

02

# HEALTH SITUATION IN THE EUROPEAN REGION



## Introduction

The European Region has passed the half-way point of the Health 2020 implementation period. In this chapter we assess the extent to which progress has been made towards the targets as defined in the Health 2020 monitoring framework. It provides an overview of progress made by the Member States towards reaching the Health 2020 targets (1) at the regional level in relation to the agreed 2010 baseline. The Health 2020 monitoring framework (Annex 1) is the backbone of this report. It has three main components: burden of disease and risk factors; healthy people, well-being and determinants; and processes, governance and health systems (1). Each area is linked to one or more targets (six in total). There are 19 core indicators and 18 additional indicators by which to measure progress on the six targets. The narratives, information and data illustrations in this chapter are organized numerically according to the Health 2020 main targets and indicators. This introduction provides a very brief summary of progress made on the Health 2020 targets but a more detailed overview is provided by target in the following sections of this chapter.

Among the many monitoring frameworks in operation in the European Region, there are three main frameworks which overlap to a significant degree: the 17 sustainable development goals (SDGs) which are part of the comprehensive Agenda 2030 (2) framing global sustainable development; the Global action plan for the prevention and control of non-communicable diseases 2013–2020 (3); and the European regional health policy framework Health 2020 (4, 5).

Measuring the impact of these commitments constitutes a vital part of the evidence-informed health policy-making cycle in the Region. It reflects the importance of setting goals and using

monitoring frameworks to focus the generation of evidence, and enables measurement of change in health and well-being and impact of policy over time. In order to address concerns raised by Member States on the high burden of reporting requirements to WHO and other international bodies, the Member States at the 67th session of the Regional Committee for Europe (RC67) agreed to adopt a joint monitoring framework (JMF) for reporting on indicators for the SDGs, Health 2020 and the Global action plan for the prevention and control of noncommunicable diseases, through the endorsement of Resolution EUR/RC67/R3 (6) in September 2017. The Division of Information, Evidence, Research and Innovation at the WHO Regional Office for Europe therefore established an expert group to propose a common set of indicators for the JMF. A total of 40 indicators were recommended by the group to go forward for a detailed web-based consultation with Member States in the spring of 2018. At the time of writing, this proposal is still in consultation with the Member States and will be proposed for adoption at the 68th Regional Committee for Europe in September 2018.

If adopted, the JMF – with a common set of indicators for the SDGs, Health 2020 and the Global monitoring framework on noncommunicable diseases (NCDs) – will help to reduce the burden of reporting and streamline data collection in the Region. In addition, the JMF will help Member States prioritize data collection efforts and align their national SDG monitoring targets with international monitoring. If adopted, the JMF will also enhance the coverage of international reporting across public health domains.

The Health 2020 framework is the central health policy for the Region, and emphasizes

a whole-of-government, whole-of-society and life-course approach to policy-making. It also calls for the measurement of these new concepts, including community resilience, empowerment and a life-course approach. A rapid and broad uptake of Health 2020 in Member States had already been observed and reported in the previous European Health Reports for 2012 and 2015, just a few years after its inception at the 62nd session of the Regional Committee in 2012 (4).

Over the past few years, the Region has maintained this progress yet is still facing a number of challenges. Premature mortality from the four major NCDs, as well as all-cause (all ages) mortality, including mortality from all external causes, continues to decline in the Region. At the same time, child vaccination rates remain at a high level. However, lifestyle-related indicators such as tobacco smoking rates, alcohol consumption levels, and the high prevalence of overweight and obesity are still presenting major challenges for a number of countries in the Region. There was considerable variation in country rates with large differences in the prevalence of overweight and obesity among adolescents, and across gender. Similarly, there are wide variations between the sexes and between the Member States in premature mortality from the four major NCDs, all-cause (all ages) mortality rates, mortality rates from all external causes and tobacco smoking rates.

Average life expectancy at birth in the European Region increased from 76.7 years in 2010 to 77.9 years in 2015 which is an average annual increase of 0.24 years. The gaps in life expectancy between the sexes and between countries are decreasing. However, the difference in life expectancy between the countries with the highest and lowest life expectancy at birth is still more than 10 years. Therefore, continued monitoring is required to ensure that the consistent improvement of current trends is maintained.

The number of countries that have implemented a policy or strategy to address inequality or social determinants increased from 29 in 2010 to 42 of the 53 countries in the Region in 2016. At the same time, the Region has experienced a significant reduction in infant mortality rates. In 2015, the regional average infant mortality was 6.8 infant deaths per 1000 live births. The Region has made some improvements in the proportion of children of official primary school age that are not enrolled in school, which decreased from 2.6% in 2010 to 2.3% in 2015, yet there is wide variation between countries.

Differences between countries in unemployment rates decreased, but there is still a wide variation. The regional unemployment rate slightly decreased from 8.9% in 2010 to 8.7% in 2015. Similarly, the regional average income inequality (Gini coefficient) has slightly decreased over the last decade from 34.3 in 2004 to 33.7 in 2015.

Considering well-being indicators, the Region has an overall life satisfaction score (subjective well-being indicator) of 6. Some countries have relatively low overall average self-reported life satisfaction scores of 5 or below and other countries, with the highest scores in the world, reach 7.6. Concerning objective well-being indicators, there is a high level of social connectedness in the Region: 81% of the population aged 50 years and above reported that they had social support through family or friends in 2015. However, there is a large variation in reported values that reflects a gradient of social connectedness across the Member States. In contrast, the percentage of people aged 65 years and above who live alone has increased from 29.9% in 2010 to 30.9% in 2016. In 2015, more than 90% of the European population had access to improved sanitation facilities and piped drinking water. Yet there were some inequalities in access between the urban and rural areas, ranging from 93.1% to 100% for

populations in urban areas and from 66.7% to 100% for populations in rural areas.

In relation to indicators on universal health coverage and the right to health, the WHO European regional average total health expenditure as a percentage of gross domestic product (GDP) steadily increased from 6.8% in 2000 to 8.5% in 2009 but then fell slightly and remained static at 8.3% in 2010 and 8.2% in 2014. At the same time, there was an increase in the proportion of private household out-of-pocket expenditure on health between 2010 (25.5%) and 2014 (26.6%).

The regional average maternal mortality rate decreased from 13 deaths per 100 000 live births in 2010 to 11 deaths per 100 000 live births in 2015. Similarly positive, the treatment success rate for new cases of pulmonary tuberculosis (TB) in the Region slightly increased from 74% in 2010 to 77% in 2015. There were, however, large differences in

treatment success rates between the Member States, which ranged from 10% to a maximum value of 100% in 2015.

By 2016, the Region had already made considerable progress in relation to Health 2020 Target 6, with 88.4% of the countries (38 out of the 43 countries in the Region that responded) reporting that they had set targets for health and well-being.

Health 2020 supports the SDGs for health with the social determinants of health and illness addressed through the targets and indicators. Similarly, prevention and control of NCDs and their risk factors are at the heart of Health 2020 policy. Accordingly, by embracing Health 2020 principles and targets, the Member States have put themselves in a strong position to meet both the SDGs of Agenda 2030 and the goals of the Global action plan for the prevention and control of NCDs 2013–2020.

## Target 1. Reduce premature mortality in Europe by 2020

### Introduction

Since the beginning of the millennium, Europe has maintained a consistent reduction in the risk of premature death from the four major NCDs (cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases) among people aged 30 to 70 years. Similar progress has also been made in relation to all-cause mortality rates. In fact, a 2017 review of progress has established that the WHO European Region is likely to achieve SDG Target 3.4 earlier than 2030, and will most probably exceed it significantly (7).

The most recent data, reported for 2014, reveal that Europe has been making clear progress over recent decades in reducing premature mortality from NCDs. Yet, there is a need to sustain this progress in order to reach the target. Similar progress was made in all-cause (all ages) mortality rates but there are large inequalities in mortality rates in Europe between the sexes, and between countries.

Tobacco smoking rates present a challenge for Europe as rates for the adult population are the highest of the six WHO regions though the figures varied between countries and age groups. Similarly,

despite the decreasing trend of alcohol consumption in the Region, levels of consumption among the adult population are still the highest in the world which poses a threat to population health. Differences in the levels of alcohol consumption between countries remain large.

The prevalence of overweight and obesity among adults in the European Region is high and on the rise. In most countries in the Region, the prevalence of overweight was higher among men, while the prevalence of obesity was higher among women. On the other hand, the reported prevalence of over-

weight and obesity among adolescents varied between genders, countries and age groups.

Child immunization coverage has increased since the year 2000. Nevertheless, vigilance is needed as differences between countries persist. In 2015, several countries still had vaccination rates below 90%.

There is a steady decline in the average regional mortality rates from all external causes and injuries. However, there were very wide inequalities in the death rates between the sexes and between countries.

### Box 2.1. Health 2020 Target 1 and indicators

Target 1 “Reduce premature mortality in Europe by 2020” aims to reduce premature mortality related to noncommunicable diseases, selected vaccine-preventable communicable diseases and external causes.

This Health 2020 target has two quantifications, each measured with one or more core indicators:

- A 1.5% relative annual reduction in overall (four causes combined) premature mortality from cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases by 2020.
- Achieved and sustained elimination of selected vaccine-preventable diseases (poliomyelitis (polio), measles and rubella) and prevention of congenital rubella syndrome.

The core indicators are:

1. Age-standardized overall premature mortality rate (from 30 to under 70 years old) for four major noncommunicable diseases.
2. Age-standardized prevalence of current (includes both daily and non-daily or occasional) tobacco use among people aged 18 years and over.
3. Total (recorded and unrecorded) per capita alcohol consumption among people aged 15 years and over within a calendar year (litres of pure alcohol).

**Box 2.1 contd.**

4. Age-standardized prevalence of overweight and obesity in people aged 18 years and over (defined as a body mass index (BMI)  $\geq 25$  kg/m<sup>2</sup> for overweight and  $\geq 30$  kg/m<sup>2</sup> for obesity).
5. Percentage of children vaccinated against measles (one dose by second birthday), polio (three doses by first birthday) and rubella (one dose by second birthday).
6. Age-standardized mortality rates from all external causes and injuries.

There are a number of additional indicators for this target:

1. Standardized mortality rate from all causes.
2. Prevalence of weekly tobacco use among adolescents.
3. Heavy episodic drinking (60 g of pure alcohol or around six standard alcoholic drinks on at least one occasion weekly) among adolescents.
4. Prevalence of overweight and obesity among adolescents (defined as BMI-for-age value above +1 Z-score and +2 Z-score relative to the 2007 WHO growth reference median, respectively).
5. Age-standardized mortality rates from:
  - a. motor vehicle traffic accidents
  - b. accidental poisoning
  - c. alcohol poisoning
  - d. suicide
  - e. accidental falls
  - f. homicides and assaults.

## Box 2.2. WHO STEPwise approach to Surveillance (STEPS) in Europe

Surveillance of the main noncommunicable diseases (NCDs) and their risk factors is essential for policy-making, including planning, monitoring and assessing the impact of specific interventions and policies to limit the negative effects of NCDs. An important challenge for NCD monitoring is the multiplicity of behavioural and biological risk factors involved and the difficulties for their capture by traditional surveillance systems. The WHO STEPS survey is an internationally comparable, highly standardized, integrated tool that European countries are implementing for the surveillance of NCD risk factors (8). STEPS survey data are helping policy-makers and health professionals to determine the national prevalence and patterns of risk factors, allowing them to define policies and programmes for the prevention and control of NCDs. The repeated utilization of survey data also enables countries to monitor trends and evaluate the effectiveness of public health and health care management interventions. The STEPS survey implementation allows them to further develop their national capacity for NCD monitoring and surveillance, thereby meeting several of the United Nations time-bound targets for improving capacities and response to these diseases.

STEPS collected data, in many cases for the first time, on tobacco use, harmful use of alcohol, unhealthy diet, insufficient physical activity, overweight and obesity, raised blood pressure, raised blood glucose, abnormal blood lipids and average population salt/sodium intake. WHO has sponsored and technically supported the implementation of 11 STEPS surveys in eastern European and central Asian countries. In addition, other countries have plans to complete STEPS survey for the first time, while Azerbaijan, Kyrgyzstan, Republic of Moldova, Turkmenistan and Uzbekistan will conduct a second round in 2017–2018. Overall, by the end of 2018, these surveys will have included more than 40 000 people aged 18 to 69 years, who have been interviewed, physically measured and their blood and urine chemically examined, thus increasing NCD surveillance to cover nearly 200 million people in Europe (approximately 25% of the population of the WHO European Region).

To date, results from these surveys have shown high levels of different behavioural and biological clusters of three to five risk factors among individuals, which tend to be more common among men than women, and increase rapidly with age. These results call for increasing preventive policies and measures to reduce such factors at the population level. In addition, other health care-related results also helped to determine whether people with raised blood pressure, sugar and cholesterol levels know of their situation, are on treatment and effectively managed. In general, less than 30% of those with raised physical and biochemical levels are on specific medication. Furthermore, between 10 and 20% of people aged 40 years and over have a 30% or higher cardio-metabolic risk score of having an acute myocardial infarction or stroke in the next 10 years. However, over half of them are already on treatment or receiving counselling to reduce their risk of such events. This means that health care systems are already working to reduce the occurrence of disease by tacking the needs of high-risk individuals, although there is still room to further improve health care management.

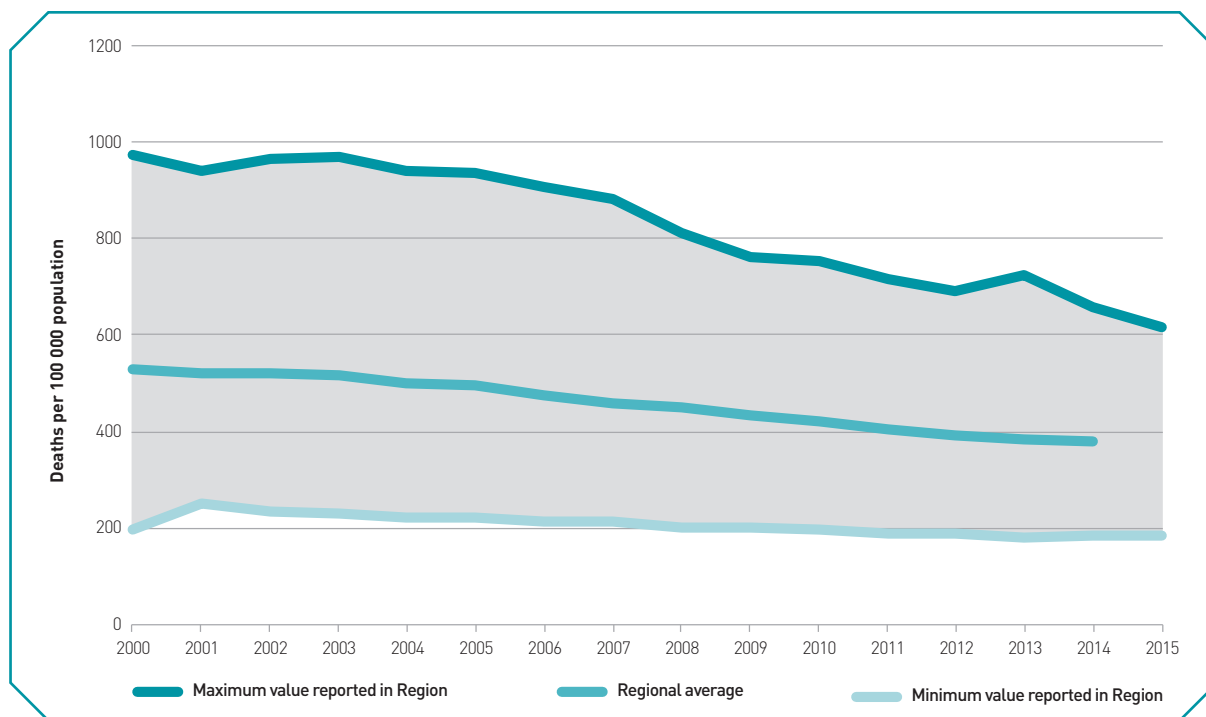
## Summary of progress: Reduction of premature mortality from the four major NCDs

### *Europe needs to sustain progress made so far to reach the target*

In 2014, the age-standardized overall premature mortality rate for the four major NCDs (cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases) in the WHO European Region was 379 per 100 000 (see Fig. 2.1).

This is lower than the reported baseline regional average in 2010 of 421 per 100 000. This represents an average annual reduction of around 2% between 2010 and 2014 which indicates that the WHO European Region is on track to achieve the policy target of a 1.5% relative annual reduction in overall premature mortality from the four major NCDs by 2020. With available data from only 40 countries in the Region for 2014, however, this should be regarded as a preliminary estimate, which will need to be assessed again once the remaining data are received.

**Figure 2.1. Age-standardized overall premature mortality rate (from 30 to under 70 years old) for four major noncommunicable diseases (cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases), deaths per 100 000 population**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

**Note:** The European regional average is calculated for those years when more than 26 countries (50% of 53 Member States) reported in that year. See Annex 2 for detailed notes.



There is a wide variation in the age-standardized overall premature mortality rates for the four major NCDs between the sexes and across the Member States. The average regional rate in 2014 was still much higher for males (524 per 100 000) than for females (255 per 100 000). In the same year, the rates ranged from 211 per 100 000 in the Nordic countries to 618 per 100 000 in the countries of the Commonwealth of Independent States (CIS). These differences are even more pronounced at the country level where there is a very wide variation between the maximum (656 per 100 000) and minimum (183 per 100 000) age-standardized premature mortality rates reported for 2014.

Caution is needed, however, in interpreting trends in the maximum and minimum age-standardized premature mortality rates because these represent the highest and lowest values reported in the Region in a given year. They may be, in some cases, influenced by gaps or delays in national reporting.

### *Continued decline in all-cause mortality rates in Europe with a wide variation between gender and countries*

An additional indicator for this target is the overall age-standardized mortality rates (1) from all causes (all ages). This continued to decline in the WHO European Region, reaching 715 deaths per 100 000 in 2015 (see Fig. 2.2). It is lower than the reported baseline regional average in 2010 of 786 per 100 000, and much lower than the mortality rate reported at the beginning of the millennium (in 2000) of 949 deaths per 100 000 (see Fig. 2.2).

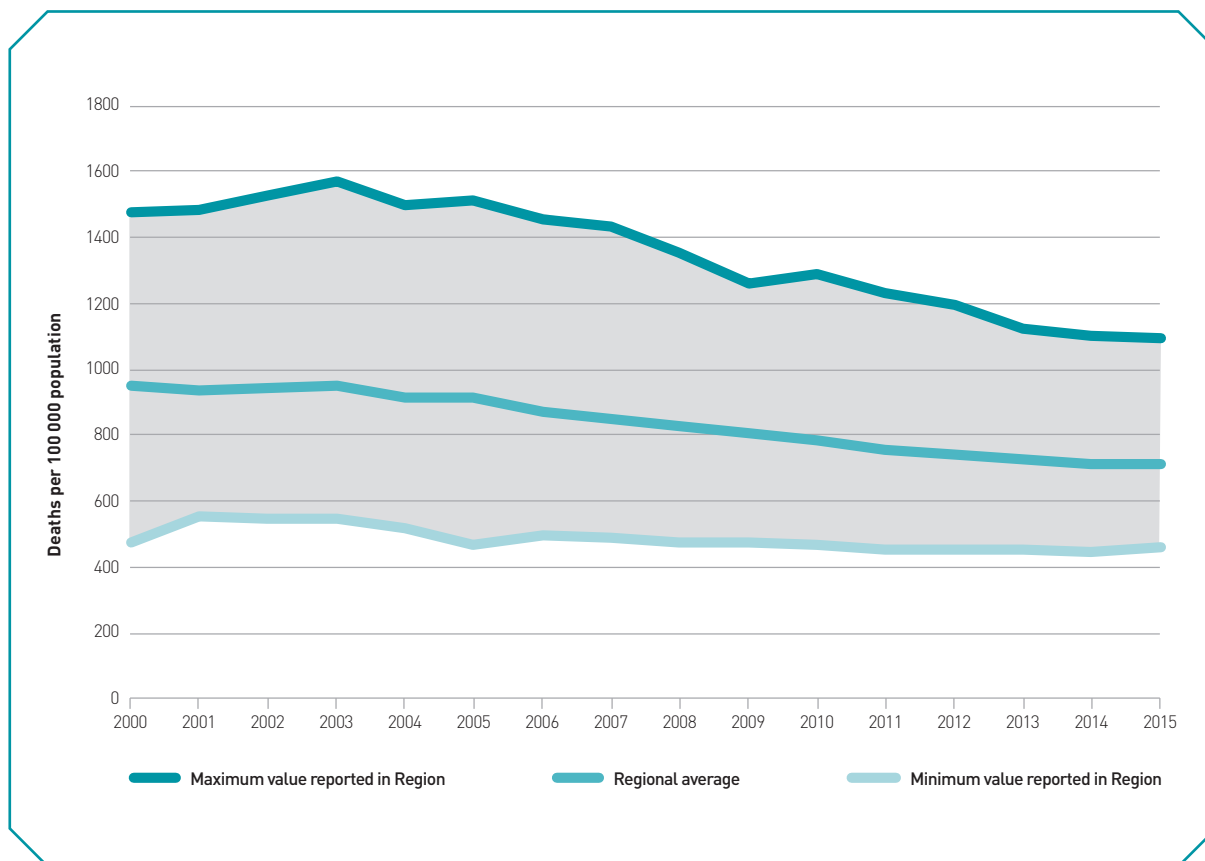
However, as for the previous indicator, complete data are not available as only 27 countries reported data for 2015. Therefore, mortality rates might change once more data are received.

As for premature mortality rates, there is a wide variation in all-cause, all-age mortality rates between the sexes and across the Member States.

The gender gap for this mortality indicator has steadily reduced since 2000. Yet, the latest available data (2015) show that the regional average mortality rate for males (930 per 100 000 population) is still higher than for females (551 per 100 000).

