product reformulation..." or "Regulation of salt/sodium content..." is the policy:

- ◯ Voluntary
- ◯ Mandatory
- ◯ Don't know

24) Has your country implemented any national public education and awareness campaign on diet within the past 2 years?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 25

24a) If Yes, please provide details of the public education and awareness campaign(s):

.....

25) Has your country implemented any national public education and awareness campaign on physical activity within the past 2 years?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 26

If yes:

25a) Does the campaign integrate with community-based programmes?

◯ Yes ◯ No ◯ Don't Know

25b) Is the campaign supported by any environmental changes to enable physical activity?

◯ Yes ◯ No ◯ Don't Know

25c) Does the campaign address any of the social, environmental and economic benefits of physical activity, in addition to the health benefits?

◯ Yes ◯ No ◯ Don't Know

25d) Please provide details of the public education and awareness campaign(s):

.....

26) Has your country implemented any national or subnational mass participation events to encourage participation by the general public in free opportunities for physical activity within the past 2 years? ***Examples of mass participation events include national walk-to-school days/weeks; other free events; cycling, yoga, tai chi, dance. Note this does NOT include hosting of major competitive sporting events like marathons, which require paid participation.***

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 27

If yes:

26a) Please provide details of the event(s):

.....

27) Has your country implemented any national, NCD-related mHealth initiatives, such as tobacco cessation, hypertension management, cervical cancer screening awareness, promotion of physical activity, within the past 2 years?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to MODULE III

If yes:

26a) Please provide details of the mHealth initiative(s):

.....

III: Health information systems, monitoring, surveillance and surveys for NCDs and their risk factors

The questions in this module assess surveillance relating to the mortality, morbidity and risk factor reporting systems of each country and whether NCD mortality, morbidity and risk factor data were included in their national health reporting systems.

1) In your country, who has responsibility for surveillance of NCDs and their risk factors?

- ◯ An office/department/administrative division within the MOH exclusively dedicated to NCD surveillance.
- ◯ An office/department/ administrative division within the MOH not exclusively dedicated to NCD surveillance
- ◯ Responsibility is shared across several offices/departments/administrative divisions within the MOH
- ◯ Coordination is by an external agency, such as a nongovernmental organization or statistical organization
- ◯ No one has this responsibility
- ◯ Don't know

III a: Data included in the national health information system

(National health information system refers to the annual or regular reporting system of the national statistical office or ministry of health).

2) Does your country have a system for collecting mortality data by cause of death on a routine basis?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 3

If yes:

2a) Is there a civil/vital registration system?

◯ Yes ◯ No ◯ Don't Know

2b) Is there a sample registration system?

◯ Yes ◯ No ◯ Don't Know

2c) What is the latest year for which data are available?

.....

2d) What percentage of total deaths in the entire country are officially registered in the system? (National estimated completeness)

◯ < 20%
◯ 20–49%
◯ 50–74%
◯ 75% or more
◯ Don't know

If estimated completeness is known:

2d-i) Specify source of estimated completeness: .....

2d-ii) If applicable, specify any population/area not covered by your registration system:

..... ◯ Not applicable ◯ Don't Know

3) Does your country have a cancer registry?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 4

IF YES:

3a) Are the data collected population-based, hospital-based, or other?

- ◯ Population-based
- ◯ Hospital-based
- ◯ Other (specify: _____)
- ◯ Don't know

3b) Is the coverage of the registry national or subnational?

- ◯ National (covers the whole population of the country)
- ◯ Subnational (covers only the population of a defined region, not the whole country)
- ◯ Don't know

3c) What is the latest year for which data are available?

.....

4) Does your country have a diabetes registry?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 5

IF YES:

4a) Are the data collected population-based, hospital-based, or other?

- ◯ Population-based
- ◯ Hospital-based
- ◯ Other (specify: _____)
- ◯ Don't know

4b) Is the coverage of the registry national or subnational?

- ◯ National (covers the whole population of the country)
- ◯ Subnational (covers only the population of a defined region, not the whole country)
- ◯ Don't know

4c) Does the registry include data on any chronic complications which are updated as the patient's complications status changes?

◯ Yes ◯ No ◯ Don't Know

4d) What is the latest year for which data are available?

.....

5) Does your country have a system for recording patient information that includes NCDs status?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 6

IF YES:

5a) Is it an electronic medical records/health records system?

◯ Yes ◯ No ◯ Don't Know

5b) What is the coverage of the system?