Similarly, there is a very wide variation in age-standardized mortality rates from all causes (all ages) between the Member States. The reported maximum and minimum mortality rates were 1095 per 100 000 and 460 per 100 000 in 2015 (see Fig. 2.2).

**Figure 2.2. Age-standardized mortality rate from all causes, all ages, deaths per 100 000 population**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

**Note:** The European regional average is calculated for those years when more than 26 countries (half of the 53 Member States) reported in that year. See Annex 2 for detailed notes.

### *Tobacco smoking rates present a main challenge for the Region*

A core indicator for this target is age-standardized prevalence of current tobacco use among people aged 18 years and over (1). “Tobacco use” is defined as including cigarettes, cigars, pipes or any other tobacco products. “Current use” includes both daily and non-daily or occasional use. However, the definition applied in the source from

which the data in this subsection were taken is not completely identical (tobacco “smoking” instead of tobacco “use” and in people aged 15 years and over instead of in people aged 18 years and over).

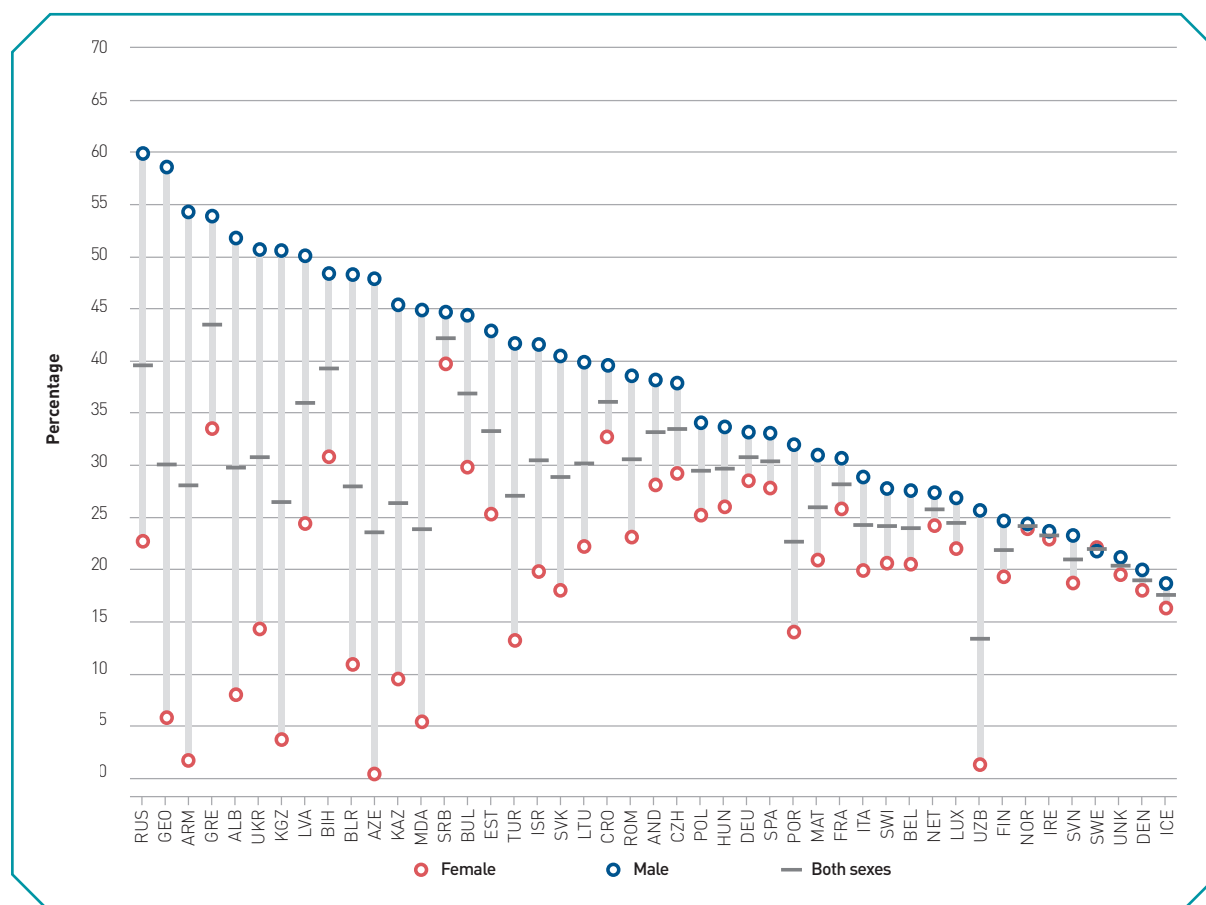
It should be noted that the data presented here are WHO estimates, and not official statistics reported by countries to WHO (10). WHO uses standard methods to calculate estimates to maximize cross-country comparability. These data

may therefore differ from the official statistics of Member States (10).

WHO estimates (based on data from 45 countries) show the age-standardized prevalence of current tobacco smoking among people aged 15 years and above was 29% in 2013.

The prevalence of tobacco smoking in 2013 among males (38.5%) was higher than that for females (20.7%). The highest and lowest national rates for smoking any tobacco product were 59.8% and 18.6% among males and 39.7% and 0.4% among females (see Fig. 2.3). These estimates are the highest of the six Regions of WHO.

**Figure 2.3. Age-standardized prevalence of current tobacco smoking among people aged 15 years and over (WHO estimates) (%), 2013**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

**Note:** Data unavailable for eight countries (AUT, CYP, MON, MNE, SMR, TJK, MKD, TKM).

### *Prevalence of weekly tobacco use among adolescents: Large differences between countries, age groups and gender*

Another additional indicator for this target is the prevalence of weekly tobacco use among adolescents. "Tobacco use" includes cigarettes, cigars, pipes or any other oral tobacco and snuff products (1).

Data from the Health Behaviour in School-aged Children (HBSC) study have been used in this subsection.

According to that study (11), on average, only 1.6% and 0.7% of male and female 11-year-olds in the Region reported in 2014 that they smoked at least once per week. However, the percentages increased to 4.2% and 3.7% among male and female 13-year-olds. These values varied between countries and between age groups (see Fig. 2.4–2.5).

Among 11-year-olds, the highest smoking rates in the Region were 9% for males and 2–3% for females, respectively, in Greenland and Israel (see Fig. 2.4), and the lowest smoking rates were 0% for both sexes in England, Finland, Greece, Iceland, the Netherlands, Scotland, Slovenia, Spain and Sweden (see Fig. 2.4).

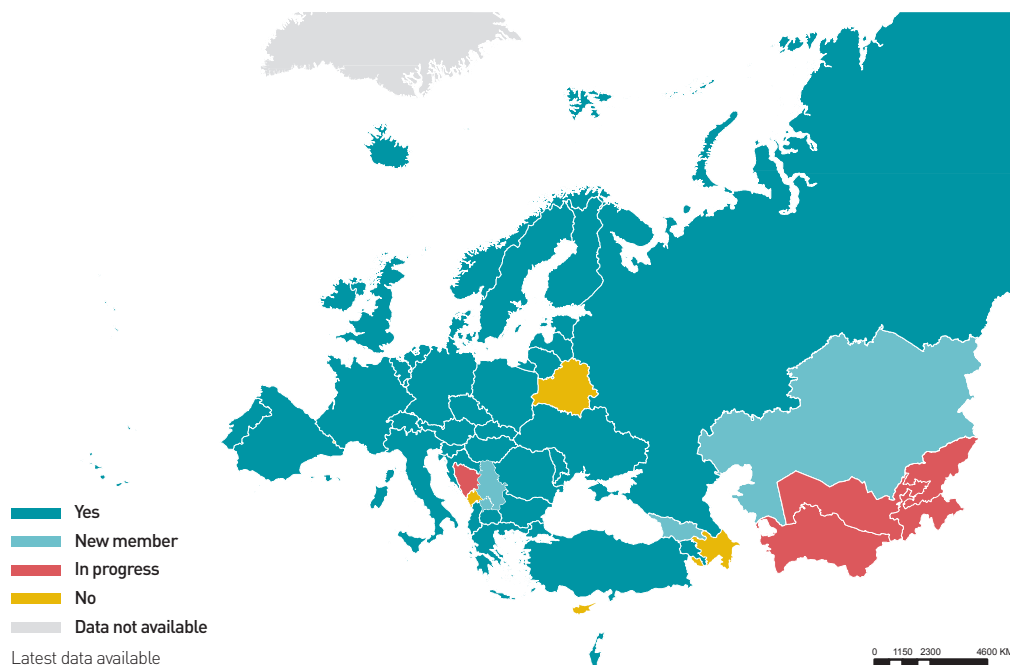
Similarly, for 13-year-olds, the highest smoking rates in the Region were in Greenland: 15% for males and 25% for females (see Fig. 2.5), and the lowest smoking rates were 1% for males in Sweden and 0% for females in Norway and Armenia (see Fig. 2.5).

### Box 2.3. Health Behaviour in School-aged Children study

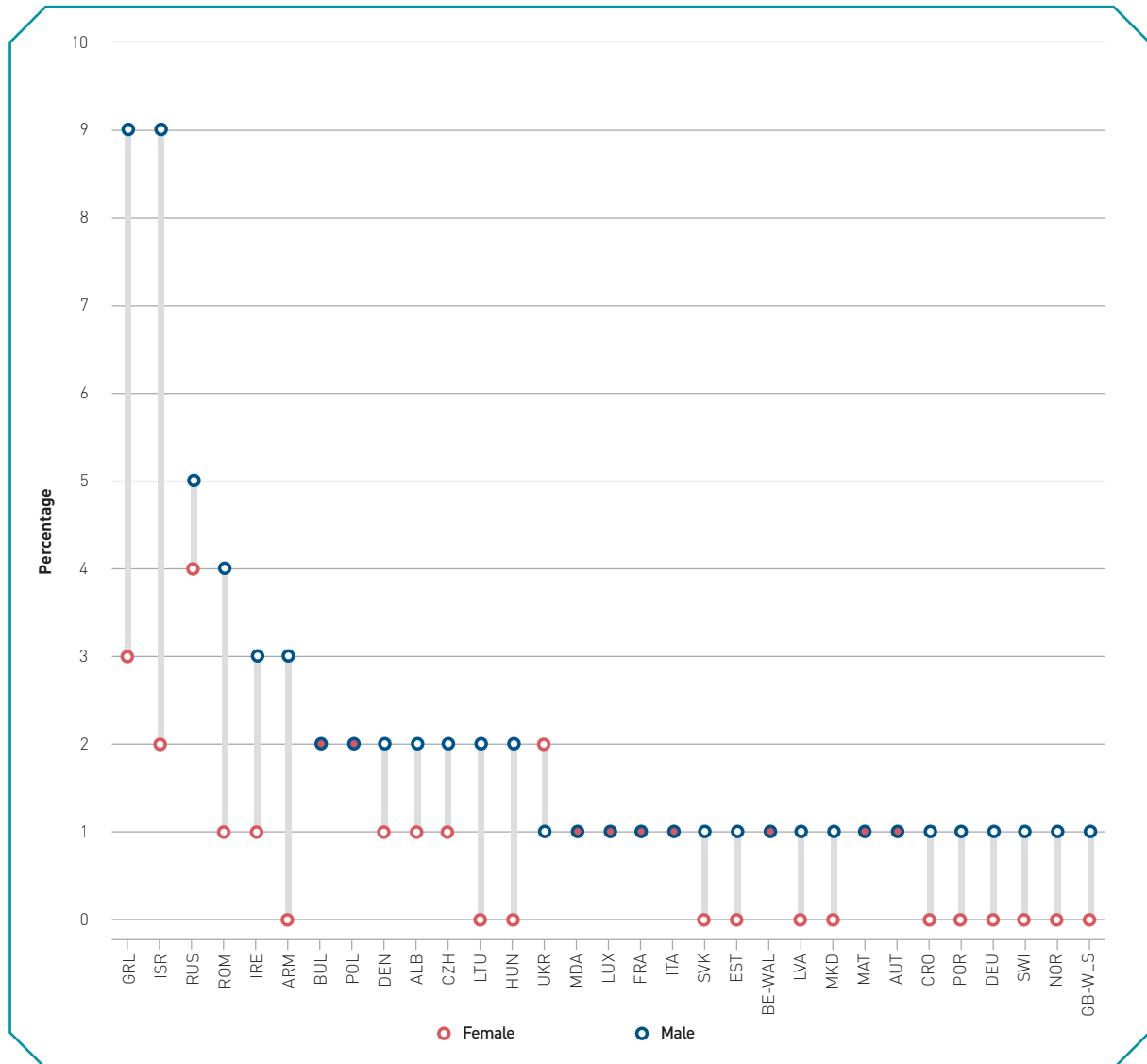
The Health Behaviour in School-aged Children (HBSC) is a WHO collaborative cross-national study which, for over 30 years, has collected data providing insight into European adolescents' well-being, behaviour and social context. The survey began in three countries and is currently conducted in 42 countries, covering four out of every five Member States (79%) in the European Region. The latest international report, launched in 2016, remains the most downloaded report on the Regional Office's website. Data from the HBSC is available via the European Health Information Gateway (<https://gateway.euro.who.int/en/datasets/hbsc/>).

Country orientations organized by the WHO Regional Office for Europe, in coordination with the HBSC study centre, have increased regional momentum by connecting researchers with national stakeholders trying to collect systematic data to inform policies and programmes affecting adolescents. Armenia shared their experience of adopting the survey and their efforts to support adoption of the HBSC in central Asian countries in a recent story published online (13). Five countries are in the process of adopting the HBSC survey.

#### Member countries of Health Behaviour in School-aged Children (HBSC) in 2018

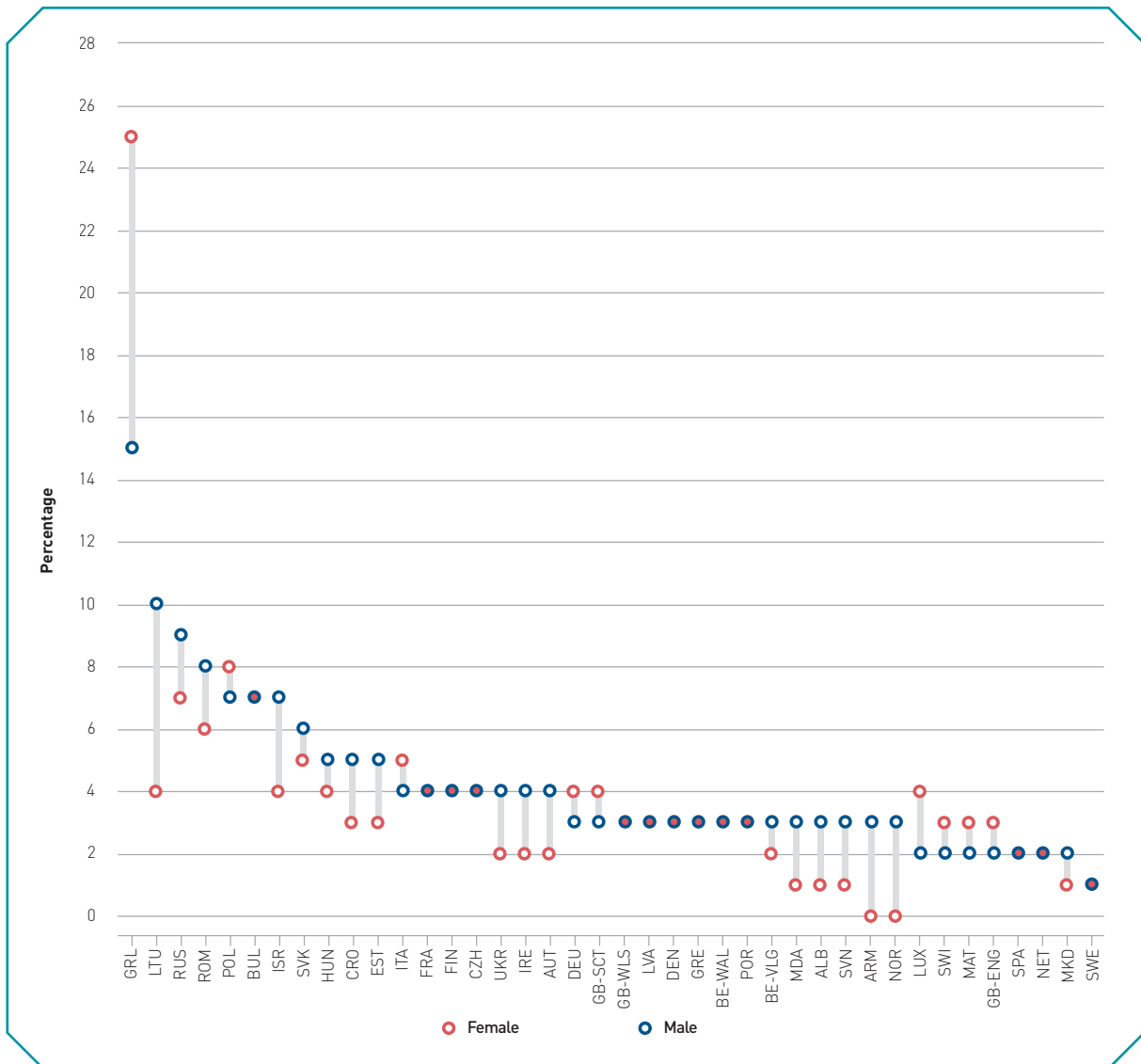


**Figure 2.4. Prevalence of weekly tobacco use among adolescents (proportion of young people who smoke at least once a week), 11 years old, by sex, 2014**



Source: HBSC data on the WHO European Health Information Gateway (12).

**Figure 2.5. Prevalence of weekly tobacco use among adolescents (proportion of young people who smoke at least once a week), 13 years old, by sex, 2014**



Source: HBSC data on the WHO European Health Information Gateway (12).

### Heavy episodic drinking among adolescents varies greatly between countries in the Region

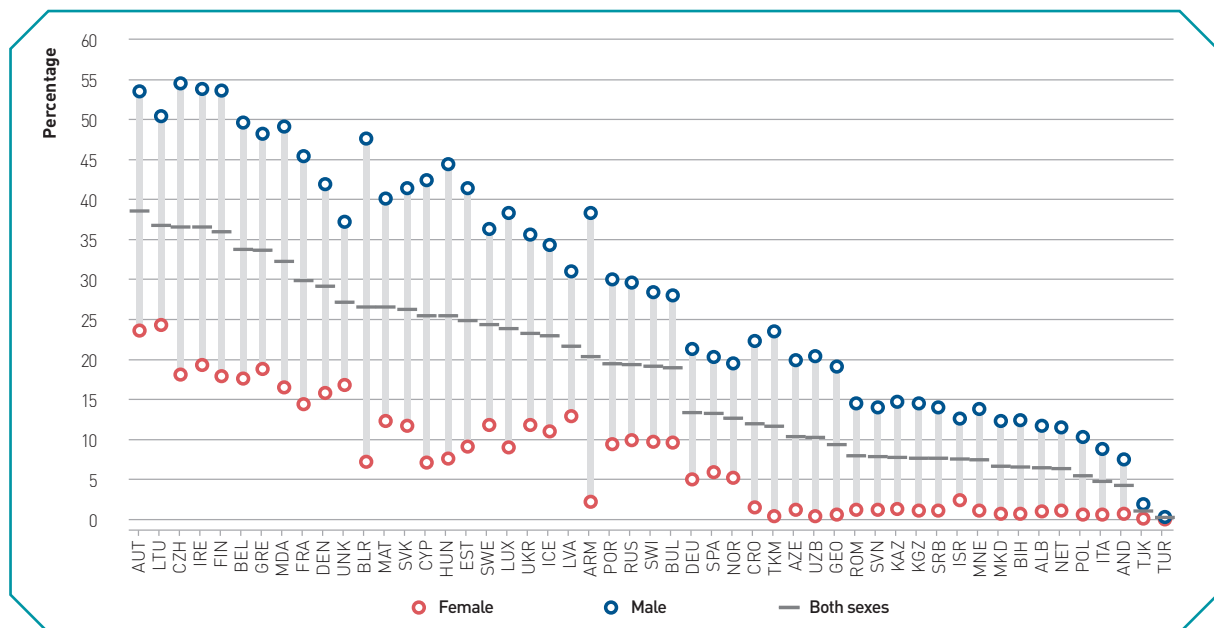
Another additional indicator for this target is the heavy episodic drinking (60 g of pure alcohol or around six standard alcoholic drinks on at least one occasion weekly) among adolescents (15 years and over) (1).

However, due to data availability, WHO estimates (14) for heavy episodic alcohol drinking in the past 30 days have been used here. Accordingly, age-standardized heavy episodic drinking is defined for the purposes of this subsection as the proportion of adults (aged 15 years and over) who have consumed at least 60 g of pure alcohol on at least one occasion in the past 30 days.

Reported values for heavy episodic alcohol drinking in the past 30 days varied between countries in the Region in 2010 (see Fig. 2.6). The highest rates for both sexes were 38.5% in Austria and 36.7% in Lithuania, and the lowest rates for both sexes were 0.2% and 1% in Turkey and Tajikistan (see Fig. 2.6).

In 2010, the national rates of heavy episodic drinking (see Fig. 2.6) among males were higher than those for females. The highest and lowest national rates among males were 54.5% (Czechia) and 0.3% (Turkey), respectively, in 2010 (see Fig. 2.6). The highest and lowest national rates among females were 24.3% (Lithuania) and 0% (Turkey), respectively, in 2010 (see Fig. 2.6).

**Figure 2.6. Alcohol, heavy episodic drinking (population) past 30 days (%), age-standardized, 2010**



**Source:** WHO Global Health Observatory (15).

**Note:** Data were not available for Monaco and San Marino in 2010.



### *High variation in the levels of alcohol consumption between countries in the Region*

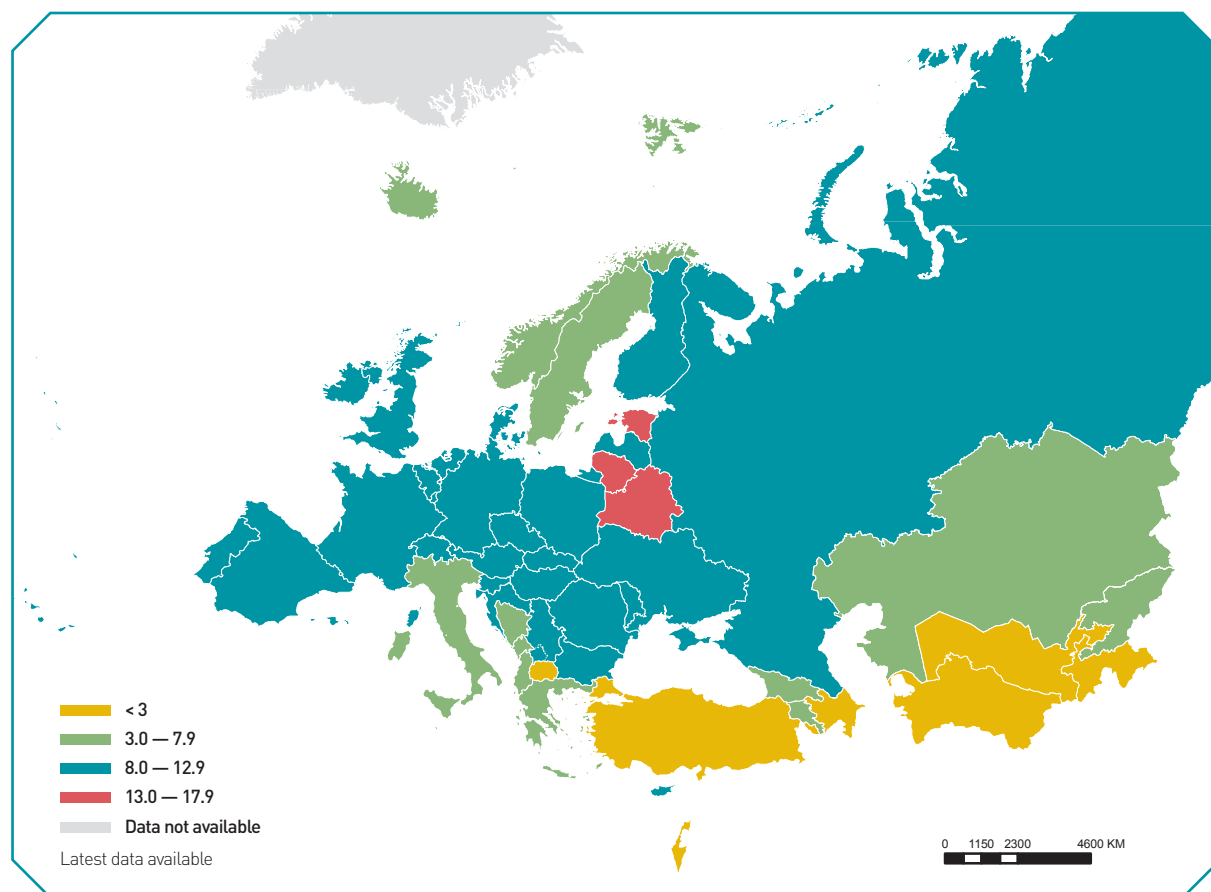
The total (sum of recorded and unrecorded) adult per capita consumption of pure alcohol is the amount of alcohol consumed per adult (aged 15 years and over) within a calendar year, expressed in litres of pure alcohol (1).

In 2014, the regional average per capita alcohol consumption among people aged 15 and over

within a calendar year was 8.6 litres of pure alcohol (see Fig. 2.7). This was only 3.4% lower than the reported baseline regional average in 2010 of 8.9 litres per capita indicating that little progress is being made in this area.

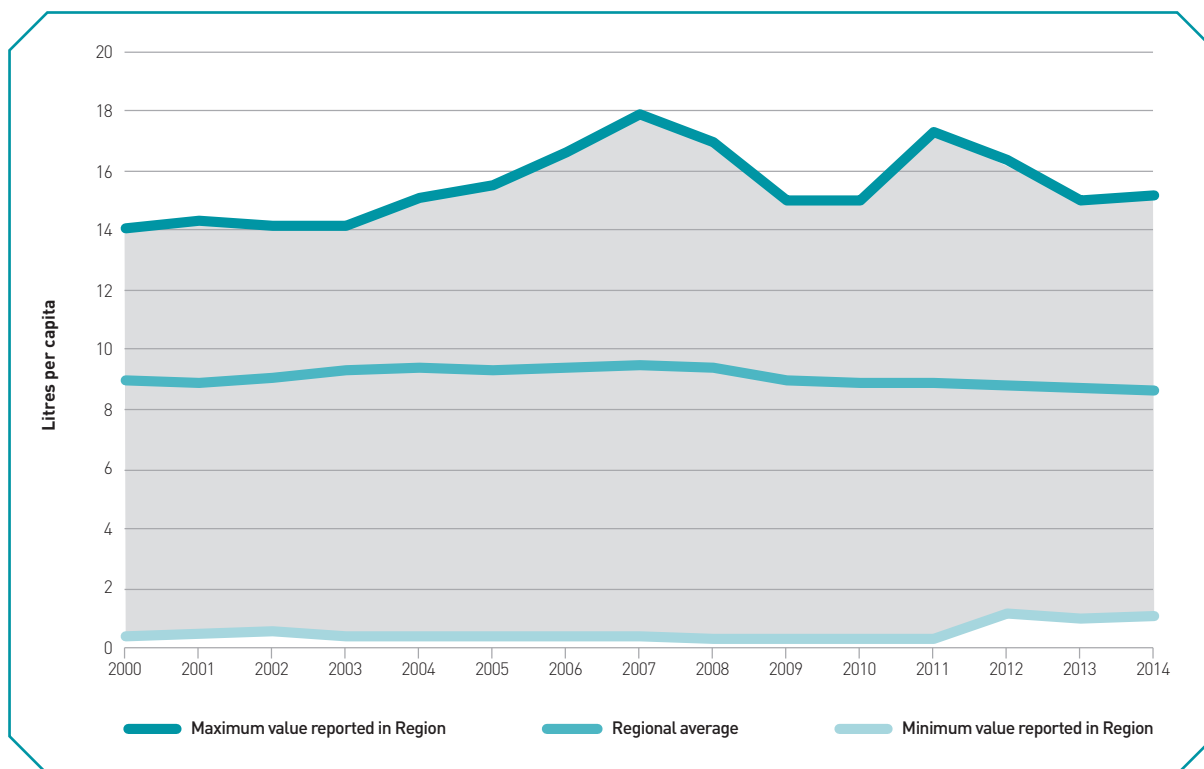
Differences in the levels of alcohol consumption between countries in the Region remain large (see Map 2.1). The maximum and minimum reported national values slightly increased from 15 and 0.3 litres per capita in 2010 to 15.2 and 1.1 litres per capita in 2014 (see Fig. 2.7).

**Map 2.1. Recorded pure alcohol consumption among people aged 15 and over within a calendar year, litres per capita, latest available data**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

**Figure 2.7. Recorded pure alcohol consumption among people aged 15 and over within a calendar year, litres per capita (litres of pure alcohol)**



Source: Health for All database on the WHO European Health Information Gateway (9).

### *High prevalence of overweight and obesity continues in the Region*

This section describes the percentage of a defined population aged 18 years and over with overweight or obesity (defined as a BMI  $\geq 25$  kg/m<sup>2</sup> for overweight and  $\geq 30$  kg/m<sup>2</sup> for obesity) (1).

The prevalence of overweight and obesity has been steadily increasing in the WHO European Region over recent years (see Fig. 2.8–2.9). The rate increased from 55.9% in 2010 to 58.7% in

2016 for overweight, and from 20.8% in 2010 to 23.3% in 2016 for obesity (see Fig. 2.8–2.9).

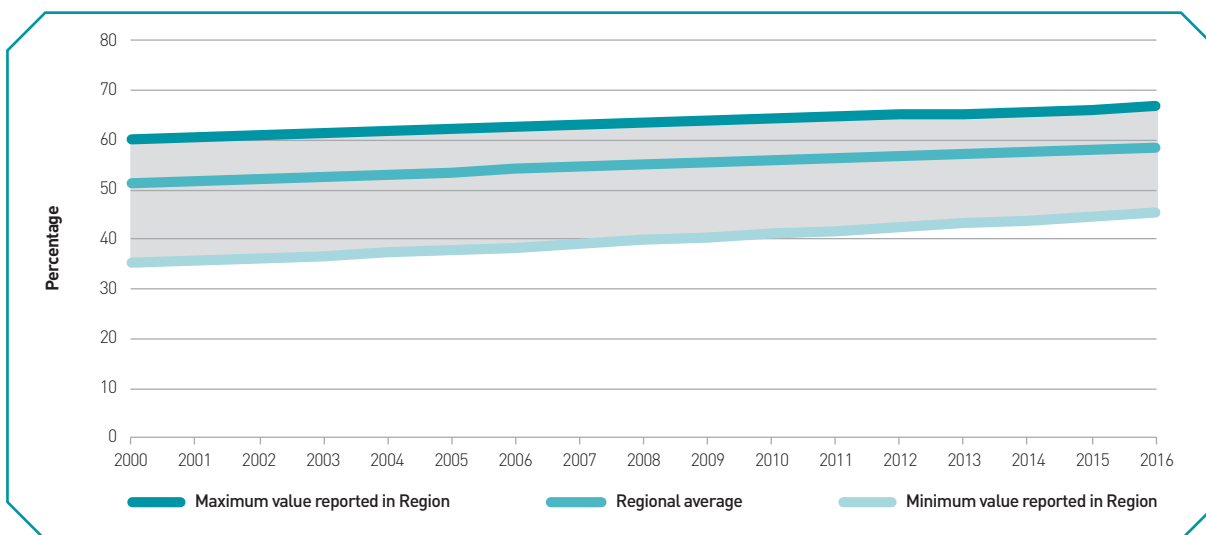
The prevalence of overweight and obesity varies considerably between Member States in the Region (see Fig. 2.8–Fig. 2.9). In the 2000s, the difference between the highest and lowest rates for overweight and obesity in countries in the Region has been, on average, between 23.6 and 25 percentage points for overweight and between 15.1 and 16.7 percentage points for obesity (see Fig. 2.8–2.9). In 2010, however, the difference between the highest

and lowest rates for overweight in the Region was slightly reduced to 23.3 percentage points, and it was further reduced to 21.5 percentage points in 2016 (see Fig. 2.8); the lowest rate in the Region was 45.3%, and the highest rate was 66.8% in 2016.

Yet, the opposite trend has been observed for obesity, as the difference between the highest and lowest rates in the Region had slightly increased to 16.9 percentage points in 2010, and further increased to 17.9 percentage points in 2016 (see Fig. 2.9); the lowest rate in the Region was 14.2%, and the highest rate was 32.1% in 2016.

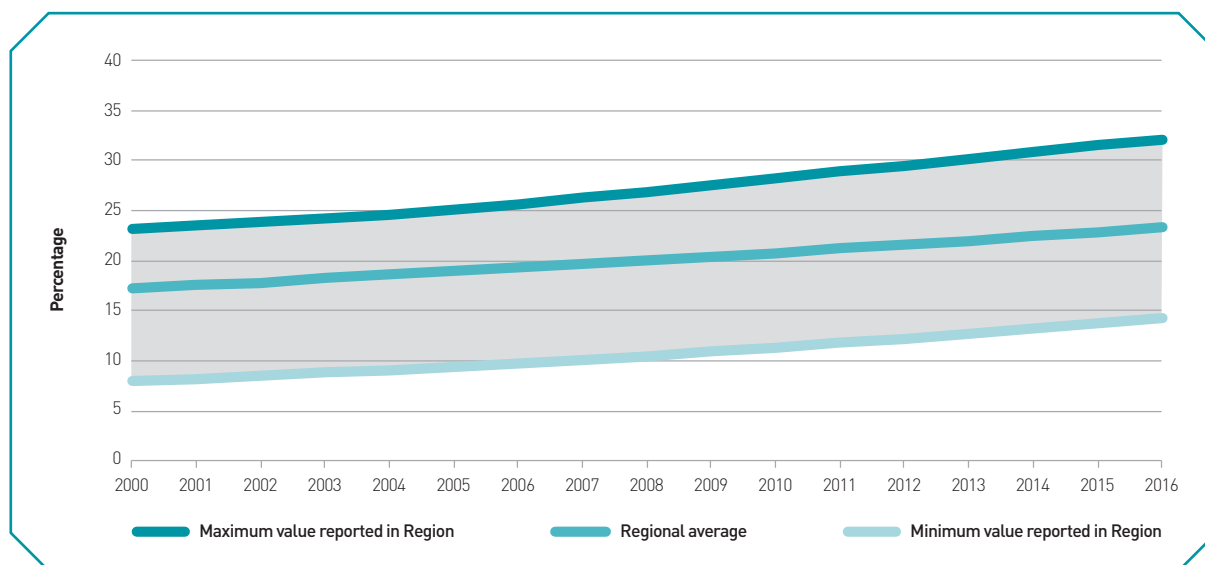
In 2016, the rates for overweight and obesity were 63% and 21.9% among men and 54.3% and 24.5% among women. These rates were higher than the reported values in 2010: the rates for overweight and obesity were 59.7% and 18.8% among men and 52.1% and 22.5% among women. Overall, national-level data for 2016 showed that, in most countries in the European Region, overweight was more prevalent among men, while obesity was more prevalent among women.

**Figure 2.8. Age-standardized prevalence of overweight (defined as BMI  $\geq 25$  kg/m<sup>2</sup>) in people aged 18 years and over, WHO estimates (%)**



Source: Health for All database on the WHO European Health Information Gateway (9).

**Figure 2.9. Age-standardized prevalence of obesity (defined as BMI  $\geq$  30 kg/m<sup>2</sup>) in people aged 18 years and over, WHO estimates (%)**



Source: Health for All database on the WHO European Health Information Gateway (9).

### *Large differences in the prevalence of overweight and obesity among adolescents between countries, age groups and gender*

An additional indicator for this Health 2020 target is the prevalence of overweight and obesity among adolescents (1) (defined as a BMI-for-age value above +1 Z-score and +2 Z-score<sup>3</sup> relative to the 2007 WHO growth reference median (16)).

Data from the HBSC study (11) have been used here. The prevalence of overweight and obesity among young people (11, 13 and 15 years old) varied between countries, gender and age groups (see Fig. 2.10–2.12). According to the

study (11), in 2014, on average, nearly 17.5% and 26.8% of female and male 11-year-olds in the Region were overweight. The percentages were 15% and 23.4% among female and male 13-year-olds. These values were lower for female (12.4%) and male (21.6%) 15-year-old adolescents.

In the three age groups (11, 13 and 15 years old), the highest prevalence of overweight in the Region was reported for Greenland, Greece, Italy and Malta, while young people (11, 13 and 15 years old) in Denmark had one of the lowest reported prevalence of overweight and obesity in the Region (see Fig. 2.10–2.12).

3 The Z-score indicates how many units (of the standard deviation) a person's BMI is above or below the average BMI value for their age group and sex.

### **Box 2.4. FEEDCities Project – Eastern Europe and Central Asia**

Unhealthy diet is major risk factor for noncommunicable diseases (NCDs). Salt, sugar and trans fatty acids (TFAs) are some of the dietary constituents connected with heart disease, cancer and diabetes. Urbanization and globalization of the food industry brought significant nutritional changes to the WHO European Region. These changes include a drop in the consumption of fibre and more frequent intake of processed foods, which are likely to contain more fats, sugar and salt and are known to be associated with weight gain and NCDs. More specifically, industrially produced TFAs and sodium heighten the risk for cardiovascular diseases. WHO is advocating complete elimination of TFAs from the global food supply and also calling for a significant reduction in sodium intake (most of it comes from salt and processed foods).

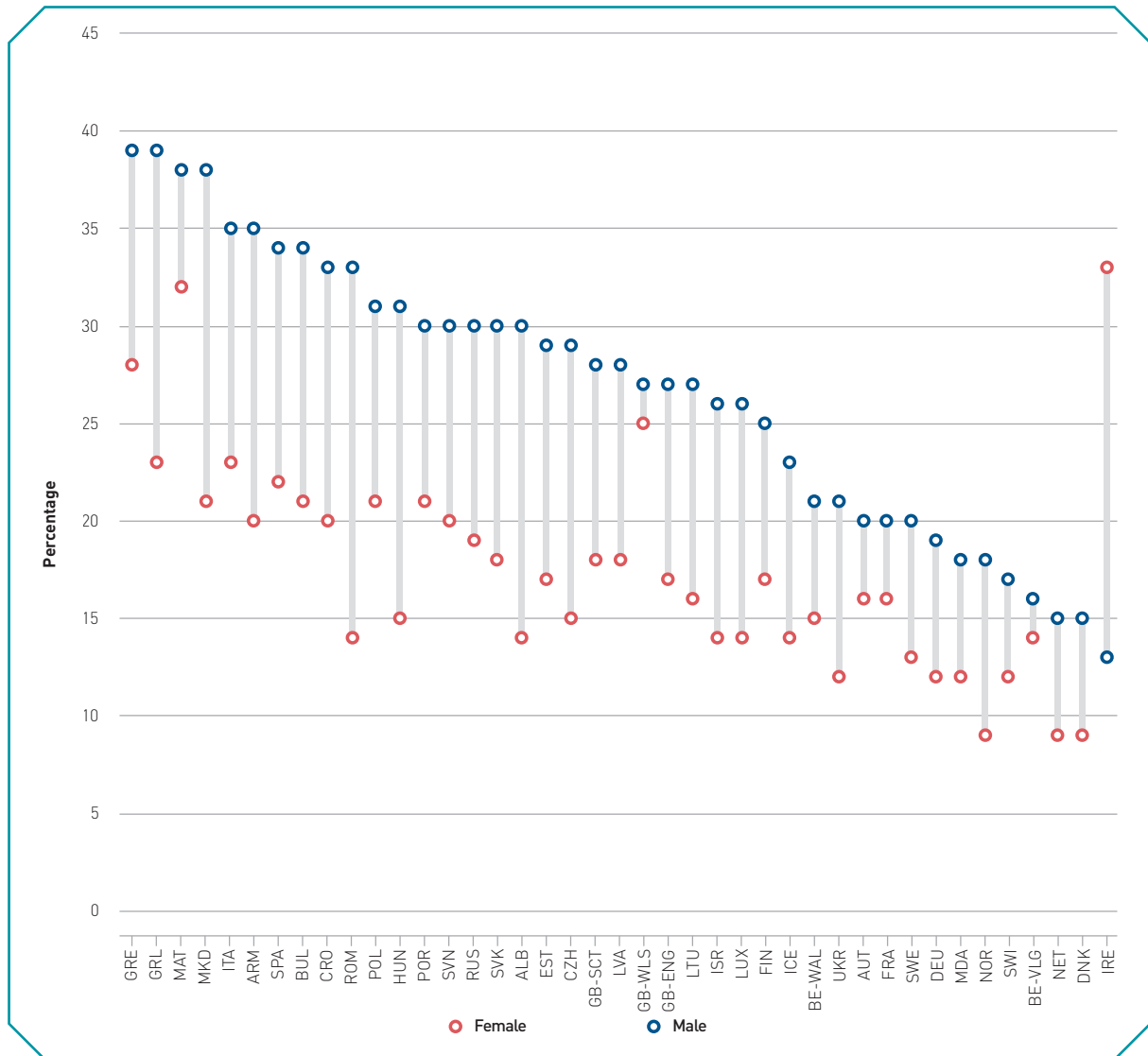
The WHO Regional Office for Europe launched the FEEDCities project to describe the street food environment and assess the food's nutritional value in several capital cities in central Asia and eastern Europe. This innovative initiative aims to evaluate the presence of harmful components like trans fats and salt in common foods. This system for assessing the composition of foods sold in markets in central Asia and other eastern European countries has already been implemented in Tajikistan, Turkmenistan, Kazakhstan, Kyrgyzstan, Republic of Moldova and Bosnia and Herzegovina. Historically, street trade has been a well-developed activity in this part of the world, with street food commonly sold in the central Asian bazaars; local dietary habits certainly reflect this. The project is based on a cross-sectional evaluation of street food vending sites, including an analysis of food composition and the characterization of customers and items purchased, along with food product advertising in public spaces.

Bromatological analyses in all countries involved show that the quantities of sodium and TFAs in a single serving (i.e. the average portion usually sold) of some of the most readily available homemade and mass-produced foods far exceed the maximum recommended daily intake. WHO has jointly launched the results of the initiative in the countries involved and advised on actions to be taken. As a result, trans fat bans and other food regulations, notably limiting salt in food, are in the making. Where no national nutrition survey is currently available – this is the case for more than one third of the 53 Member States of the WHO European Region – FEEDCities can be adapted to serve as a valuable tool for data collection and monitoring of dietary habits. So far, the FEEDCities project has collected data on a vast array of topics, from geographical coordinates of street vendors to visual records (pictures and videos) and the dietary composition of food items, providing useful information for policy-makers and regulators for the first time in the involved countries.