◯ National (covers the whole population of the country)

◯ Subnational (covers only the population of a defined region or regions or only certain segments of the population)

◯ Don't know

6) Has your country conducted a survey of facilities to assess service availability and readiness for NCDs?

◯ Yes ◯ No ◯ Don't Know

IF NO: Go to Question 7

6a) Year of last survey .....

6b) Coverage of last survey:

◯ National

◯ Subnational

◯ Don't know

III b: Risk factor surveillance

	7a) Harmful alcohol use	7b) Unhealthy diet	7c) Physical inactivity	7d) Tobacco use
7) Have population-based surveys of risk factors (may be a single risk factor or multiple) been conducted in your country for any of the following: **(Please fill in all columns, start in the first row, going left to right, and then continue left to right across the second row.)** **For the questions on surveys on adolescents or children, please include here only surveys specifically targeting adolescents or children (i.e. do not repeat adult surveys that may have covered part of the adolescent or child age range).**	◯ Yes ◯ No ◯ Don't know **IF NO:** **Go to next column.** **IF YES:** **i) Was there a survey on adolescents?** ◯ Yes ◯ No ◯ Don't know **IF YES:** i-1) Was it: ◯ National ◯ Subnational ◯ Don't know i-2) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know i-3) When was the last survey conducted? (give year) ..... **ii) Was there a survey on adults?** ◯ Yes ◯ No ◯ Don't know **IF YES:** ii-1) Was it: ◯ National ◯ Subnational ◯ Don't know	◯ Yes ◯ No ◯ Don't know **IF NO:** **Go to next column.** **IF YES:** **i) Was there a survey on adolescents?** ◯ Yes ◯ No ◯ Don't know **IF YES:** i-1) Was it: ◯ 24-hour recall ◯ Food frequency ◯ Other ◯ Don't know i-2) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know i-3) Was it: ◯ National ◯ Subnational ◯ Don't know i-4) When was the last survey conducted? (give year) ..... **ii) Was there a survey on adults?** ◯ Yes ◯ No ◯ Don't know	◯ Yes ◯ No ◯ Don't know **IF NO:** **Go to next column.** **IF YES:** **i) Was there a survey on children?** ◯ Yes ◯ No ◯ Don't know **IF YES:** i-1) Was it: ◯ Measured ◯ Self-reported ◯ Don't know i-2) Was it: ◯ National ◯ Subnational ◯ Don't know i-3) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know i-4) When was the last survey conducted? (give year) ..... **ii) Was there a survey on adolescents?** ◯ Yes ◯ No ◯ Don't know **IF YES:** ii-1) Was it: ◯ Measured ◯ Self-reported ◯ Don't know	◯ Yes ◯ No ◯ Don't know **IF NO:** **Go to next column.** **IF YES:** **i) Was there a survey on adolescents?** ◯ Yes ◯ No ◯ Don't know **IF YES:** i-1) Was it: ◯ National ◯ Subnational ◯ Don't know i-2) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know i-3) When was the last survey conducted? (give year) ..... **ii) Was there a survey on adults?** ◯ Yes ◯ No ◯ Don't know **IF YES:** ii-1) Was it: ◯ National ◯ Subnational ◯ Don't know

(continued)

	7a) Harmful alcohol use	7b) Unhealthy diet	7c) Physical inactivity	7d) Tobacco use
	ii-2) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know ii-3) When was the last survey conducted? (give year)	**IF YES:** ii-1) Was it: ◯ 24-hour recall ◯ Food frequency ◯ Other ◯ Don't know ii-2) Was it: ◯ National ◯ Subnational ◯ Don't know ii-3) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know ii-4) When was the last survey conducted? (give year)	ii-2) Was it: ◯ National ◯ Subnational ◯ Don't know ii-3) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know ii-4) When was the last survey conducted? (give year) ..... **ii) Was there a survey on adults?** ◯ Yes ◯ No ◯ Don't know **IF YES:** iii-1) Was it: ◯ Measured ◯ Self-reported ◯ Don't know iii-2) Did it assess physical activity for work/in the household, for transport and during leisure time? ◯ Yes ◯ No ◯ Don't know iii-3) Was it: ◯ National ◯ Subnational ◯ Don't know iii-4) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know iii-5) When was the last survey conducted? (give year)	**ii) Was there a survey on adults?** ◯ Yes ◯ No ◯ Don't know **IF YES:** ii-1) Was it: ◯ National ◯ Subnational ◯ Don't know ii-2) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know ii-3) When was the last survey conducted? (give year) .....