### **Box 2.5. Country profiles of child and adolescent health-related policies: Investing in children – the European child and adolescent health strategy (CAH) (2015–2020)**

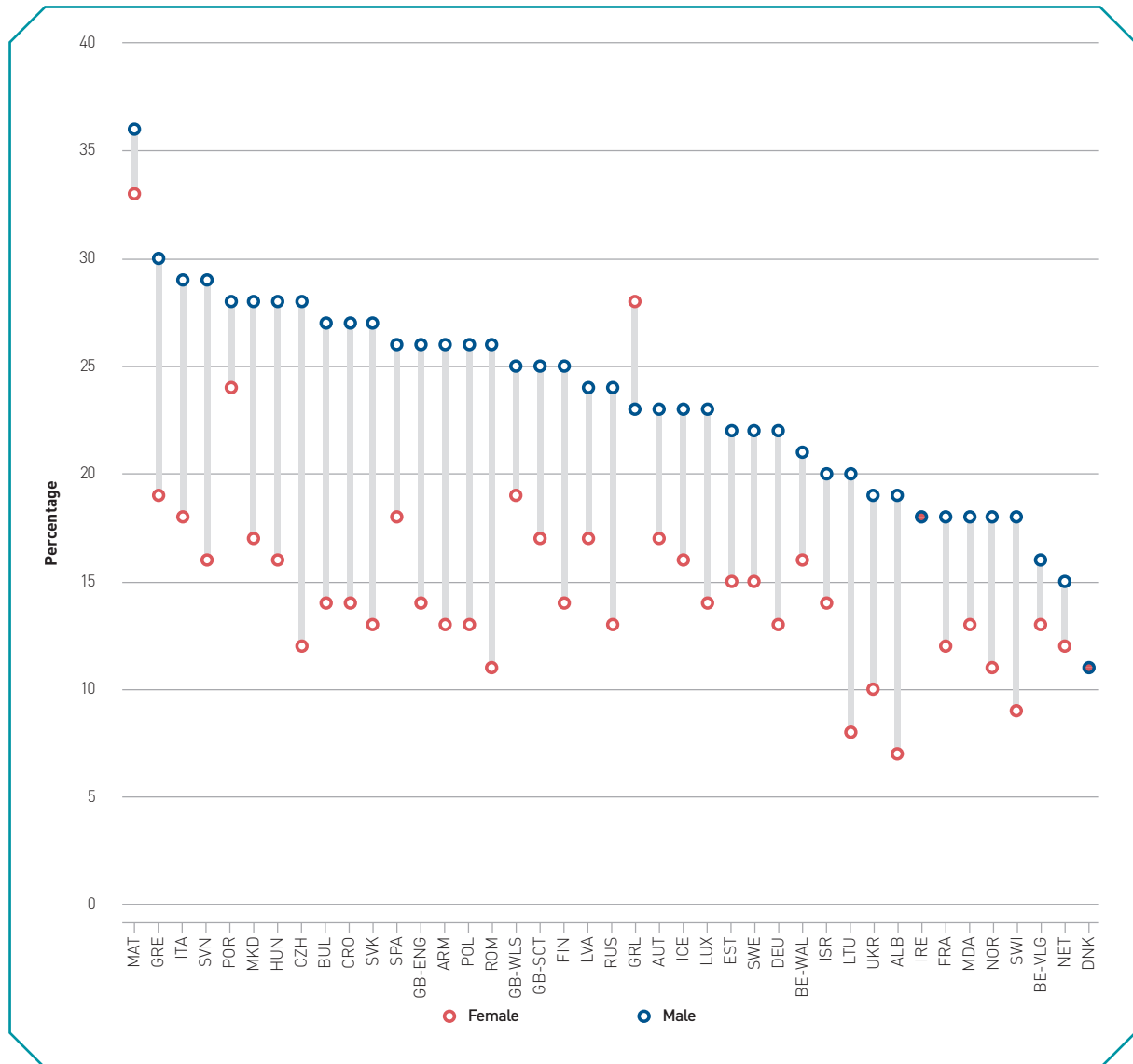
The strategy, which aims to “make children’s lives visible”, led to the development of country profiles that provide Member States with a view of the status of children and young people in their countries through indicators, including data from the Health Behaviour in School-aged Children survey, directly linked to the strategy’s priorities. The profiles, available through the WHO European Health Information Gateway (12) were sent in 2016 to Member States with a complementary survey to capture the state of CAH and related policies in the Region since the strategy’s adoption. A summary report presented to the Regional Committee in September 2018 highlights areas where the Region thrives and where there are gaps in policy. A final report on the strategy’s implementation will be presented in 2020. National survey findings led to the development of country feedback reports shared by the Regional Office with country representatives in the relevant country or during visits of country delegations to the WHO Regional Office for Europe. The feedback report provides country-specific achievements in CAH and possible areas for action. These tools support the regional commitment embedded in the strategy and the implementation of national programmes to achieve optimal health for European children and young people.

Figure 2.10. Prevalence of overweight or obesity among adolescents, 11 years old, by sex



Source: HBSC data on the WHO European Health Information Gateway (12).

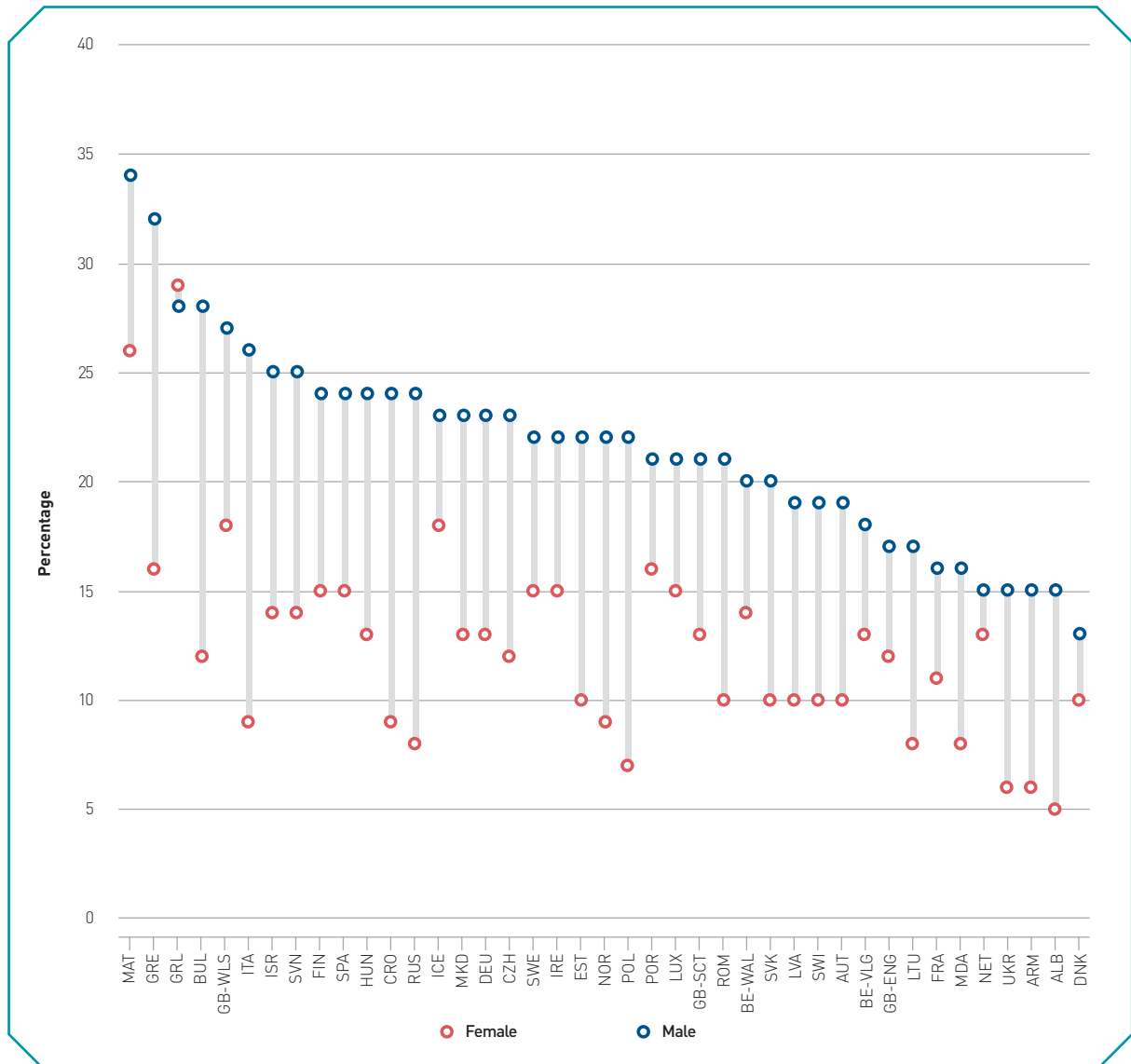
Figure 2.11. Prevalence of overweight or obesity among adolescents, 13 years old, by sex



Source: HBSC data on the WHO European Health Information Gateway (12).



Figure 2.12. Prevalence of overweight or obesity among adolescents, 15 years old, by sex



Source: HBSC data on the WHO European Health Information Gateway (12).

## Summary of progress: Vaccine-preventable diseases

### *High levels of child vaccination rates, yet cautious monitoring and compliance is needed*

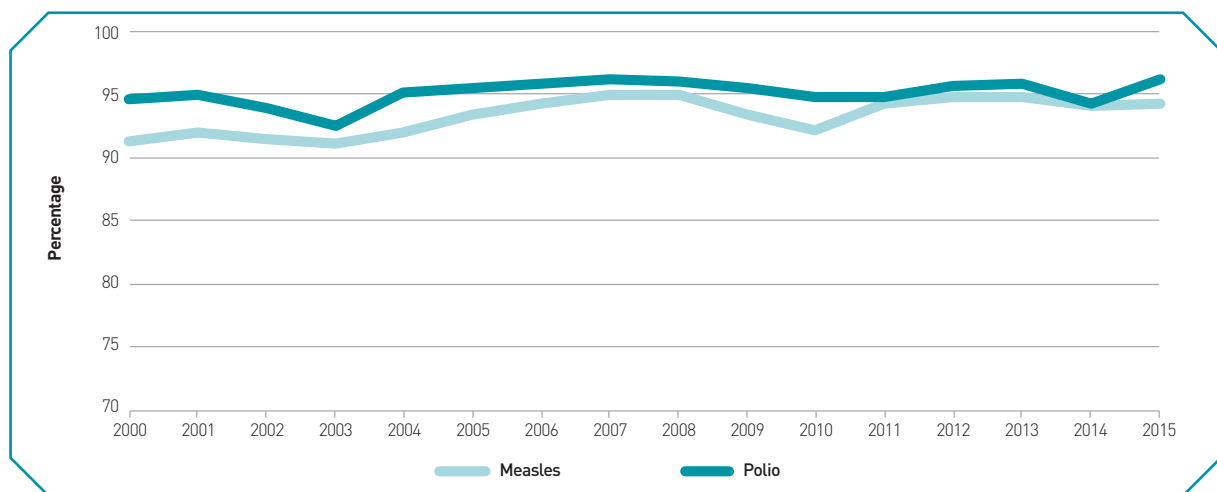
During the last decade, the average regional vaccination coverage rates increased or remained almost static for the three childhood vaccines against measles<sup>4</sup>, polio<sup>5</sup> and rubella<sup>6</sup>.

Child immunization<sup>7</sup> coverage has increased since the year 2000 to 94.3% and 96.1% for measles and polio, respectively, in 2015 (see Fig. 2.13).

These values are slightly higher than the reported baseline regional averages in 2010 of 92.2% for measles and 94.8% for polio.

Most recent data indicate that there were still considerable differences in vaccination rates between countries, with some having vaccination rates below 90%. In 2015, 10 countries had vaccination rates of less than 90% against measles, while five countries had vaccination rates of less than 90% against polio, leaving communities vulnerable to outbreaks.

**Figure 2.13. Percentage of children vaccinated against measles and polio (%)**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

- 4 The percentage of children vaccinated against measles is the proportion of children reaching their second birthday who have been fully vaccinated against measles (one dose).
- 5 The percentage of infants vaccinated against polio is the proportion of infants reaching their first birthday in the given calendar year who have been fully vaccinated against polio (three doses).
- 6 The percentage of infants vaccinated against rubella is the proportion of children reaching their second birthday in the given calendar year who have been fully vaccinated against rubella (one dose).
- 7 WHO stopped reporting separately on coverage for rubella vaccination in 2010, as nowadays rubella vaccination is always given in combination with vaccination for measles and mumps (MMR). Therefore, as of 2010, data on vaccination coverage for measles should be interpreted as vaccination coverage for measles and rubella.

### *Middle-income countries lagging behind in interrupting endemic measles and rubella transmission in the WHO European Region*

The number of Member States in the WHO European Region that have interrupted measles since 2013 has doubled and progress against rubella elimination is also very promising (17). By the end of 2016, endemic measles and rubella transmission had been interrupted for more than 12 months in 79% and 70% of the countries, respectively. While the WHO European Region as a whole has made steady progress towards measles and rubella elimination in the last few years, stratifying the remaining endemic countries (nine for measles and 14 for rubella) by World Bank income level suggests that most of them are middle-income countries (Fig. 2.14).

Of the nine measles-endemic countries in the WHO European Region, six (67%) of them are middle-income countries, and of particular note, 55% of the measles-endemic countries in the Region are middle-income countries without any donor support. In 2015, 70% of the infants that did not receive the third dose of diphtheria–tetanus–pertussis vaccine resided in these middle-income countries without donor support. These countries in particular continue to face significant challenges to the financial and operational sustainability of their immunization programmes. These factors contribute significantly towards a declining trend in vaccination coverage, including with the measles-containing vaccine, leading to susceptible pockets of the population that are not protected from measles and rubella. In order to achieve the measles and rubella target outlined in the European vaccine action plan 2015–2020 (18), it is essential that these middle-income countries develop context-specific, tailored immunization interventions.

**Figure 2.14. Measles elimination status in the WHO European Region, by World Bank income group, 2016**



**Source:** Sixth meeting of the European regional verification commission for measles and rubella elimination (RVC) (17).

**Note:** For definition of high- and middle-income countries, see World Bank Country and Lending Groups (19).

### Box 2.6. Facing vocal vaccine deniers

Measles and rubella are highly contagious diseases. Therefore, at least 95% immunization coverage of each annual cohort is needed to achieve community protection and eliminate the diseases. Immunization coverage in the WHO European Region is generally high, however, among other challenges, the spread of misinformation about vaccines has resulted in a relatively low level of confidence in the safety of vaccines in some countries. This is a serious concern that all immunization stakeholders must continue to address. Together with partners and Member States, the Regional Office for Europe works to build and maintain public confidence in vaccines and the authorities delivering them.

As part of this work, in 2017, the Regional Office further developed and refined a guidance document for health spokespersons facing vocal vaccine deniers ([www.euro.who.int/vaccinedeniers](http://www.euro.who.int/vaccinedeniers)). The guide was originally developed based on a review of peer-reviewed journal articles in the relevant fields, which revealed the five key topics and the five key techniques that are most commonly used by vaccine deniers, and presents a set of appropriate responses that can be used to debunk the misperceptions of the denier and win over the attention and trust of the audience. The document includes sections on the psychological mechanisms of the target audiences, embracing techniques, religious concerns, addressing fake experts and unfavourable interview conditions.

The training programme developed for the area offers a variety of plenary presentations and case-based group work, placing particular emphasis on practical exercises and simulations of a public debate with a vocal vaccine denier. Subregional training workshops were conducted in 2017 for immunization programme managers from Albania, Austria, Bosnia and Herzegovina, Croatia, Germany, Montenegro and Serbia. A video from a December 2016 training session was launched in 2017 and is available online (20).

### Box 2.7. Addressing health inequality through tailored immunization services

Closing immunization gaps and equitably extending the benefits of vaccination to all are crucial if the Region is to meet the goals of eliminating measles and rubella and maintaining the polio-free status it has enjoyed since 2002. The reasons for insufficient coverage differ per country and are diverse within each country, often including both supply challenges and insufficient uptake of offered vaccines. To address the latter it is imperative for health authorities to understand the factors influencing vaccination intentions, decisions and behaviours.

The WHO Regional Office for Europe developed a *Guide to tailoring immunization programmes* (TIP) in 2014 in response to this need. Based on experience in several countries and an external review conducted in 2016, the approach was refined in 2017. It provides a logical pathway for all TIP projects, including a structured process from initial data collection and analysis to intervention planning, implementation and evaluation.

To build capacity for implementing the approach, the WHO Regional Office for Europe, in collaboration with the University of Erfurt, Germany, organized a one-week Behavioural Insights Summer School in September 2017 with participation from PhD students and immunization programme managers and staff from Bosnia and Herzegovina, France, Finland, Germany, Republic of Moldova, Serbia and Sweden.

TIP projects are currently underway in Armenia, Bosnia and Herzegovina, and Serbia, focusing in part on identifying health workers' barriers and needs, and in Romania, where a rapid survey was conducted to understand the barriers to vaccination among families affected by measles. A peer-reviewed publication on the external review results and recommendations was published in the journal *Vaccine* (21).

### Summary of progress: Mortality from external causes

#### *Steady decline in death rates from all external causes, including injuries and poisoning*

In 2015, deaths due to external causes, including injuries and poisoning, constituted the third leading cause of death in Europe, accounting for

7% of all deaths, after diseases of the circulatory system (44%) and malignant neoplasms (21%). The regional average age-standardized death rate from external causes consistently decreased from 82 deaths per 100 000 in 2000 to 57 per 100 000 in 2010 and 50 per 100 000 in 2015 (see Fig. 2.15). Still, there were very wide inequalities in the death rates between the sexes, and across countries. The regional average death rate among males was 3.5 and 3.3 times higher than for females in 2010 and 2015, respectively.

The differences in death rates from all external causes between countries have decreased considerably over time. The gap between the highest and lowest death rates in the Region has narrowed from 118 deaths per 100 000 in 2010 to 73 per 100 000 in 2015 though recent values for 2015 indicate that the remaining differences between countries are still large. In 2015, the highest rate in the Region was 95 deaths per 100 000 and the lowest 22 per 100 000, yet only 27 countries reported data for 2015.

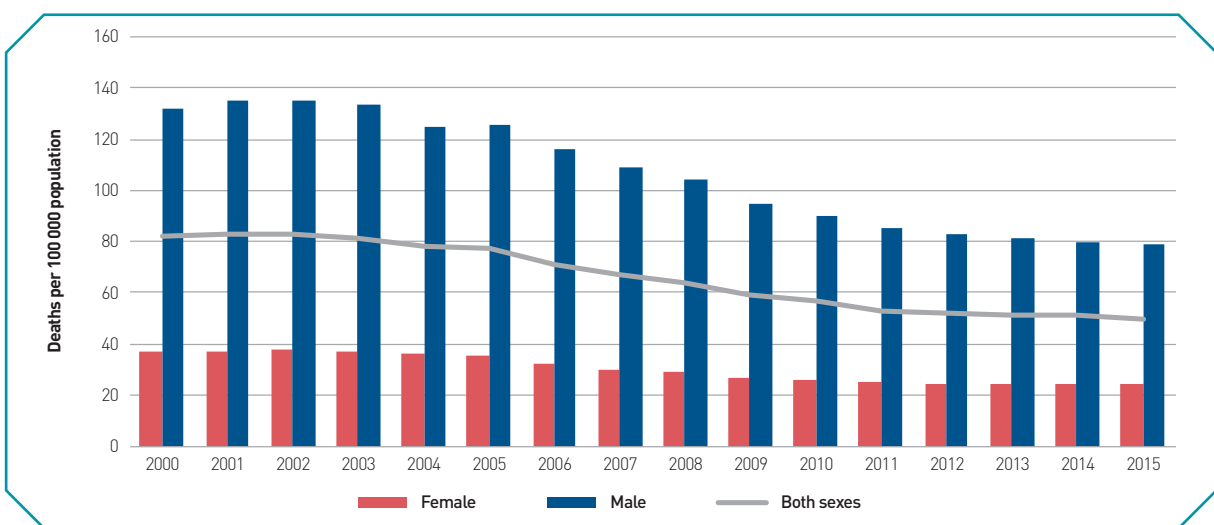
There are six additional indicators linked to this core indicator: motor vehicle traffic accidents; accidental falls; accidental poisoning; accidental poisoning by alcohol; suicide and intentional self-harm; and homicide and assault. This subsection examines the pattern and trend of deaths by cause for the period between 2000 and 2015 (see Fig. 2.16).

Suicide and self-inflicted injury, along with motor vehicle traffic accidents, were the leading external causes of death in 2014 (21% and 15%, respectively, of all external causes of death and injury combined). In 2015, suicide and self-inflicted injury was the leading external cause of death (constituting 21% of all external causes of death and injury combined).

Moreover, over the same period, there was a wide variation between countries for each separate cause.

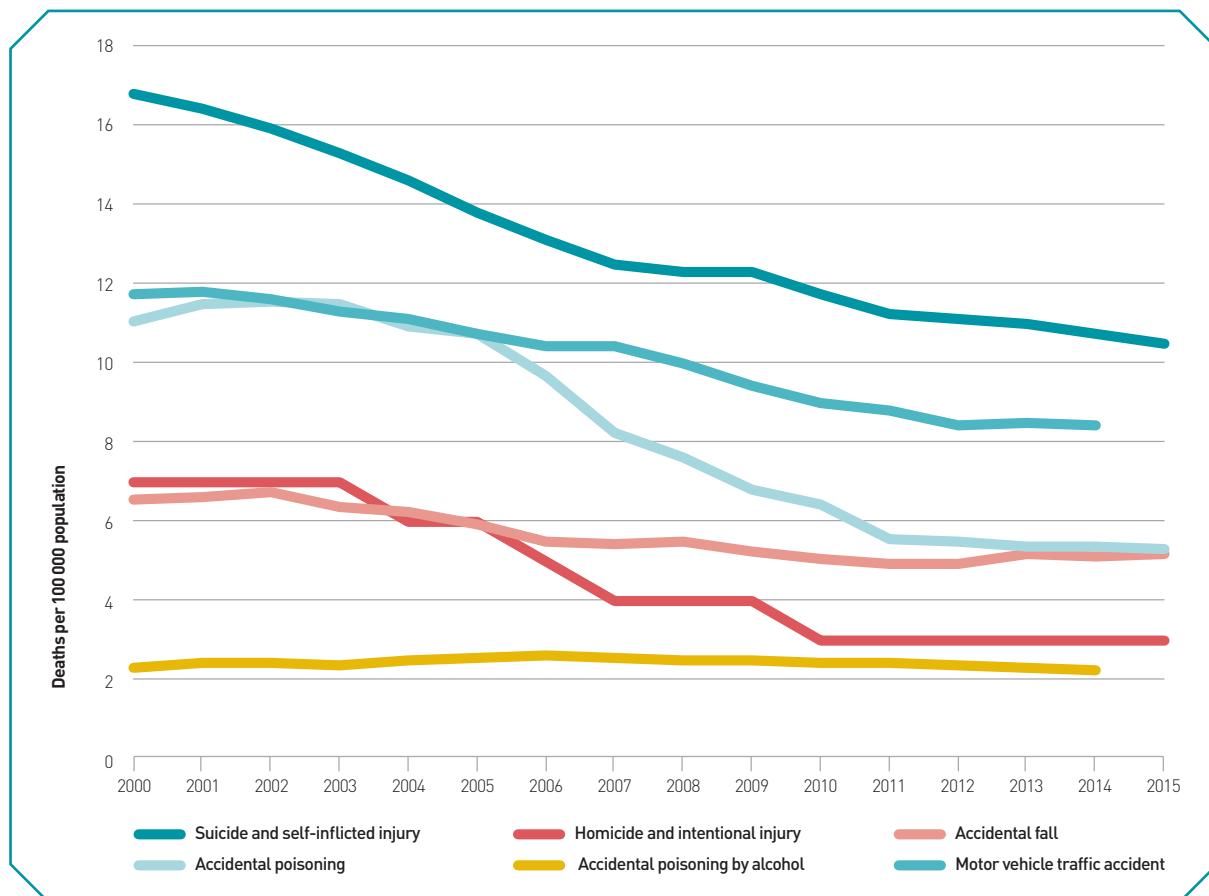
To conclude, in 2015, deaths due to external causes were the third leading cause of death in the Region, accounting for 7% of all deaths, which continues to represent a major public health problem. Despite an overall decline in associated trends over recent decades, there were wide differences in death rates between the sexes and countries in the Region.