7e) Raised blood glucose/ diabetes

○ Yes ○ No
○ Don't know

IF NO: Go to next column.

IF YES:
i) Was it:

○ Measured
○ Self-reported
○ Don't know

ii) Was it:

○ National
○ Subnational
○ Don't know

iii) How often is the survey conducted?

○ Ad hoc
○ Every 1 to 2 years
○ Every 3 to 5 years
○ Other
○ Don't know

iv) When was the last survey conducted? (give year)

....

7f) Raised total cholesterol

○ Yes ○ No
○ Don't know

IF NO: Go to next column.

IF YES:
i) Was it:

○ Measured
○ Self-reported
○ Don't know

ii) Was it:

○ National
○ Subnational
○ Don't know

iii) How often is the survey conducted?

○ Ad hoc
○ Every 1 to 2 years
○ Every 3 to 5 years
○ Other
○ Don't know

iv) When was the last survey conducted? (give year)

....

7g) Raised blood pressure/ hypertension

○ Yes ○ No
○ Don't know

IF NO: Go to next column.

IF YES:
i) Was it:

○ Measured
○ Self-reported
○ Don't know

ii) Was it:

○ National
○ Subnational
○ Don't know

iii) How often is the survey conducted?

○ Ad hoc
○ Every 1 to 2 years
○ Every 3 to 5 years
○ Other
○ Don't know

iv) When was the last survey conducted? (give year)

....

7h) Overweight and obesity

○ Yes ○ No
○ Don't know

IF NO: Go to next column.

IF YES:
i) Was there a survey on children?

○ Yes ○ No
○ Don't know

IF YES:
i-1) Was it:

○ Measured
○ Self-reported
○ Don't know

i-2) Was it:

○ National
○ Subnational
○ Don't know

i-3) How often is the survey conducted?

○ Ad hoc
○ Every 1 to 2 years
○ Every 3 to 5 years
○ Other
○ Don't know

i-4) When was the last survey conducted? (give year)

....

ii) Was there a survey on adolescents?

○ Yes ○ No
○ Don't know

IF YES:
ii-1) Was it:

○ Measured
○ Self-reported
○ Don't know

7i) Salt / sodium intake

○ Yes ○ No
○ Don't know

IF NO: Go to MODULE IV.

IF YES:
i) Was it:

○ Measured by 24-hr urine collection
○ Measured by 12-hr urine collection
○ Measured by spot urine collection
○ Measured by combination of methods
○ Self-reported
○ Don't know

ii) Was it:

○ National
○ Subnational
○ Don't know

iii) How often is the survey conducted?

○ Ad hoc
○ Every 1 to 2 years
○ Every 3 to 5 years
○ Other
○ Don't know

iv) When was the last survey conducted? (give year)

....

(continued)

7e) Raised blood glucose/ diabetes	7f) Raised total cholesterol	7g) Raised blood pressure/ hypertension	7h) Overweight and obesity	7i) Salt / sodium intake
			ii-3) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know ii-4) When was the last survey conducted? (give year) ..... **iii) Was there a survey on adults?** ◯ Yes ◯ No ◯ Don't know **IF YES:** iii-1) Was it: ◯ Measured ◯ Self-reported ◯ Don't know iii-2) Was it: ◯ National ◯ Subnational ◯ Don't know iii-3) How often is the survey conducted? ◯ Ad hoc ◯ Every 1 to 2 years ◯ Every 3 to 5 years ◯ Other ◯ Don't know iii-4) When was the last survey conducted? (give year)	

IV: Capacity for NCD early detection, treatment and care within the health system

The questions in this module assess the health care systems' capacity related to NCD early detection, treatment and care within the health care sector. Specific questions focus on availability of guidelines or protocols to treat major NCDs, and the tests, procedures and equipment related to NCDs within the health care system. It also assesses the availability of palliative care services for NCDs.

1) Please indicate whether evidence-based national guidelines/protocols/standards are available for the management (diagnosis and treatment) of each of the major NCDs through a primary-care approach recognized/approved by government or competent authorities. Where guidelines/protocols/standards are available, please indicate their implementation status, when they were last updated and whether they contain standard criteria for the referral of patients from primary care to a higher level of care (secondary/tertiary).

	Cardiovascular disease	Diabetes	Cancer	Chronic respiratory disease
i) Are they available?	◯ Yes (specify topics covered) ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes (specify cancer types) ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know
ii) Do they include drug- and dose-specific protocols?	◯ Yes ◯ No ◯ Don't Know If Yes: If there are multiple guidelines, specify for which conditions: _____	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know If Yes: If there are multiple guidelines, specify for which conditions: _____	◯ Yes ◯ No ◯ Don't Know If Yes: If there are multiple guidelines, specify for which conditions: _____
iii) Are they being used in at least 50% of health care facilities?	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know
iv) When were they last updated?				
v) Do they include referral criteria?	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know

1b) Please indicate whether evidence-based national guidelines/protocols/standards are available for the management of each of the following NCD risk factors through a primary-care approach recognized/approved by government or competent authorities.

	Alcohol dependence	Tobacco dependence	Overweight/ obesity	Physical inactivity
i) Are they available?	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know
ii) Are they being used in at least 50% of health care facilities	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know
iii) When were they last updated?	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know
v) Do they include referral criteria?	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know	◯ Yes ◯ No ◯ Don't Know

2) Indicate the availability* of the following basic technologies for early detection, diagnosis/monitoring of NCDs in the primary-care facilities of the public and private health sector where: generally available = 1; generally not available = 2; don't know = 3.

** Generally available: available in 50% or more health care facilities; generally not available: in less than 50% of health care facilities.*

	Availability in the primary care facilities of the public health sector (1, 2 or 3)	Availability in the primary care facilities of the private health sector (1, 2 or 3)
Overweight and obesity		
2a) Measuring of weight		
2b) Measuring of height		
Diabetes mellitus		
2c) Blood glucose measurement		
2d) Oral glucose tolerance test		
2e) HbA1c test		
2f) Dilated fundus examination		
2g) Foot vibration perception by tuning fork 2h) Foot vascular status by Doppler		
2h) Urine strips for glucose and ketone measurement		
Cardiovascular disease		
2i) Blood pressure measurement		
2j) Total cholesterol measurement		
2k) Urine strips for albumin assay		
Asthma and chronic obstructive pulmonary disease		
2l) Peak flow measurement spirometry		

3) Please indicate if there is a national screening programme targeting the general population for the following cancers and, if yes, provide details.

Cancers	Initial screening method (indicate only one, the most widely used)	Population targeted by the programme	Type of programme	Screening coverage
Breast ◯ Yes ◯ No ◯ Don't know If NO: Go to next row	◯ Clinical breast exam ◯ Mammography screening ◯ Don't know	Women aged ..... to ..... Other, specify:..... ◯ Don't know	◯ Organized population-based screening ◯ Opportunistic screening ◯ Don't Know	◯ Less than 10% ◯ 10% to 50% ◯ More than 50% but less than 70% ◯ 70% or more ◯ Don't know
Cervix ◯ Yes ◯ No ◯ Don't know If NO: Go to next row	◯ Visual inspection ◯ PAP smear ◯ HPV test ◯ Don't know	Women aged ..... to ..... Other, specify:..... ◯ Don't know	◯ Organized population-based screening ◯ Opportunistic screening ◯ Don't Know	◯ Less than 10% ◯ 10% to 50% ◯ More than 50% but less than 70% ◯ 70% or more ◯ Don't know
Colon ◯ Yes ◯ No ◯ Don't know If NO: Go to next row	◯ Faecal test ◯ Colonoscopy/ sigmoidoscopy ◯ Don't know	People aged ..... to ..... Other, specify:..... ◯ Don't know	◯ Organized population-based screening ◯ Opportunistic screening ◯ Don't Know	◯ Less than 10% ◯ 10% to 50% ◯ More than 50% but less than 70% ◯ 70% or more ◯ Don't know
Other cancer type(s) Specify: :..... ◯ Yes ◯ No ◯ Don't know				

4) Please indicate if early detection of the following cancers by means of rapid identification of the first symptoms is integrated into primary health care services and if there is a clearly defined referral system from primary care to secondary/tertiary care for suspect cases (in low- and middle-income countries this set of measures may be designated as an "early diagnosis" programme):

	Breast	Cervix	Colon	Cancers in children	Other cancer types (specify: _____)
Program/guidelines to strengthen early diagnosis of first symptoms at primary health care level	◯ Yes ◯ No ◯ Don't know	◯ Yes ◯ No ◯ Don't know	◯ Yes ◯ No ◯ Don't know	◯ Yes (please specify types of cancer) _____ ◯ No ◯ Don't know	◯ Yes ◯ No ◯ Don't know
Clearly defined referral system from primary care to secondary and tertiary care	◯ Yes ◯ No ◯ Don't know	◯ Yes ◯ No ◯ Don't know	◯ Yes ◯ No ◯ Don't know	◯ Yes ◯ No ◯ Don't know	◯ Yes ◯ No ◯ Don't know

5) Is HPV vaccination included in the national immunization schedule?