**Figure 2.15. Standardized death rates from all external causes, including injuries and poisoning, overall and by sex**



Source: Health for All database on the WHO European Health Information Gateway (9).

**Figure 2.16. Regional average standardized death rates from external causes, by cause**



Source: Health for All database on the WHO European Health Information Gateway (9).



## Target 2. Increase life expectancy in Europe

### Introduction

The regional average life expectancy has steadily increased over recent years and the gaps in average life expectancy between the sexes and between countries are getting narrower. However, there are still considerable differences which require continued monitoring to ascertain consistent improvement. In 2015, the difference between countries with the highest life expectancy and the lowest was more than a decade. Women still live longer than men at all ages.

**Despite increase in life expectancy at birth, the difference between countries with the highest and lowest life expectancy in the Region is still more than a decade**

The aim for this Health 2020 target is to increase overall life expectancy while reducing differences in life expectancy between countries (1).

### Box 2.8. Health 2020 Target 2 and indicators

Target 2 “Increase life expectancy in Europe” is linked to Health 2020 policy area 2 “Healthy people, well-being and determinants”.

The quantification for this Health 2020 target is a continued increase in life expectancy at the current rate (the annual rate for the period 2006–2010), coupled with reducing differences in life expectancy in the Region.

The core indicator for this target is life expectancy at birth.

There are two additional indicators for this target: quantification of life expectancy at ages 1, 15, 45 and 65 years, and healthy life years at age 65.

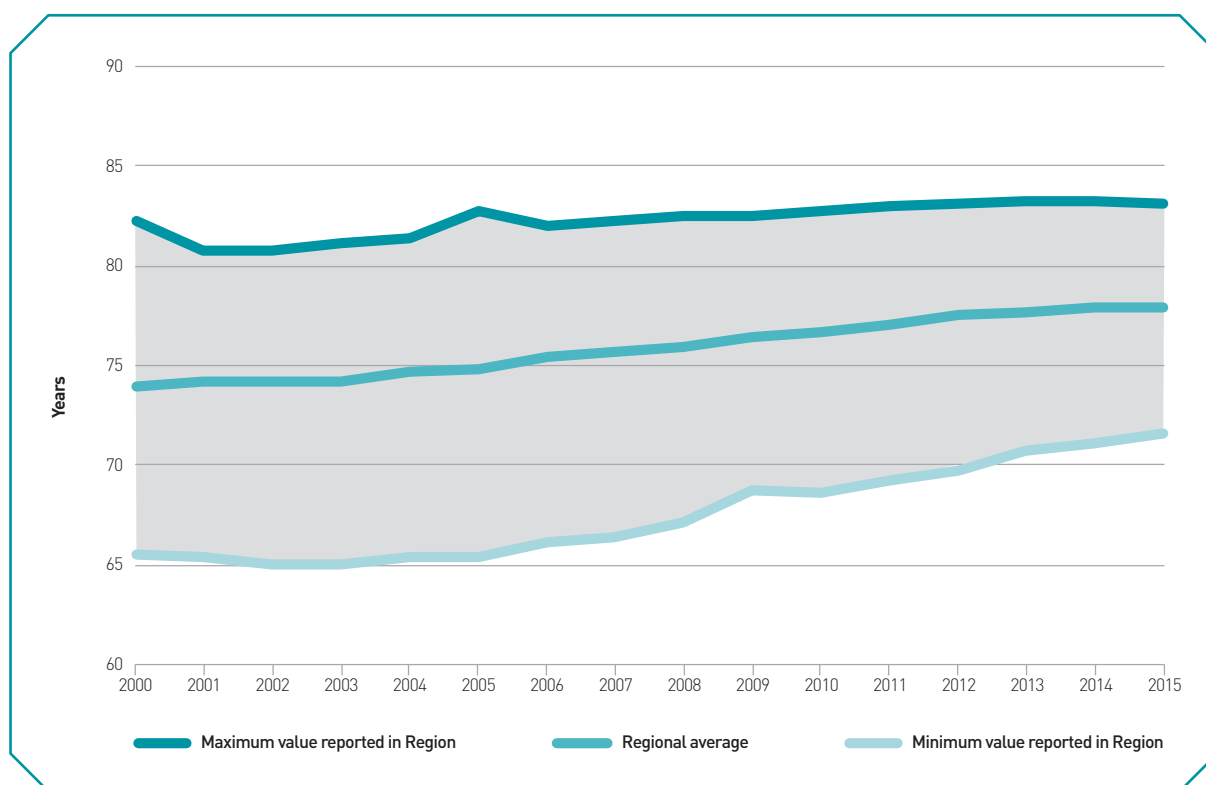
According to the WHO definition, life expectancy at birth is the average number of years that a newborn is expected to live if current mortality rates continue to apply.

The regional average life expectancy has steadily increased over recent decades. Average life expectancy at birth in the European Region increased from 76.7 years in 2010 to 77.9 years in 2015 (see Fig. 2.17) which represented an aver-

age annual increase of 0.24 years. This increase is in line with the Health 2020 target.

The difference between the highest and lowest life expectancy in the Region is decreasing (see Fig. 2.17); it was 16.8 years in 2000, 14.2 years in 2010 and 11.5 years in 2015. In 2015, the lowest value in the Region was 71.6 years, while the highest was 83.1 years.

**Figure 2.17. Life expectancy at birth (years)**

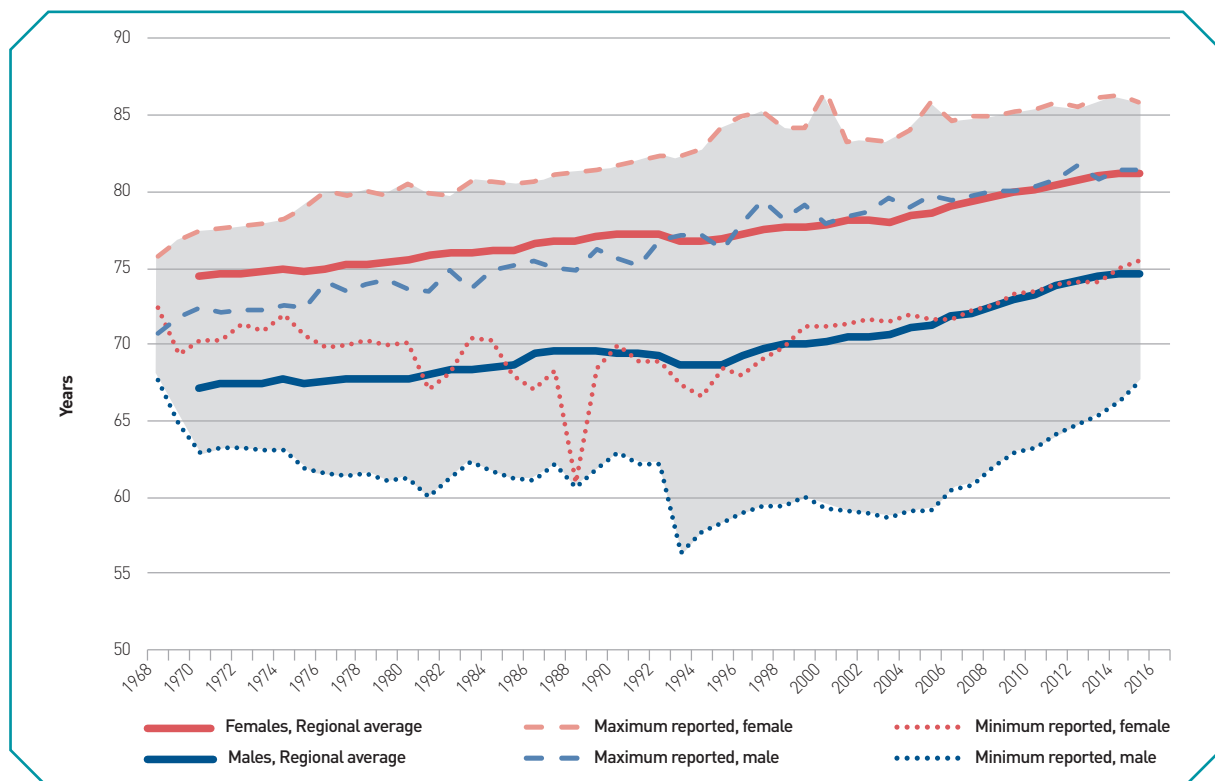


**Source:** Health for All database on the WHO European Health Information Gateway (9).

Considering gender differences, life expectancy at birth in the WHO European Region in 2015 was 74.6 years for males and 81.2 years for females (see Fig. 2.18). These values show an increase of approximately 1.3 years for males and 1.0 years for females since 2010.

The gender gap in life expectancy continues to decrease over time. It fell from 7.7 years in 2000, to 6.9 years in 2010 and 6.6 years in 2015.

**Figure 2.18. Male and female life expectancy at birth (years)**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

The narrowing gaps in regional averages of life expectancy between the sexes and between countries are encouraging. However, the remaining differences are still large and continued monitoring is required to ascertain consistent improvement.

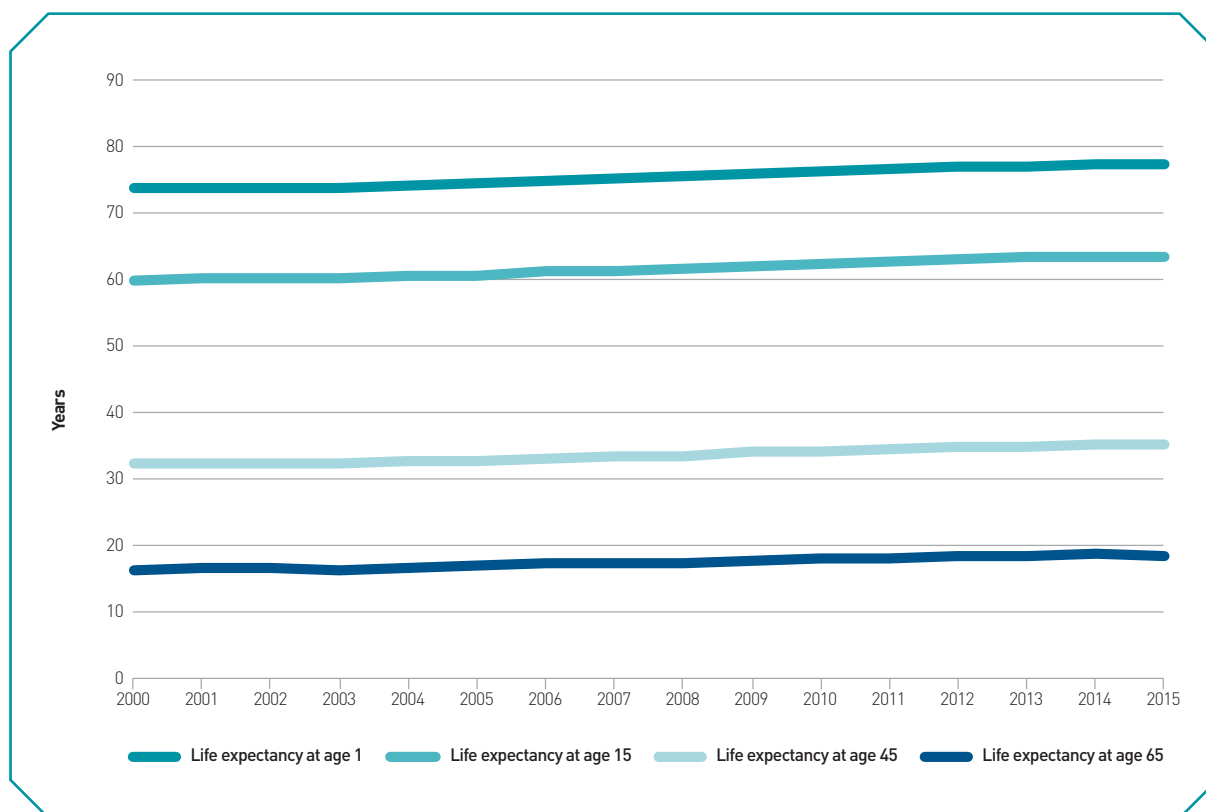
### Continuous increase in life expectancy at ages 1, 15, 45 and 65 years

An additional indicator for this Health 2020 target is life expectancy at ages 1, 15, 45 and 65 years (see Fig. 2.19) (1).

Overall, people are living longer in the Region. In 2015, on average, a person in the Region is expected to live for 77.3 years at age 1, 63.5 years at age 15, 35.1 years at age 45, and 18.5 years at age 65. This is an increase on the corresponding values reported in 2010: 76.2 years at age 1, 62.5 years at age 15, 34.2 years at age 45, and 17.9 years at age 65.

Table 2.1 shows the regional average life expectancy (years) at ages 1, 15, 45, and 65 years for both sexes over time. Females still live longer than males (see Table 2.1).

**Figure 2.19. Regional average life expectancy (years) at ages 1, 15, 45 and 65 years**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

The data in Table 2.1 indicate that the gender gap reduced slightly between 2010 and 2015 for regional average life expectancy at ages 1, 15 and 45. However, it increased slightly for regional average life expectancy at 65 years old.

Moreover, there are still differences between countries in life expectancy at ages 1, 15, 45 and 65 years.

**Table 2.1. Regional average life expectancy (years) at ages 1, 15, 45 and 65 years, by sex**

| Year | Life expectancy at age 1 |      | Life expectancy at age 15 |      | Life expectancy at age 45 |      | Life expectancy at age 65 |      |
|------|--------------------------|------|---------------------------|------|---------------------------|------|---------------------------|------|
|      | Female                   | Male | Female                    | Male | Female                    | Male | Female                    | Male |
| 2000 | 77.5                     | 69.9 | 63.9                      | 56.3 | 35.1                      | 29.1 | 17.9                      | 14.3 |
| 2001 | 77.7                     | 70.2 | 64.0                      | 56.5 | 35.3                      | 29.3 | 18.1                      | 14.6 |
| 2002 | 77.7                     | 70.2 | 64.0                      | 56.5 | 35.2                      | 29.3 | 18.0                      | 14.5 |
| 2003 | 77.6                     | 70.2 | 63.9                      | 56.6 | 35.1                      | 29.3 | 17.9                      | 14.5 |
| 2004 | 78.1                     | 70.7 | 64.4                      | 57.0 | 35.6                      | 29.7 | 18.4                      | 14.9 |
| 2005 | 78.1                     | 70.8 | 64.4                      | 57.1 | 35.6                      | 29.7 | 18.4                      | 14.9 |
| 2006 | 78.6                     | 71.4 | 64.9                      | 57.7 | 36.0                      | 30.3 | 18.8                      | 15.3 |
| 2007 | 78.9                     | 71.7 | 65.1                      | 58.0 | 36.3                      | 30.5 | 18.9                      | 15.4 |
| 2008 | 79.1                     | 72.0 | 65.3                      | 58.3 | 36.4                      | 30.7 | 19.1                      | 15.6 |
| 2009 | 79.4                     | 72.5 | 65.6                      | 58.7 | 36.7                      | 31.0 | 19.3                      | 15.7 |
| 2010 | 79.6                     | 72.8 | 65.8                      | 59.1 | 36.9                      | 31.3 | 19.4                      | 15.9 |
| 2011 | 80.0                     | 73.2 | 66.2                      | 59.5 | 37.2                      | 31.6 | 19.7                      | 16.1 |
| 2012 | 80.2                     | 73.6 | 66.4                      | 59.9 | 37.4                      | 31.9 | 19.8                      | 16.3 |
| 2013 | 80.4                     | 73.8 | 66.6                      | 60.1 | 37.6                      | 32.1 | 20.0                      | 16.4 |
| 2014 | 80.7                     | 74.1 | 66.8                      | 60.3 | 37.8                      | 32.3 | 20.1                      | 16.6 |
| 2015 | 80.6                     | 74.1 | 66.8                      | 60.3 | 37.7                      | 32.3 | 20.1                      | 16.5 |

**Source:** Health for All database on the WHO European Health Information Gateway (9).

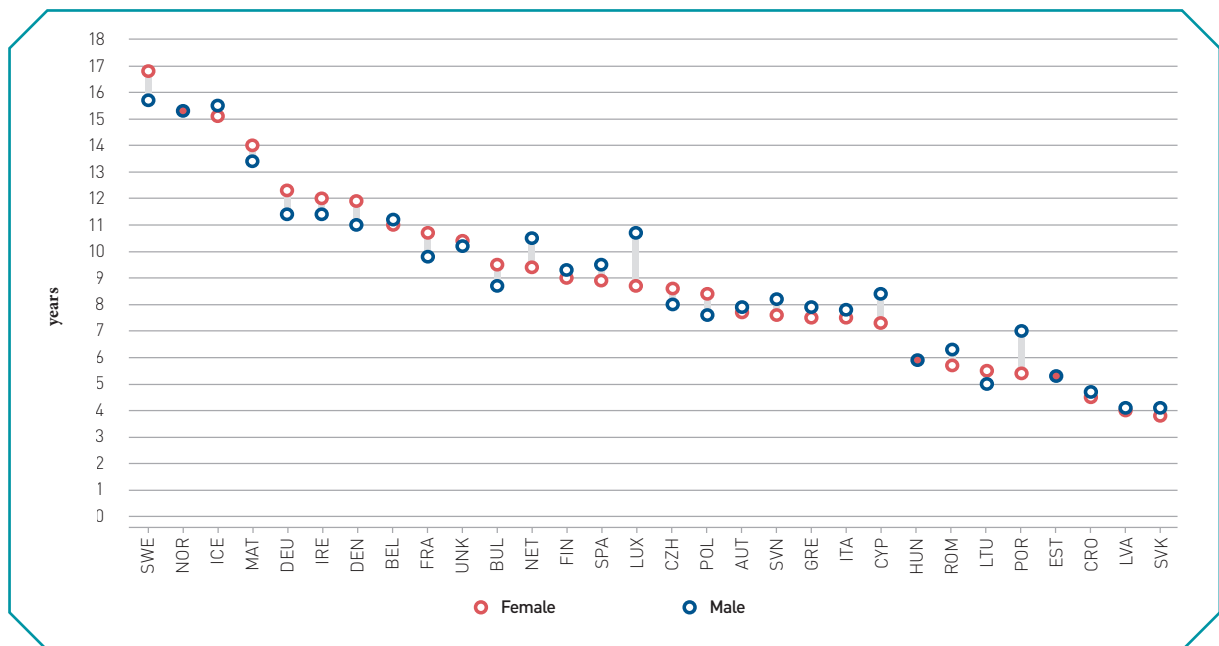
## Healthy ageing: Increments in healthy life years at age 65

Another additional indicator for this target is healthy life years (HLY) at age 65, disaggregated by sex. This indicator (also called disability-free life expectancy) measures the number of years that a person at age 65 is still expected to live in a healthy condition (1). It is calculated separately for males and females (1).

The HLY indicator has been used to describe, monitor and improve the health status and quality of life of elderly populations over time (22). Assessment of life expectancy, mortality rates and HLY enable policy-makers and concerned stakeholders to determine whether populations are living longer healthy lives or not.

As already discussed, death rates have declined and the corresponding values for life expectancy have increased over recent decades. According to Eurostat data, between 2010 and 2015, the average HLY for EU countries increased from 8.8 years to 9.4 years for females and from 8.7 to 9.4 years for males. In 2015, the HLY varied significantly by geographical boundaries or country in the EEA/EFTA countries (see Fig. 2.20). In the same year, at 65 years of age, HLY for Swedish females was 16.8 years, 1.1 years greater than that for males at 15.7 years. These values were much higher than the reported values for Slovakian females (3.8 years) and Slovakian males (4.1 years), which were the lowest reported values in the EEA/EFTA countries in 2015 (see Fig. 2.20).

Figure 2.20. Healthy life years at age 65, by sex, 2015



Source: Eurostat (23).

## Target 3. Reduce inequalities in health in Europe (social determinants target)

### Introduction

The inequalities in infant mortality between countries and gender have been declining over recent decades.

The Region has experienced a noticeable reduction in infant mortality rates since 2000 but differences still exist between countries.

Since 2000, the Region has made progress in the proportion of children of official primary school age that are enrolled in school but there was also a large variation between countries regarding the proportion of children not enrolled in primary school.

Differences between countries in the Region in unemployment rates have been decreasing. Nevertheless, there is a wide variation between countries. Out of the 53 countries in the WHO European Region, the number of countries that have implemented a policy or strategy to address inequality or social determinants has increased since 2010 and the regional average of income inequality as expressed by the Gini coefficient has decreased. At the same time, there were large differences in levels of income inequality between the countries in the Region.