◯ Yes ◯ No ◯ Don't know

If NO: Go to Question 6.

5a) What was the HPV vaccine coverage (last dose) in the last calendar year?

◯ Less than 10%
◯ 10% to 50%
◯ More than 50% but less than 80%
◯ 80% or more
◯ Don't know

6) Describe the availability* of the medicines below in the primary care facilities of the public health sector, where: 1 = generally available; 2 = generally not available; 3 = don't know.

Generally available: in 50% or more pharmacies; generally not available: in less than 50% of pharmacies.

Generic drug name	Availability*
6a) Insulin	
6b) Aspirin (75/100 mg)	
6c) Metformin	
6d) Thiazide diuretics	
6e) ACE inhibitors	
6f) Angiotensin II receptor blockers (ARBs)	
6g) Calcium channel blockers	
6h) Beta blockers	
6i) Statins	
6j) Oral morphine	
6k) Steroid inhaler	
6l) Bronchodilator	
6m) Sulphonylurea(s)	
6n) Benzathine penicillin injection	
6o) Nicotine replacement therapy	

7) Indicate the availability* of the following procedures for treating NCDs in the publicly funded health system, where: 1 = generally available; 2 = generally not available; 3 = don't know.

** Generally available: reaches 50% or more patients in need; generally not available: reaches less than 50% of patients in need.*

Procedure name	Availability*
7a) Retinal photocoagulation	
7b) Renal replacement therapy by dialysis	
7c) Renal replacement by transplantation	
7d) Coronary bypass	
7e) Coronary stenting	
7f) Thrombolytic therapy (streptokinase) for acute myocardial infarction	
7g) Bone marrow transplantation	

8) Detail the availability of cancer diagnosis and treatment services in the public sector.

** Generally available: reaches 50% or more patients in need; generally not available: reaches less than 50% of patients in need .*

Service	Availability*
Cancer centres or cancer departments at tertiary level	◯ Generally available ◯ Generally not available ◯ Don't know
Pathology services (laboratories)	◯ Generally available ◯ Generally not available ◯ Don't know
Cancer surgery	◯ Generally available ◯ Generally not available ◯ Don't know
Chemotherapy	◯ Generally available ◯ Generally not available ◯ Don't know
Radiotherapy	◯ Generally available ◯ Generally not available ◯ Don't know

9) How many dedicated cancer centres are there in the country?

Dedicated cancer centres are defined as providing multidisciplinary care including pathology, surgery, systematic therapy and radiotherapy. If you don't know the exact number, please give an estimated range.

Number of public laboratories: ..... ◯ Don't know

Number of private laboratories: ..... ◯ Don't know

10) Indicate the availability* of palliative care for patients with NCDs in the public health system:

** Generally available: reaches 50% or more patients in need; generally not available: reaches less than 50% of patients in need.*

10a) In primary health care facilities:

- ◯ Generally available
- ◯ Generally not available
- ◯ Don't know

10b) In community or home-based care:

- ◯ Generally available
- ◯ Generally not available
- ◯ Don't know

11) What proportion of primary health care facilities are offering cardiovascular risk stratification for the management of patients at high risk of heart attack and stroke?

- ◯ None
- ◯ Less than 25%
- ◯ 25% to 50%
- ◯ More than 50%
- ◯ Don't know

If more than none:

11a) Which CVD risk scoring chart is used?

- ◯ WHO/ISH risk prediction charts
- ◯ Others (specify .....)
- ◯ Don't know

12) Indicate the availability* of services for stroke in the public health system:

** Generally available: reaches 50% or more patients in need; generally not available: reaches less than 50% of patients in need.*

12a) Provision of care for acute stroke:

- ◯ Generally available
- ◯ Generally not available
- ◯ Don't know

12b) Rehabilitation for stroke patients:

- ◯ Generally available
- ◯ Generally not available
- ◯ Don't know

13) Is there a register of patients who have had rheumatic fever and rheumatic heart disease?

◯ Yes ◯ No ◯ Don't know

If Yes::

13a) Are there systems for follow-up/recall to deliver long-term penicillin prophylaxis?

◯ Yes ◯ No ◯ Don't know

Annex 2. Glossary of terms used in the survey

Academia: educational institutions, especially those for higher education.

Broadcast media: media that is broadcast to the public through radio and television.

Cancer: a generic term for a large group of diseases that can affect any part of the body. Other terms used are malignant tumours and neoplasms. One defining feature of cancer is the rapid creation of abnormal cells that grow beyond their usual boundaries, and which can then invade adjoining parts of the body and spread to other organs.

Cancer registry: a systematic collection of data about cancer cases in a certain region or a certain hospital. The first aim is to count cancer cases to get an idea of the magnitude of the problem. WHO advises national coverage by population-based registry in small countries only.

Capacity-building: the development of knowledge, skills, commitment, structures, systems and leadership to enable effective action.

Cardiovascular diseases: a group of disorders of the heart and blood vessels that includes coronary heart disease, cerebrovascular disease, peripheral arterial disease, rheumatic heart disease, congenital heart disease, deep vein thrombosis and pulmonary embolism.

Cardiovascular risk assessment: use of risk prediction charts to indicate the risk of a fatal or non-fatal major cardiovascular event in the next 5 to 10 years. Based on the assessment people can be stratified into different levels of risk, which will help in management and follow up.

Chronic respiratory diseases: diseases of the airways and other structures of the lung. Some of the most common are: asthma, chronic obstructive pulmonary disease, occupational lung diseases and pulmonary hypertension.

Civil registration: the system by which a government records the vital events of its citizens and residents, such as births, deaths and marital status and cause of death.

Collaboration: a recognized relationship between different groups with a defined purpose.

Community: a specific group of people, often living in a defined geographical area, who share a common culture, values and norms, and are arranged in a social structure according to relationships which the community has developed over a period of time. Members of a community exhibit some awareness of their identity as a group, and share common needs and a commitment to meeting them.

Cross-border marketing: marketing originating in one country that crosses national borders through broadcast media and Internet, print media, sponsorship of events and programmes or any other media or communication channel. It includes both in-flowing and out-flowing cross-border marketing.

Diabetes: a disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces.

Early detection/screening: measures performed to identify individuals who have early stages of a disease (with apparent symptoms in the case of early detection and without in the case of screening).

Earmarked taxes: taxes that are collected and used for a specific purpose.

Electronic health record: an in-house electronic version of the traditional paper charts that collect, store and display patient information.

Fiscal interventions: measures taken by the government such as taxes and subsidies.

Free sugars: monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates.

Front-of-pack labelling (FOPL): nutrition labelling systems that are presented on the front of food packages (in the principal field of vision) and can be applied across the packaged retail food supply. FOPL comprises an underpinning nutrient profile model that considers the overall nutrition quality of the product and/or the nutrients of concern for NCDs; and presents simple, often graphic information on the nutrient content and/or nutritional quality of products to complement the more detailed nutrient declarations usually provided on the back of food packages.

There are two major categories of FOPL, including interpretive and non-interpretive systems. Non-interpretive nutrient-based systems provide a summary of nutrient information, but no advice on the overall nutritional value of the food to assist with purchasing decisions. Interpretive systems may provide no nutrient

information but only at-a-glance guidance on the relative healthiness of a product.

Full immunization coverage: the proportion of people in the population targeted by the programme who actually received the full dose(s) of vaccine.

General government revenue: the money received from taxation, and other sources, such as privatization of government assets, to help finance expenditures.

Health: a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity. A resource for everyday life that allows people to lead an individually, socially and economically productive life. A positive concept emphasizing social and personal resources as well as physical capabilities.

Health behaviour: any activity undertaken by an individual, regardless of actual or perceived health status, for the purpose of promoting, protecting or maintaining health, whether or not such behaviour is objectively effective towards that end.

Health care and treatment: the diagnosis and treatment of diseases.

Health care facility: facilities which provide health services. They may include mobile clinics, pharmacies, laboratories, primary health care clinics, specialty clinics, and private and faith-based establishments.

Health promotion: the process of enabling people to increase control over, and to improve their health.