Such inequalities have significant humanitarian, health and economic implications. To narrow these gaps, current collaborative efforts across all relevant sectors and stakeholders need to be strengthened.

### Box 2.9. Health 2020 Target 3 and indicators

All citizens have the right to good health, well-being, education and equal opportunities to prosper where they live.

Target 3 “Reduce inequalities in health in Europe (social determinants target)” is linked to Health 2020 policy area 2 “Healthy people, well-being and determinants”. The target is to achieve a reduction in the gaps in health status associated with social determinants in Europe (1). This target has five key indicators:

- Infant mortality per 1000 live births
- Proportion of children of official primary school age not enrolled
- Unemployment rate
- National and/or subnational policy addressing the reduction of health inequality established and documented
- Gini coefficient (income distribution).

## Decline in inequality in infant mortality between countries and gender

The infant mortality rate is the probability that a child born in a specific year or period will die before reaching the age of 1 year, if subject to age-specific mortality rates of that period, expressed as a rate per 1000 live births (1). Reduction of infant mortality rates is one of the main health targets of the SDGs. Overall, the Region is on track to reach SDG Target 3.2 (24) which aims to “end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births” by 2030.

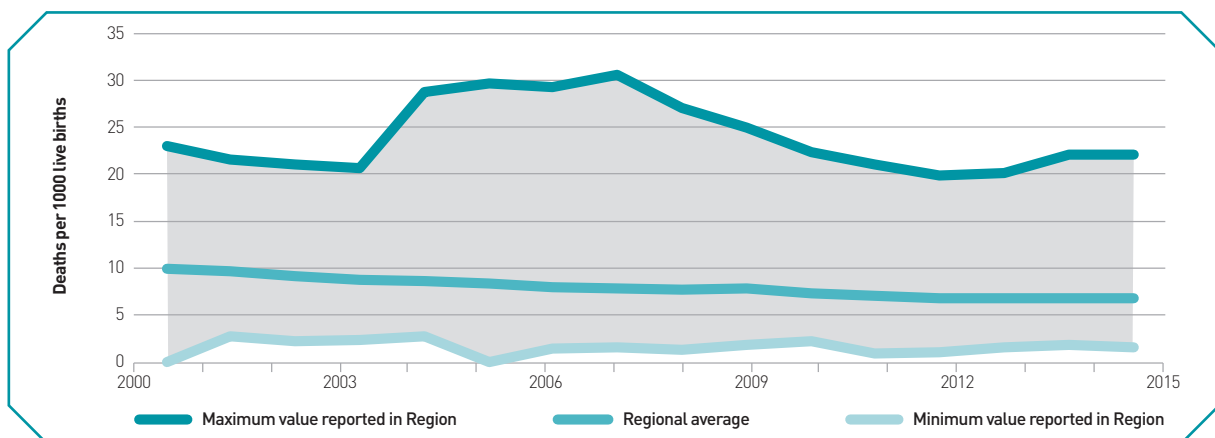
The WHO European Region has made gains in closing the gaps in infant mortality between countries and between the sexes. In 2015, the regional average infant mortality was 6.8 infant deaths per 1000 live births (see Fig. 2.21), which was lower

than the reported rate in 2000 (9.9 infant deaths per 1000 live births) and 2010 (7.3 infant deaths per 1000 live births), representing an average annual decline of 1.4% since 2010.

In 2015, the regional average infant mortality rate for males was 7.3 infant deaths per 1000 live births and the rate for females was 5.9; both have steadily decreased since 2000, from 11.1 for males and 8.8 for females. The most recent figures showed a decline of 9.9% for males and 10.6% for females since 2010, from 8.1 deaths per 1000 live births for males and 6.6 for females.

The difference between the highest and lowest infant mortality rates in the Region is decreasing (see Fig. 2.21): 23.0 infant deaths per 1000 live births in 2000; 20.1 in 2010; and 20.5 in 2015. The lowest and highest infant mortality rates in the Region were 1.6 and 22.1 deaths per 1000 births, respectively, in 2015 (see Fig. 2.21). Caution is needed, however, in interpreting the trends, as only 29 countries reported data for 2015.

**Figure 2.21. Infant deaths per 1000 live births**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

**Note:** The maximum regional value in the infant mortality rate is a reflection of the infant mortality rate in Kyrgyzstan. The sharp increase since 2004 is an artefact of the introduction of the WHO definition for live births and stillbirths in Kyrgyzstan (25, 26).



## Differences still exist between countries in the Region in the proportion of children not enrolled in primary school

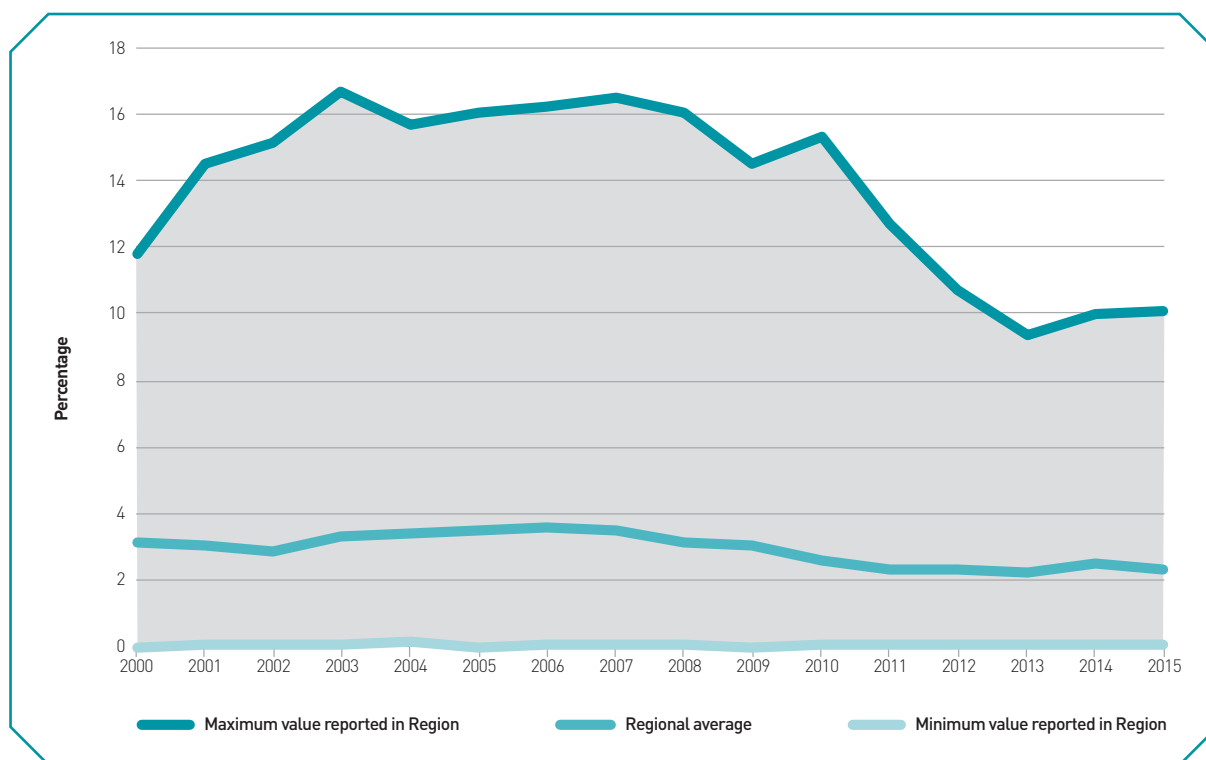
This indicator is defined as the number of children of official primary school age who are not enrolled in primary school – which is expressed as a percentage of the population of official primary school age (1). Children enrolled in pre-primary education are excluded and considered to be out of school (1).

Since 2000, the regional average proportion of children of official primary school age not enrolled has declined (see Fig. 2.22). It decreased from

3.1% in 2000 to 2.6% in 2010 and 2.3% in 2015. The regional average proportion of boys not enrolled in 2000 was 3.3%, and for girls, 3.9%, which decreased to 2.8 for both boys and girls in 2010 and to 2.7% for boys and 2.5% for girls in 2015.

The difference between the maximum and minimum proportions of children of official primary school age not enrolled in school has decreased from 15.2 percentage points in 2010 to 10.0 percentage points in 2015 (see Fig. 2.22). Recent data, however, indicate that there is a large variation between countries. In 2015, the maximum reported proportion in the Region was 10.1% while the minimum was 0.1% (see Fig. 2.22).

**Figure 2.22. Proportions of children of primary school age not enrolled (%)**



Source: Health for All database on the WHO European Health Information Gateway (9).

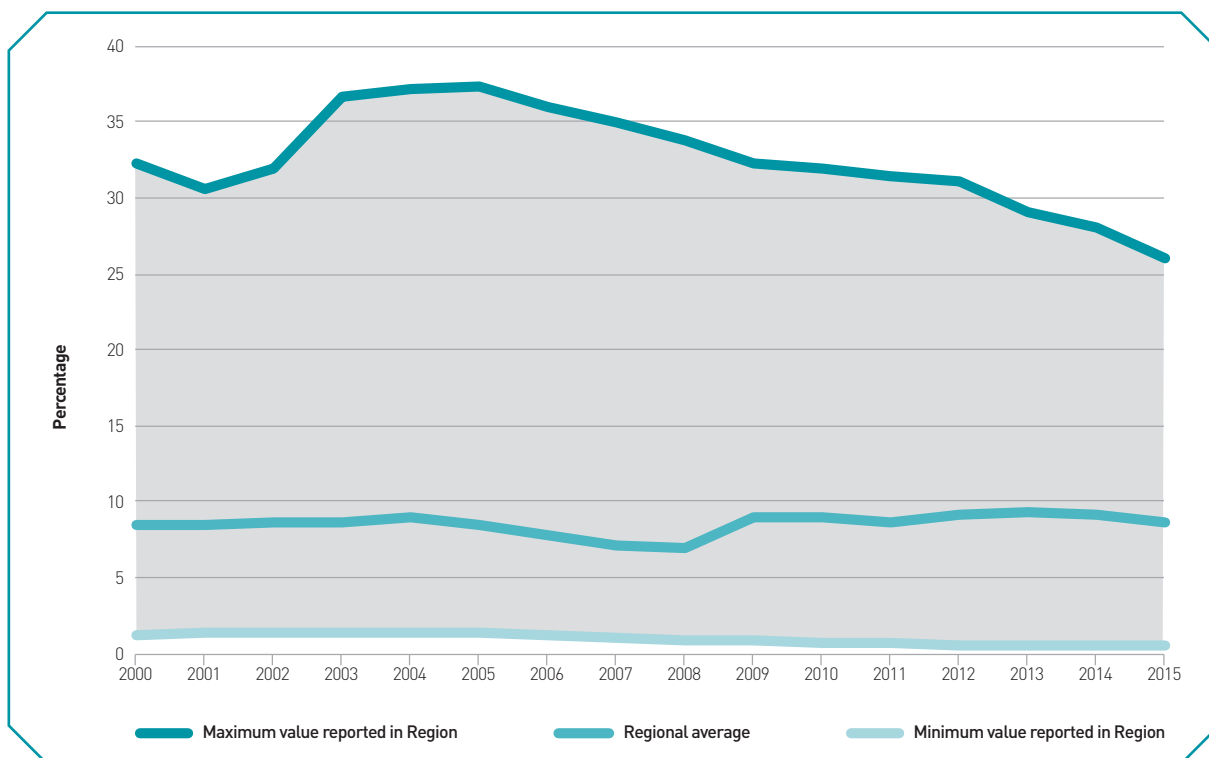
## Differences in unemployment rates are decreasing, but a wide variation still exists between countries in the Region

Unemployment rates contribute to the measurement of the target of reducing inequality. The unemployed comprise all people of working age who were: a) without work during the reference period (i.e. were not in paid employment or self-employment); b) currently available for work (i.e. were available for paid employment or self-employment during the reference period); and c) seeking work (i.e. had taken specific steps in a specified recent period to seek paid employment or self-employment) (1).

The WHO European regional average unemployment rate (see Fig. 2.23) decreased to 8.7% in 2015, which was slightly lower than the regional average for 2010 (8.9%), yet slightly higher than the reported rate for 2000 (8.4%).

There was wide variation in the unemployment rates across the Region in 2015, which ranged from a minimum value of 0.5% to a maximum value of 26.1%. The differences between the maximum and minimum unemployment rates have been decreasing over the last decade: from 31.3 percentage points in 2010 to 25.6 percentage points in 2015 (see Fig. 2.23).

**Figure 2.23. Unemployment rate (%)**



Source: Health for All database on the WHO European Health Information Gateway (9).

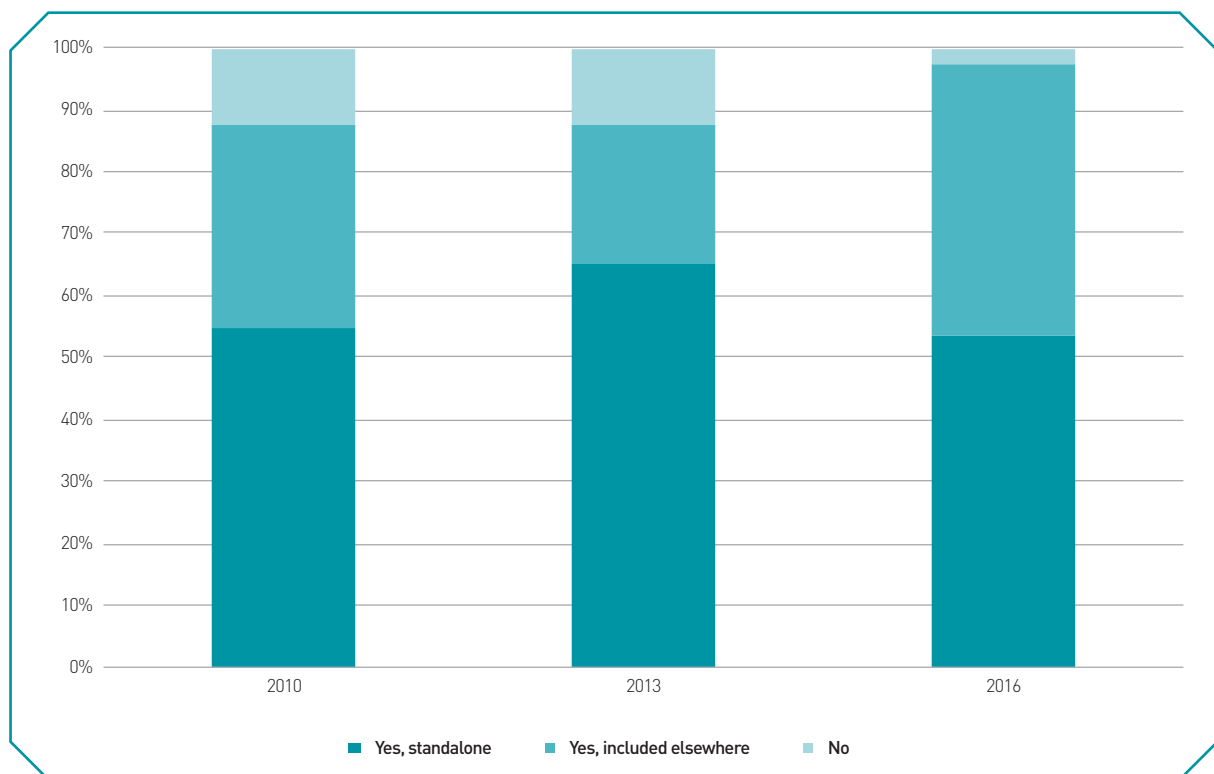
## Policies to tackle health inequities in place in 42 countries in 2016

Health inequities are unfair distributions of health and well-being outcomes (1). Social determinants of health include all political, social, economic, institutional and environmental factors which shape the conditions of daily life (1), contribute to health and well-being and the onset of illness throughout a person's life. National policies that address the reduction of health inequities by taking action on the social determinants

of health can lead to improvements in the overall health and well-being of the entire population.

The number of countries in the European Region establishing and documenting national and subnational policies to address the reduction of health inequities has been increasing (see Fig. 2.24). In 2016, 42 countries out of 53 (79%) had a policy or strategy in place to address inequities or social determinants. This is an increase from 29 and 35 countries, respectively, in 2010 and 2013.

**Figure 2.24. All country replies on the existence of a national or subnational policy or strategy addressing health inequities or social determinants of health (2010: n = 33; 2013: n = 40; 2016: n = 43)**



Source: WHO Regional Office for Europe (27).

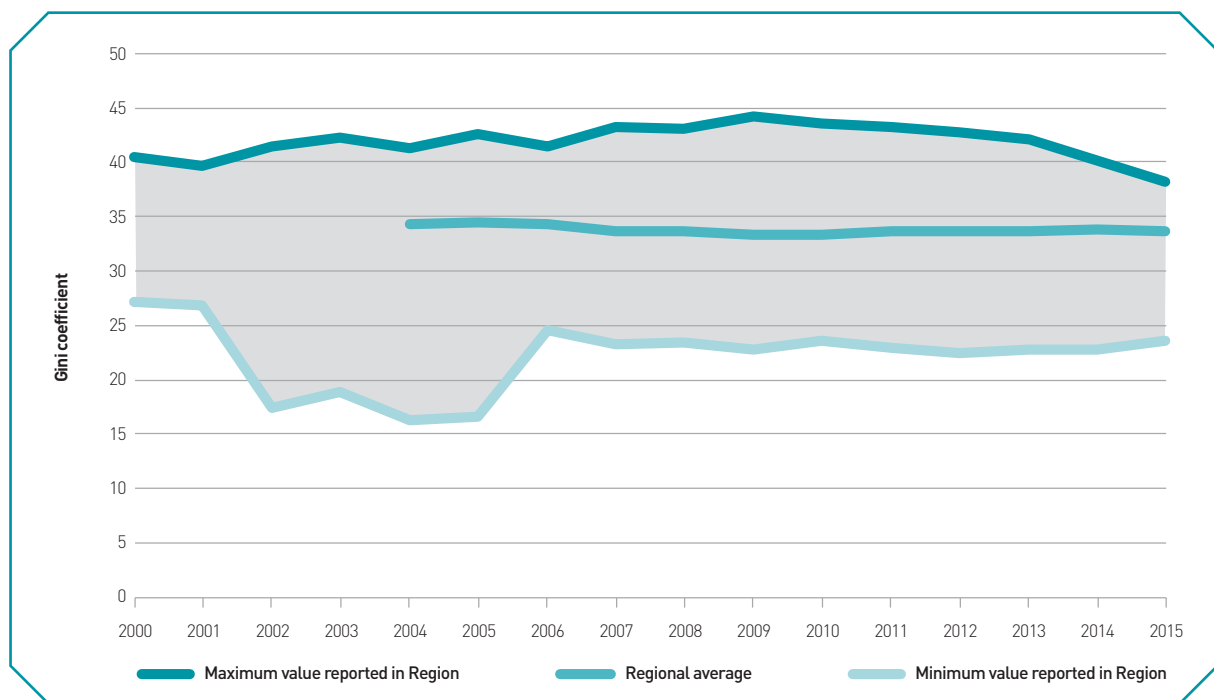
## Decline in inequalities in income distribution between the countries in the Region

The Gini coefficient measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution (1).

The WHO European regional average of income inequality (Gini coefficient) has slightly decreased over the last decade from 34.3 in 2004 to 33.7 in 2015, respectively.

At the same time, there were large differences in levels of income inequality between the countries in the Region which ranged from a minimum value of 23.6 to a maximum value of 38.2 in 2015 (see Fig. 2.25). The differences between the maximum and minimum values in the Region have been slowly decreasing over recent years (see Fig. 2.25): from 19.9 percentage points in 2010 to 17.4 percentage points in 2014 and 14.6 in 2015, representing a decrease of 27% since 2010. However, these trends should be interpreted with caution as the number of countries that reported data decreased from 40 countries in 2010 to 37 in 2014 and 31 countries in 2015.

**Figure 2.25. Gini coefficient (income distribution)**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

**Note:** The European regional average is calculated for those years when more than 26 countries (half of the 53 Member States) reported in that year. See Annex 2 for detailed notes.

## Target 4. Enhance the well-being of the European population

### Introduction

The assessment of well-being as a multidimensional concept is a core target area in Health 2020 policy for the Region. Reporting on well-being indicators within the Health 2020 framework informs stakeholders about the distribution of well-being across different population groups as well as the drivers and barriers to well-being (28).

The WHO European Region's overall life satisfaction index is 6. However, some countries have a relatively low life satisfaction score of 5 or below, while other countries have the highest scores in the world.

The indicator of social support (one of the objective well-being indicators), is high in the Region with 81% of the population aged 50 years and above reporting that they had relatives or friends on whom they could count when in trouble. However, this is lower than the reported value for 2013. There was a large variation between different countries in the Region, reflecting a gradient of social connectedness across the Member States.

Concerning the second indicator on objective well-being, in 2015, more than 90% of the population in the Region had access to improved sanita-

tion facilities and piped drinking water. Yet there were inequalities in access between the urban and rural areas in the Region.

In 2015, on average, the percentage of the adult population that had completed at least secondary education remained almost unchanged. However, educational attainment varied between countries in the Region.

According to the Eurostat database which includes data on 34 countries in the Region, the percentage of people aged 65 years and above that live alone has increased, with women constituting the greater share of older adults living alone. Finally, there has been a steady increase in the regional average of household final consumption expenditure per capita which is now the highest reported since 2000, the reference year.

These findings revealed a diverse performance of Member States in relation to their populations' well-being. Improved well-being contributes to better mental and physical health, higher productivity at work and in turn stronger economies. Hence, careful design, monitoring and implementation of well-being policies and strategies will need to continue in the Region.

### **Box 2.10. Health 2020 Target 4 and indicators**

Well-being is both subjective and objective. It comprises an individual's experience of their life as well as a comparison of life circumstances with social norms and values.

Target 4 "Enhance the well-being of the European population" is linked to Health 2020 policy area 2 "Healthy people, well-being and determinants". The quantification for this target is set as a result of the baseline of the core well-being indicators.