Healthy diet: a healthy diet throughout the life-course helps prevent malnutrition in all its forms as well as a range of NCDs and conditions. The exact make-up of a healthy, balanced diet will vary depending on the individual needs (e.g. age, gender, lifestyle, degree of physical activity). For adults, a healthy diet contains fruits, vegetables, legumes, nuts and whole grains and should be limited in free sugars, salt, total fat, saturated fats and free of industrial trans-fats.

International donors: organizations that extend across national boundaries and which provide funds for projects of a development nature.

Intervention: any measure whose purpose is to improve health or alter the course of disease.

Legislation: a law or laws that have been enacted by the governing bodies in a country.

Marketing: any form of commercial communication or message that is designed to, or has the effect of, increasing the recognition, appeal and/or consumption of particular products and services. It comprises anything that acts to advertise or otherwise promote a product or service.

mHealth: the use of mobile and wireless technologies to support the achievement of health objectives.

Multisectoral: involving different sectors, such as health, agriculture, education, finance, infrastructure, transport, trade, etc.

Multisectoral collaboration: a recognized relationship between part or parts of different sectors of society (such as ministries of health or education, agencies, nongovernmental agencies, the private for-profit sector and community representation) which has been formed to take action to achieve health outcomes in a way that is more effective, efficient or sustainable than might be achieved by the health sector acting alone.

Multi-stakeholder: involving stakeholders from across the public sector, civil society, nongovernmental organizations and the private sector.

National cancer screening programme: a government-endorsed programme where screening is offered. nongovernmental organization-led programmes or national recommendations to go for screening at one's own cost, do not qualify as national screening programmes.

National focal point, unit or department:

i. ***National focal point:*** the person responsible for the prevention and control of chronic diseases in a ministry of health or national institute.

ii. ***Unit or department:*** a unit or department with responsibility for NCD disease prevention and control in a ministry of health or national institute.

National health reporting system, survey and surveillance:

i. ***National health reporting system:*** the process by which a ministry of health produces annual health reports that summarize data on, for example, national health human resources, population demographics, health expenditures and health indicators such as mortality and morbidity. Includes the process of collecting data from various health information sources, e.g. disease registries, hospital admission or discharge data.

ii. ***National survey:*** a fixed or unfixed time-interval survey on the main chronic diseases, or major risk factors common to chronic diseases.

iii. ***Surveillance:*** the systematic collection of data (through survey or registration) on risk factors, chronic diseases and their determinants for continuous analysis, interpretation and feedback.

National integrated action plan: a concerted approach to addressing a multiplicity of issues within a chronic disease prevention and health promotion framework, targeting the major risk factors common to the main

chronic diseases, including the integration of primary, secondary and tertiary prevention, health promotion and disease prevention programmes across sectors and disciplines.

National policy, strategy and action plan:

i. ***Policy:*** a specific official decision or set of decisions designed to carry out a course of action endorsed by a political body, including a set of goals, priorities and main directions for attaining these goals. The policy document may include a strategy to give effect to the policy.

ii. ***Strategy:*** a long-term plan designed to achieve a particular goal.

iii. ***Action plan:*** a scheme or course of action that may correspond to a policy or strategy, with defined activities indicating who does what (type of activities and people responsible for implementation), when (time frame), how and with what resources, to accomplish an objective.

National protocols/guidelines/standards for chronic diseases and conditions: a recommended evidence-based course of action to prevent a chronic disease or condition, or to treat or manage a chronic disease or condition aiming to prevent complications, improve outcomes and quality of life of patients.

Noncommunicable diseases (NCDs): the four main types of NCDs are cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes.

NCDs prevention and control: all activities related to surveillance, prevention and management of the chronic NCDs.

Not in effect: any policy, strategy or plan of action that has been previously developed and is no longer under development, but for various reasons is not being implemented.

Nutrition labelling: a description intended to inform consumers of the nutritional properties of food. Nutrition labelling consists of two components: (a) nutrient declaration; (b) supplementary nutrition information (e.g. front-of-pack labelling).

Operational: a policy, strategy or plan of action that is being used and implemented in the country, and has resources and funding available to implement it. Also applies to a multisectoral commission/mechanism that is functional and meets on a regular basis.

Palliative care: an approach that improves the quality of life of patients (adults and children) and their families who are facing problems associated with life-threatening illness. It prevents and relieves suffering through the early identification, correct assessment and treatment of pain and other problems, whether physical, psychosocial or spiritual.

Partnership for health: an agreement between two or more partners to work cooperatively towards a set of shared health outcomes.

Price subsidies: economic benefit provided by the government (such as a tax allowance or duty rebate) to keep the price of healthy foods low.

Primary health care: refers to core functions of a nation's health system. Encompassing front-line health service delivery (primary care) as well as health system structure; governance and financing; the intersectoral policy environment; and social determinants of health, primary health care provides essential health interventions according to a community's needs and expectations.

Primary prevention: measures directed towards preventing the initial occurrence of a disease or disorder.

Print media: printed materials such as magazines, newspapers and billboards used to communicate with the public.

Product reformulation by industry: the process of changing the composition of processed foods to be healthier and to reduce the salt content.

Public awareness programme: a comprehensive effort that includes multiple components (messaging, grassroots outreach, media relations, government affairs, budget, etc.) to help increase public understanding about the importance of an issue.

Public health sector: publicly funded health care sector.

Rehabilitation: a set of measures that assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments.

Risk factors associated with NCDs: the four main risk factors for NCDs are tobacco use, harmful use of alcohol, unhealthy diet and low levels of physical activity.

Sample registration system: a method and procedure for estimating vital statistics in national and regional populations by intensively registering and verifying vital events in population samples. For example, in India more than 4000 rural and 2000 urban sample units, covering a total of more than 6 million people (i.e. less than 1% of the total national population) are included in a sample registration system that provides a reasonably reliable picture of the national pattern of vital events at a cost that is feasible and reasonable.

Saturated fats: fats found in animal products, including meat and whole milk dairy products, as well as certain plant oils such as palm, palm kernel and coconut oils.

Screening: measures performed across an apparently healthy population to identify individuals who are at high risk or in the early stages of disease, but do not yet have symptoms.

Screening coverage: the proportion of people in the population targeted by the programme who actually received screening in the time frame defined by the programme. For example, if a country recommends mammography screening every 2 years for women aged 50 to 60. The screening coverage is the number of women aged 50 to 60 who benefited from mammography thanks to the programme in the past 2 years, divided by the total number of women aged 50 to 60 in the country.

Self-regulation: in this context refers to a situation in which a group or private sector entity governs or policies itself without outside assistance or influence.

Sugar-sweetened beverages: defined as all types of beverages containing free sugars and these include carbonated or non-carbonated soft drinks, fruit/vegetable juices and drinks, liquid and powder concentrates, flavoured water, energy and sports drinks, ready-to-drink tea, ready-to-drink coffee and flavoured milk drinks. Free sugars include monosaccharide and disaccharides added to foods and beverages by the manufacturer, cook or consumer; and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates.

Target: a specific aim to be achieved, that should be time bound, and define a "desired", "promised", "minimum" or "aspirational" level of achievement.

Taxation incentives to promote physical activity: involves removing the tax (or a portion of the tax) to promote increased use of goods or services to encourage physical activity.

Trans-fatty acids (trans fats): unsaturated fatty acids with at least one double carbon–carbon bond in the trans configuration. Trans-fatty acids can be produced industrially by the partial hydrogenation of vegetable and fish oils, but also occur naturally in meat and dairy products from ruminant animals (e.g. cattle, sheep, goats, camels). Industrially produced trans-fatty acids can be found in baked and fried foods, pre-packaged snacks and food, and partially hydrogenated cooking oils and fats which are often used at home, in restaurants, or in the informal food sector (such as street vendors) and are the predominant source of trans-fatty acid intake in many populations.

Under development: still being developed or finalized and not yet being implemented in the country.

VAT/sales tax: Value-added tax (VAT) is a "multi-stage" tax on all consumer goods and services applied proportionally to the price the consumer pays for a product. Although manufacturers and wholesalers also participate in the administration and payment of the tax all along the manufacturing/distribution chain, they are all reimbursed through a tax credit system, so that the only entity who pays in the end is the final consumer. Most countries that impose VAT do so on a base that includes any excise tax and customs duty. For example, VAT representing 10% of the retail price. Some countries, however, impose sales taxes instead. Unlike VAT, sales taxes are levied at the point of retail on the total value of goods and services purchased.

This regional report provides the results of the 2019 noncommunicable disease (NCD) country capacity survey in the Eastern Mediterranean Region. It offers an overview of the current capacities of the countries of the Region to prevent and control NCDs, particularly in regard to the four key areas of: governance; prevention and reduction of risk factors; surveillance; monitoring and evaluation; and health care. The report aims to inform the work of decision-makers in ministries of health and other sectors related to health, as well as NCD managers, physicians, clinicians, researchers, the media and others.