The indicator for subjective well-being is life satisfaction and those for objective well-being include:

- availability of social support
- percentage of population with improved sanitation facilities
- Gini coefficient (described in the section on Target 3)
- unemployment rate (described in the section on Target 3), and
- proportion of children of official primary school age not enrolled in school (described in the section on Target 3).

The additional indicators include:

- percentage of people aged 65 years and over living alone
- household final consumption expenditure per capita, and
- educational attainment of people aged 25 years and over who have completed at least secondary education.

## Subjective well-being: average level of life satisfaction in the Region

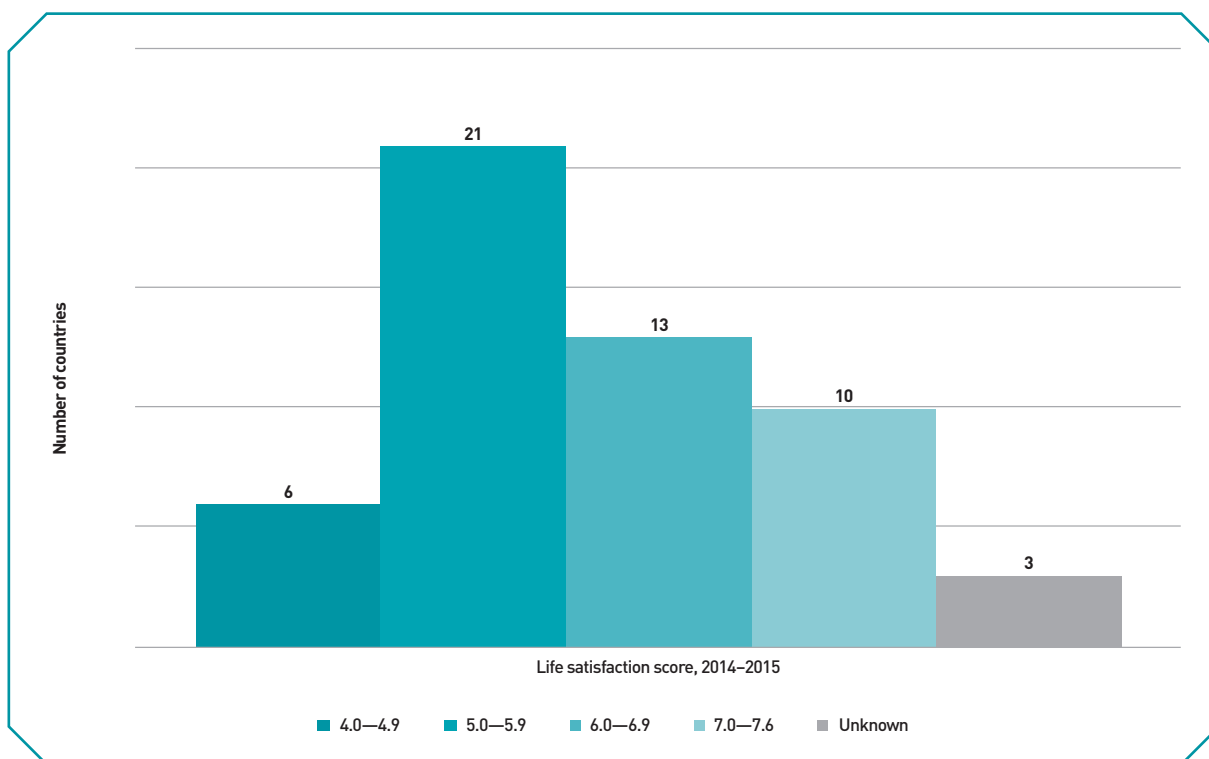
Life satisfaction comprises the subjective dimension of well-being in Health 2020 (1). The life satisfaction score is measured on a scale from zero (least satisfied) to 10 (most satisfied) for the question: “How satisfied are you with life these days?”

Data from the Gallup World Poll for 2014–2015, obtained through the United Nations Development Programme’s *Human Development Report 2016* (29), give the WHO European Region an overall life

satisfaction score of 5.9. Data were available for 50 countries in the Region.

There is considerable variation in life satisfaction levels between the countries in the Region. Some countries have a relatively low overall average self-reported life satisfaction score, with average scores of 4.9 or below. Other countries in the Region have higher scores of up to 7.6 (which is also the highest score in the world) (29). Twenty-three countries have an average life satisfaction score above 6; the remaining 27 have a score of 5.9 or lower (see Fig. 2.26).

**Figure 2.26. Overall life satisfaction in the WHO European Region, 2014–2015**



Source: adapted from (29).

## High level of social connectedness in the Region: 81% of the population has social support through family or friends

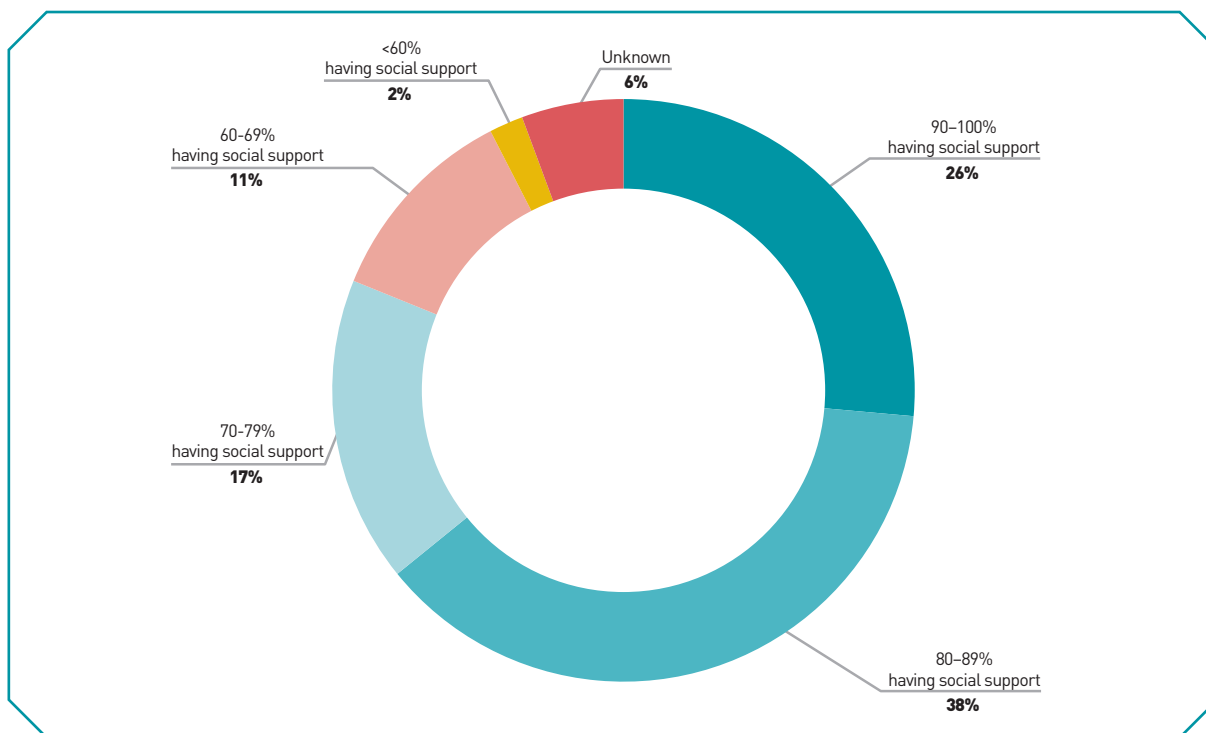
Social connectedness is a measure of objective well-being (1). Its importance for health and well-being has been well established and is therefore a common element in well-being frameworks (1).

The level of availability of social support (objective well-being indicator) is expressed as a percentage of the population aged 50 years and above who responded “yes” to the survey ques-

tion: “If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?” (1). In 2015, 81% responded positively. This average percentage is slightly lower than that reported in 2013 (86%).

There is a large gap between the countries in the Region reporting the highest and lowest proportions of social connectedness which ranged from 43% to 95% in 2015. In 2015, 64% of countries in the Region had a proportion of social connectedness of 80% or higher, while for 13% of countries the proportion was below 70% (Fig. 2.27).

**Figure 2.27. Percentage of people aged over 50 years who have social support, proportion of countries, 2015**



Source: Health for All database on the WHO European Health Information Gateway (9).



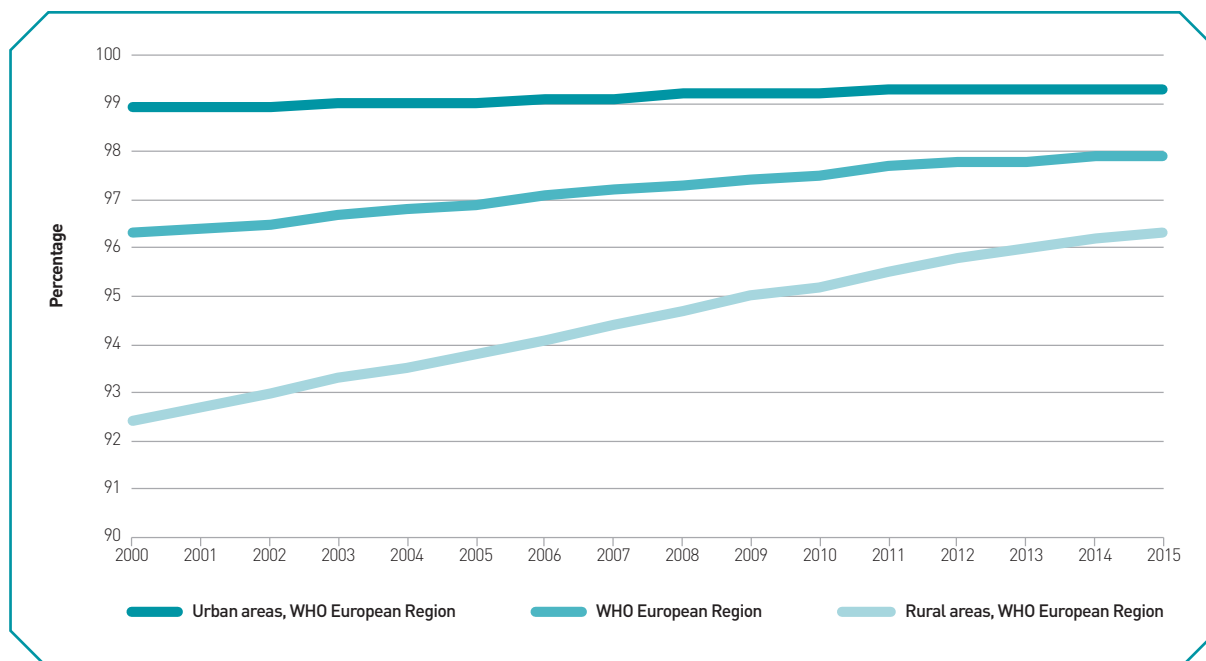
## Inequalities in rural and urban access to piped water and sanitation systems persist

An improved sanitation facility is defined as one that hygienically separates human excreta from human contact (1). Living in satisfactory and sanitary housing conditions is one of the most important aspects of people's lives (1). An assessment of population well-being thus needs to examine living conditions and whether dwellings have access to facilities – including an adequate water supply and sewage system – that are considered basic needs and human rights (1).

Improved sanitation facilities include flush toilets (alternatively pour flush to piped sewer system, septic tank, or pit latrine); ventilated improved pit latrines; pit latrines with slab; and composting toilets (1).

Using the pre-specified definition by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, more than 90% of the population in the Region has access to improved sanitation facilities and piped drinking water (see Fig. 2.28–2.30).

**Figure 2.28. Access to piped water in urban and rural areas**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

In 2015, 97.9% of the population in the WHO European Region had access to piped drinking water: 96.3% of the population in rural areas and 99.3% of the population in urban areas (see Fig. 2.28). These average proportions show a small increase since 2010 when the percentages were 95.2% for rural areas and 99.2% for urban areas. In 2015, there were large inequalities in access to piped drinking water between the urban and rural areas in the Region, which ranged from 93.1% to 100% for populations in urban areas and from 66.7% to 100% for populations in rural areas.

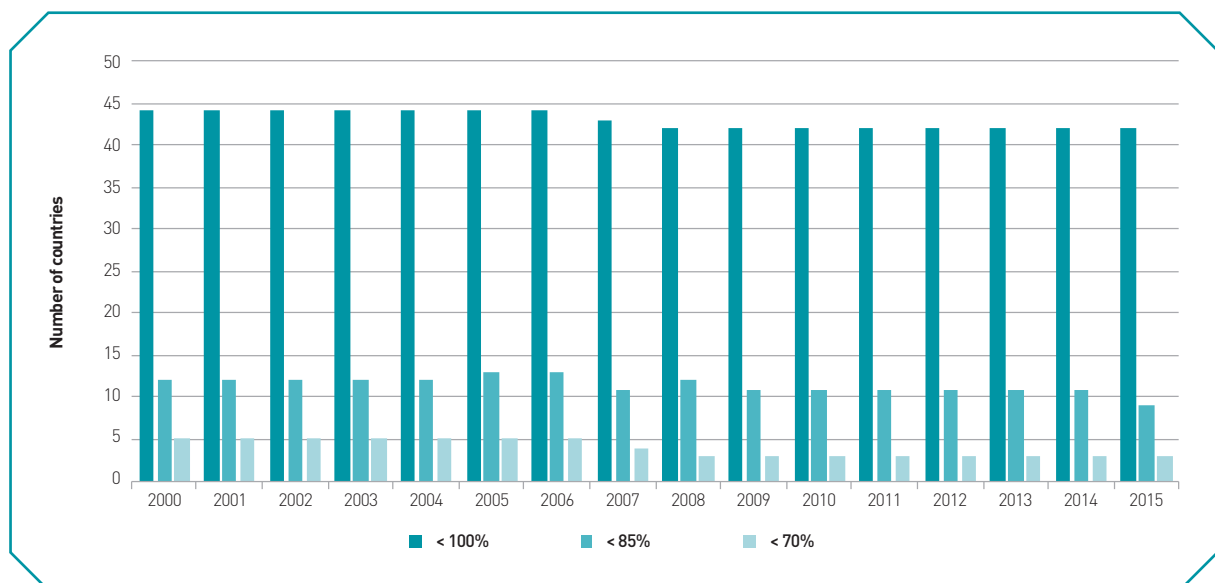
In 2015, 92.9% of the population in the WHO European Region had access to improved sanitation systems. By 2015, 89.2% of the population in rural areas and 94.6% of the population in urban areas had access to a sewage system, septic

tank or other hygienic means of sewage disposal. These proportions show a small improvement since 2010 when the percentages were 88.2% for rural areas and 94.4% for urban areas.

The proportion of the rural population with access to improved sanitation facilities in 2015 was below 85% in nine countries and below 70% in three (see Fig. 2.29). In urban areas it was below 90% in five countries and below 80% in one country (see Fig. 2.30).

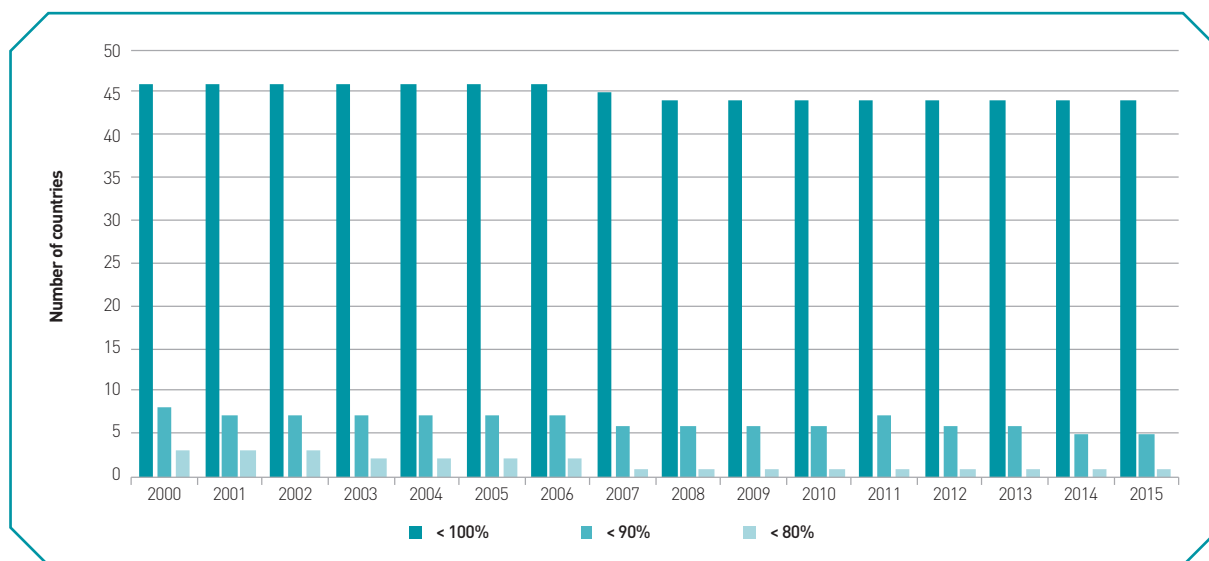
These figures show that the Region still lags behind the targets for SDG goals (24). SDG Targets 6.1 and 6.2 aspire to “achieve universal and equitable access to safe and affordable drinking water for all; and achieve access to adequate and equitable sanitation and hygiene for all”.

**Figure 2.29. Number of countries in which the proportion of the rural population with access to improved sanitation facilities is below 100%, 85% or 70%**



Source: Health for All database on the WHO European Health Information Gateway (9).

**Figure 2.30. Number of countries in which the proportion of the urban population with access to improved sanitation facilities is below 100%, 90% or 80%**



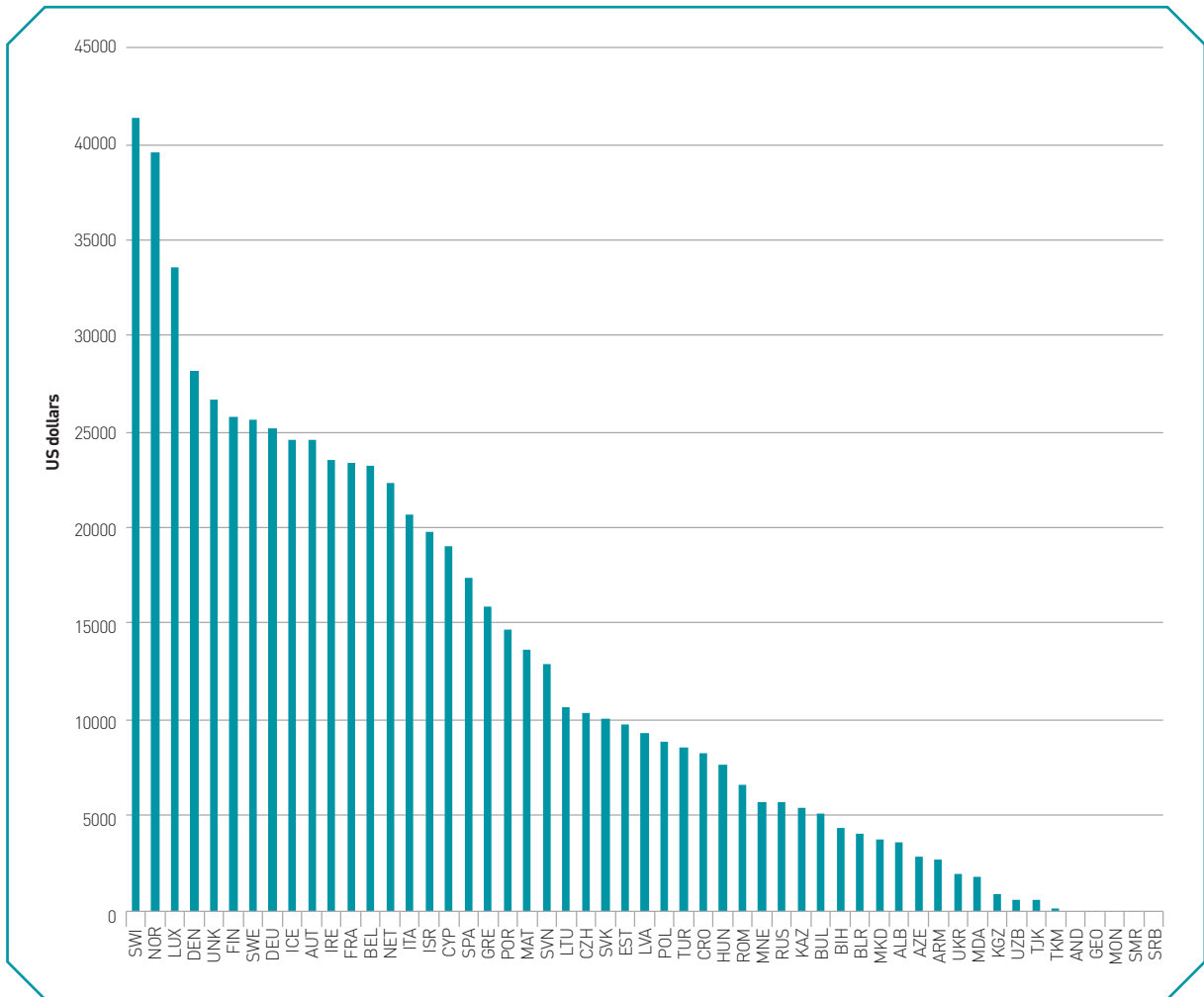
**Source:** Health for All database on the WHO European Health Information Gateway (9).

### Highest level of household final consumption expenditure per capita since 2000: US\$ 15 120 in 2016

Household final consumption expenditure is the market value of all goods and services, including durable products (such as cars, washing machines and home computers), purchased by households (1). It excludes purchases of dwellings

but includes imputed rent for owner-occupied dwellings (1). It also includes payments and fees to governments to obtain permits and licenses (1). There has been a steady increase in the regional household final consumption expenditure per capita (constant 2010 US\$); it increased from US\$ 12 902 in 2010 to US\$ 15 120 in 2016, which is the highest reported since 2000, the reference year (see Fig. 2.31).

**Figure 2.31. Household final consumption expenditure per capita (constant 2010 US\$), latest available year**



Source: World Bank (30).

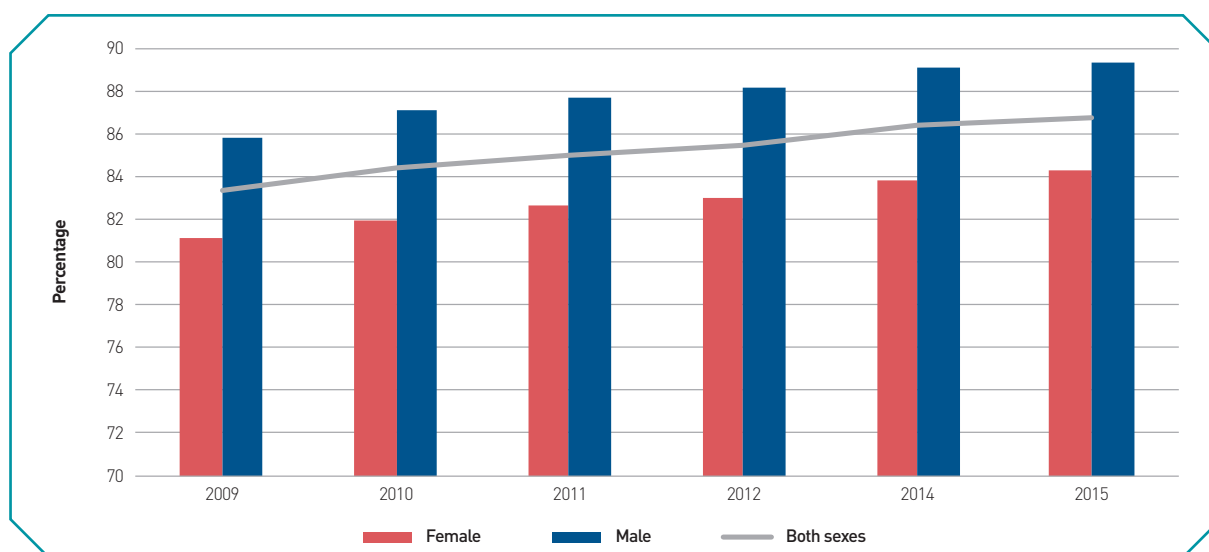
## Large differences between countries in the Region in educational attainment of people aged 25 years and above who have completed at least secondary education

Educational attainment is defined as the highest level successfully completed in the educational system of the country where the education was received (1). The levels of education are defined according to the International Standard Classification of Education (ISCED) of 1997 (1).

According to UNESCO data, on average, the percentage of the adult population who had completed at least secondary education (ISCED level 2 and up) remained unchanged between 2010 (51.2%) and 2015 (50.0%); 32 countries in the Region reported data (see Fig. 2.32).

There are large differences between countries in educational attainment of people aged 25 and above who have completed at least secondary education; in 2015, the maximum reported value in the Region was 80.3% and the minimum reported value was 34%.

**Figure 2.32. Percentage of people aged 25 years and above who have completed at least secondary education**



Source: UNESCO (31).

## A high percentage of people aged 65 years and above live alone

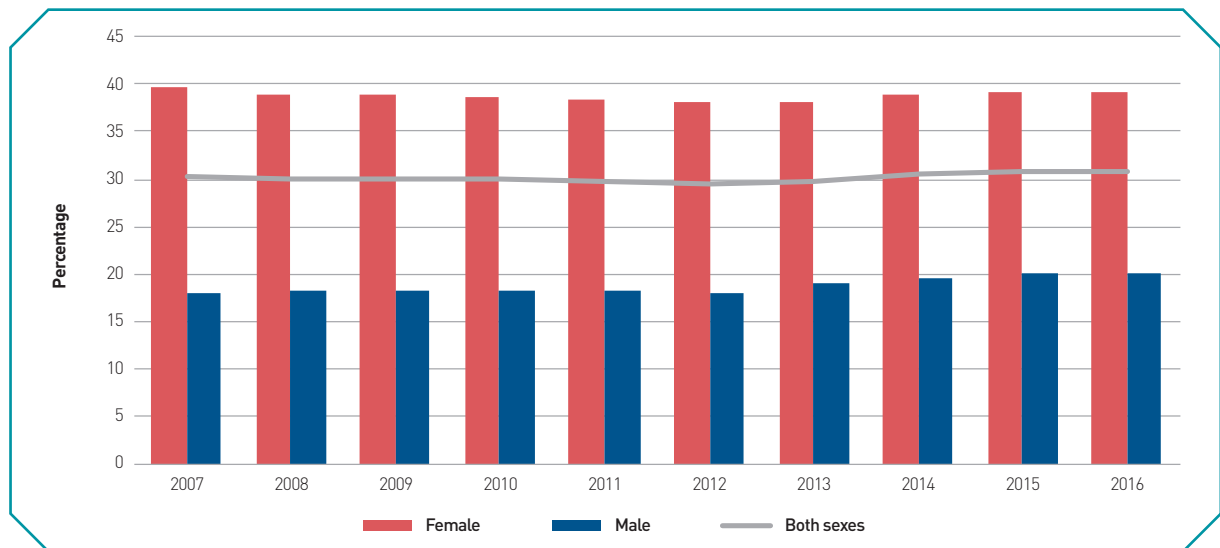
This indicator measures the potential support needed for older – and in general more vulnerable – people in a community by measuring the percentage of people aged 65 and over that live alone (1).

The percentage of people aged over 65 who live alone has increased from 29.9% in 2010 to 30.9% in 2016 (see Fig. 2.33), according to the Eurostat

database, which includes data on 34 countries in the Region.

In 2010, women made up a greater share of older adults living alone as 38.7% of elderly women were living alone. Since then, the percentage of older women living alone has slightly increased to 39.2% in 2016, while the percentage of older men living alone has risen from 18.3% in 2010 to 20.2% in 2016. The gender difference is largely a reflection of the gap in life expectancy between men and women.

**Figure 2.33. Percentage of people aged 65 years and above living alone, by sex**



Source: Eurostat (23).

## Target 5. Ensure universal coverage and the “right to health”

### Introduction

Target 5 is focused on achieving universal health coverage by 2020 and envisages the “right to health” as a core policy construct and vision that fosters the idea that provision of equitable fair access to effective and needed services without financial burden is a fundamental right of all citizens.

The WHO Director-General, Dr Tedros, identified universal health coverage as one of the five key priorities for the World Health Organization (32). Ensuring universal health coverage without impoverishment is the foundation for achieving the health objectives of the SDGs (32). The World Health Assembly made universal health coverage one of WHO’s three strategic priorities in the WHO’s thirteenth general programme of work 2019–2023, by setting the strategic priority (and goal) of “reducing persistent barriers to accessing health services and 1 billion more people benefitting from universal health coverage” (33).

Moreover, achieving universal health coverage will put the health system into a better position to respond to new and intensifying challenges, such as antibiotic resistance. Antibiotic resistance leads to longer hospital stays, higher medical costs and increased mortality. A sustained response to antibiotic resistance will address these (34).

Countries should secure sufficient resources to support universal health coverage systems in which essential health services are available to all individuals who need them while at the same time reducing out-of-pocket payments.

Member States’ performance is showing a mixed picture in association with the indicators for Target 5. The WHO European regional average total health expenditure as a percentage of GDP has remained unchanged since 2010. Likewise, the regional average of the general government expenditure on health as a percentage of GDP has also remained unchanged. There are, however, large differences in levels of public expenditure on health between the countries in the Region. Private household out-of-pocket expenditures as a share of total expenditure on health has slightly increased with great variation across the Region.

On the other hand, the WHO European Region has made some gains in closing the gap in maternal mortality which decreased between 2010 and 2015.

Similarly, the regional average treatment success rate (%) for new pulmonary TB cases has also improved slightly over the last decade. There were, however, large differences in reported treatment success rates by the Member States.

### **Box 2.11. Health 2020 Target 5 and indicators**

Target 5 is “moving towards universal coverage (according to the WHO definition: Equitable access to effective and needed services without financial burden) by 2020”. To assess countries’ performance in relation to this target, Member States in the Region collect and report data for a set of core indicators:

- private household out-of-pocket payments as a proportion of total health expenditure (WHO estimate)
- percentage of children vaccinated against measles, polio and rubella (described in the section on Target 1)
- total expenditure on health (as a percentage of GDP) (WHO estimate).

The additional indicators include:

- maternal deaths per 100 000 live births
- percentage of people treated successfully among laboratory-confirmed (new smear-positive) pulmonary tuberculosis cases who completed treatment
- government (public) expenditure on health as a percentage of GDP (WHO estimate).



### **Box 2.12. Surveillance of antibiotic resistance in the European Region**

Surveillance is an essential tool for assessing the sources and trends of antibiotic resistance, informing policies and interventions and monitoring their impact. In many EU/EEA countries, surveillance of antibiotic resistance has been performed for almost two decades, which has been coordinated by the European Centre for Disease Prevention and Control since 2010 as the European Antimicrobial Resistance Surveillance Network (EARS-Net). In 2012, the Regional Office, together with partners, established the Central Asian and Eastern European Surveillance of Antimicrobial Resistance (CAESAR) network to assist countries in the rest of the European Region to set up or strengthen national surveillance systems to complete the regional overview of antibiotic resistance. In some countries, this proved particularly difficult since antibiotic susceptibility testing of samples obtained from patients to support treatment decisions was not done routinely, so data on antibiotic resistance were not readily available. To stimulate routine sampling practice to improve patient treatment (antibiotic stewardship) and enable national antimicrobial resistance surveillance, a so-called proof-of-principle (PoP) study was designed. Such a study entails selecting project hospitals, forming interdisciplinary hospital teams, providing criteria for sampling patients, training hospital and national reference laboratory personnel on international diagnostic standards and setting up lines of communication for results and project progress within and between project teams.

The first PoP study was performed in Georgia between July 2015 and December 2016. At the end of the study, a stakeholder meeting was organized in May 2017 to discuss the obtained data with the participating hospitals, the lessons learnt and the next steps needed at the hospital and the national level to ensure sustainable implementation. The results presented during the stakeholder meeting indicated that the study had successfully demonstrated the value of standardizing blood culturing in de-escalating treatment of bloodstream infections and that communication between clinicians, epidemiologists and microbiologists had greatly improved. The efforts also laid the foundation for a laboratory-based surveillance system for antimicrobial resistance which enabled Georgia to provide data for the CAESAR annual report (35) for the first time in 2017. Currently, Armenia is performing a PoP study and more studies are being prepared in Uzbekistan and Tajikistan.

## The regional average of the total expenditure on health as a percentage of GDP remained almost unchanged between 2010 and 2014

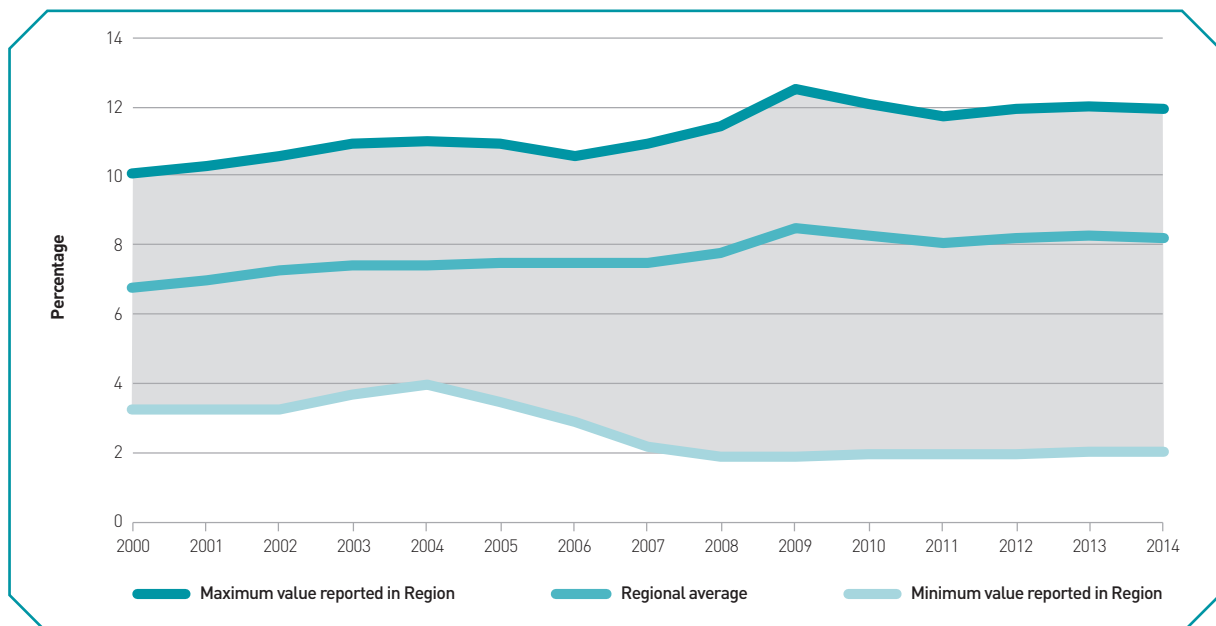
Total health expenditure is measured as the sum of general government and private expenditure on health (1). Estimates for this indicator are produced by WHO jointly with the Organisation for Economic Co-operation and Development and the World Bank (1).

The WHO European regional average of total health expenditure as a percentage of GDP has steadily

increased from 6.8% in 2000 to 8.5% in 2009 but then fell slightly and remained almost unchanged at 8.3% in 2010 and 8.2% in 2014 (Fig. 2.34).

However, there were large differences in levels of total health expenditure as a percentage of GDP between the countries in the Region. Expenditure ranged from 2.1% to a maximum value of 11.9% in 2014 (see Fig. 2.34). The difference between the countries with the highest and lowest rates of expenditure in the Region has widened since 2005 but has remained at around 10 percentage points since 2010 (see Fig. 2.34). There were large intra-regional differences as expenditure ranged from 6.6% in CIS countries to 10.8% in Nordic countries.

**Figure 2.34. Total health expenditure as a proportion of GDP (WHO estimates) (%)**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

## Continued increment in the regional average of private households' out-of-pocket payments on health: the challenge of achieving universal health coverage in the Region

The level of out-of-pocket payments or expenditure on health is expressed as a percentage of total expenditure on health (1). Private households' out-of-pocket payments on health are their direct expenses, including gratuities and payments in kind made to health practitioners and suppliers of pharmaceuticals, therapeutic appliances and other goods and services, whose primary purpose is to contribute to the restoration or enhancement of the health status of individuals or population groups (1). They also include household payments to public services, non-profit institutions or non-governmental organizations, nonreimbursable cost sharing, deductibles, co-payments and fees for service (1). The evidence shows that there is a strong correlation between a country's public expenditure on health and private out-of-pocket payments (36, 37 p. 29). Countries with low levels of public expenditure on health usually experience high levels of out-of-pocket payments, which in turn may lead to financial hardship for households and adverse effects on health outcomes.

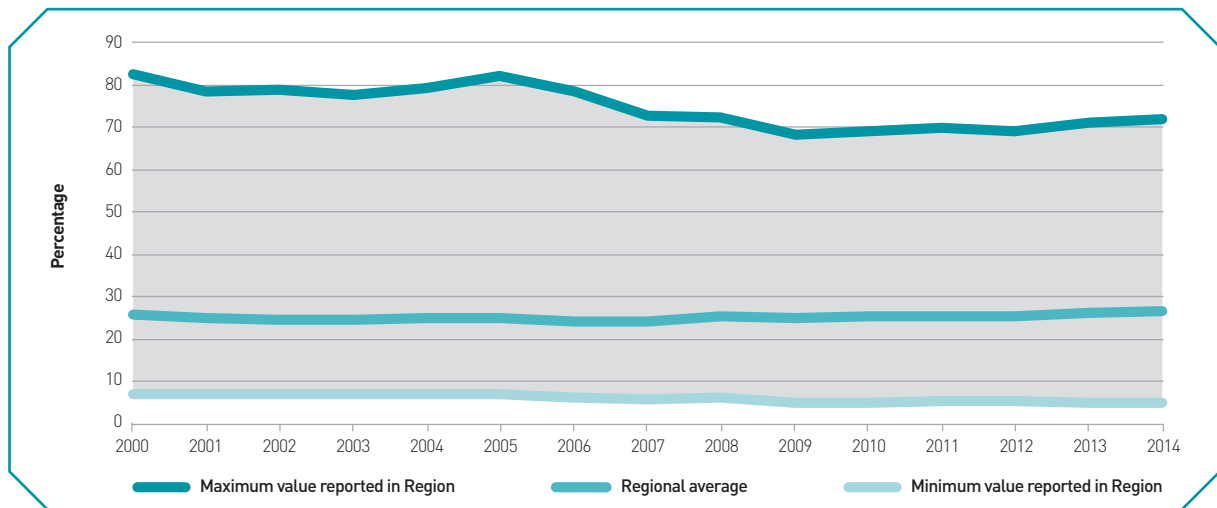
International analysis suggests that once the share of out-of-pocket payments falls below 15% of total spending on health, very few households experience catastrophic or impoverishing levels of health expenditure (38). In 2014, 40 countries in the Region had proportions higher than this critical threshold, similar to the findings reported in the *European health report* for 2015.

The regional average of private household out-of-pocket expenditure has slightly increased from 25.5% in 2010 to 26.6% in 2014 (see Fig. 2.35). This indicates an increase in inequitable access to health care along with an elevated level of financial risk, impoverishment and perpetuation of an economically vulnerable population.

There were large differences in the proportions of private household out-of-pocket expenditure between the countries in the Region, which ranged from a low value of 5.2% to a very high maximum value of 72.1% in 2014 (see Fig. 2.35).

There were also considerable differences between subregions in the proportions of private household out-of-pocket expenditure, which ranged from 14.7% in Nordic countries to 46.2% in CIS countries in 2014.

**Figure 2.35. Private households' out-of-pocket expenditure on health as a proportion of total health expenditure (WHO estimates) (%)**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

### General government expenditure on health as a percentage of GDP remained static between 2010 and 2014

There is an additional indicator for this target that concerns general government expenditure on health as a percentage of GDP (1).

General government expenditure on health is the sum of total expenditure for health maintenance, restoration or enhancement paid for in cash or supplied in kind by government entities, such as ministries of health and other ministries, parastatal organizations and social security agencies (without double counting the government transfer for social security and to extra budgetary funds) (1). It includes transfer payments to households to offset medical care costs to finance health services and goods (1).

The regional average of the general government expenditure on health as a percentage of GDP remained steady at 5.8% in 2010 and 5.7% in 2014.

There are large differences in the levels of general government expenditure on health between the countries in the Region. In 2014, the highest reported value for general government expenditure on health was 10% and the lowest was 1%. Since 2010 the highest level of general government expenditure on health in the Region has increased by 1 percentage point, whereas the lowest level has remained unchanged.

There are also considerable differences between subregions in the levels of general government expenditure on health as a percentage of GDP, which ranged from 3.4% in CIS countries to 8.9% in the Nordic countries in 2014.

To achieve universal health coverage at the national level, Member States have to ensure that sufficient public resources are allocated to health and out-of-pocket payments are reduced to a minimum, especially for the poor and other vulnerable populations. There is

an inverse relationship between a country's public expenditure on health and out-of-pocket payments. Countries with low levels of public expenditure on health usually experience high levels of out-of-pocket payments, which in turn pose a financial risk and foster negative influences on health outcomes.

### Slow decline in maternal deaths

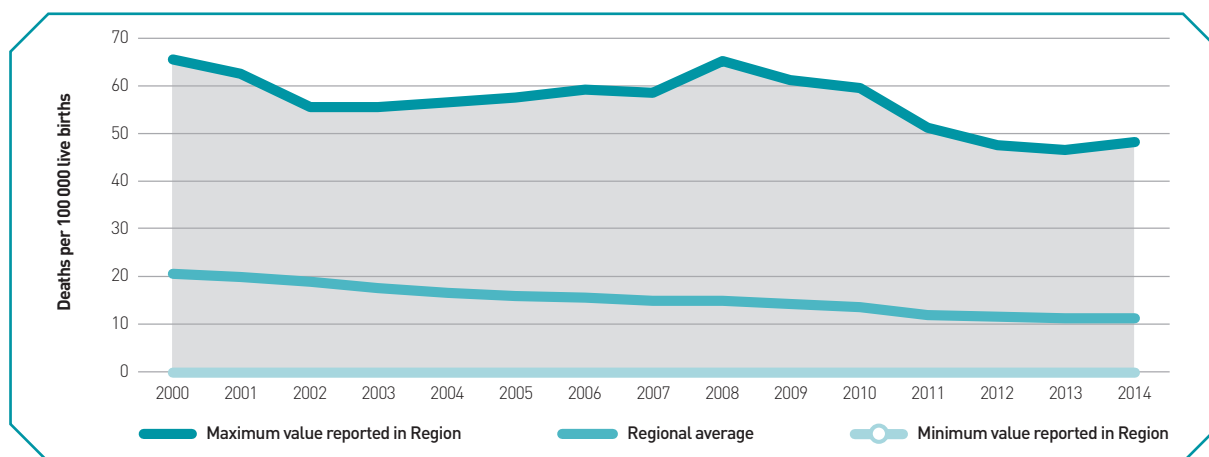
An additional key indicator for this target is maternal deaths per 100 000 live births (1).

It is also an SDG indicator for monitoring Goal 3.1 which aims to “reduce the global maternal mortality ratio to less than 70 per 100 000 live births” by 2030 (24). The maternal mortality ratio is the annual number of female deaths from any cause related to, or aggravated by, pregnancy or its management (excluding accidental or incidental causes), during pregnancy and childbirth or within 42 days of the end of the pregnancy, irrespective of the duration and site of the pregnancy, per 100 000 live births, for a specified year (1).

The WHO European Region has made considerable progress in closing the maternal mortality gap between countries; the difference between the highest and lowest rates is decreasing. The lowest rate in the Region in 2015 was 0%, while the highest rate was 55%.

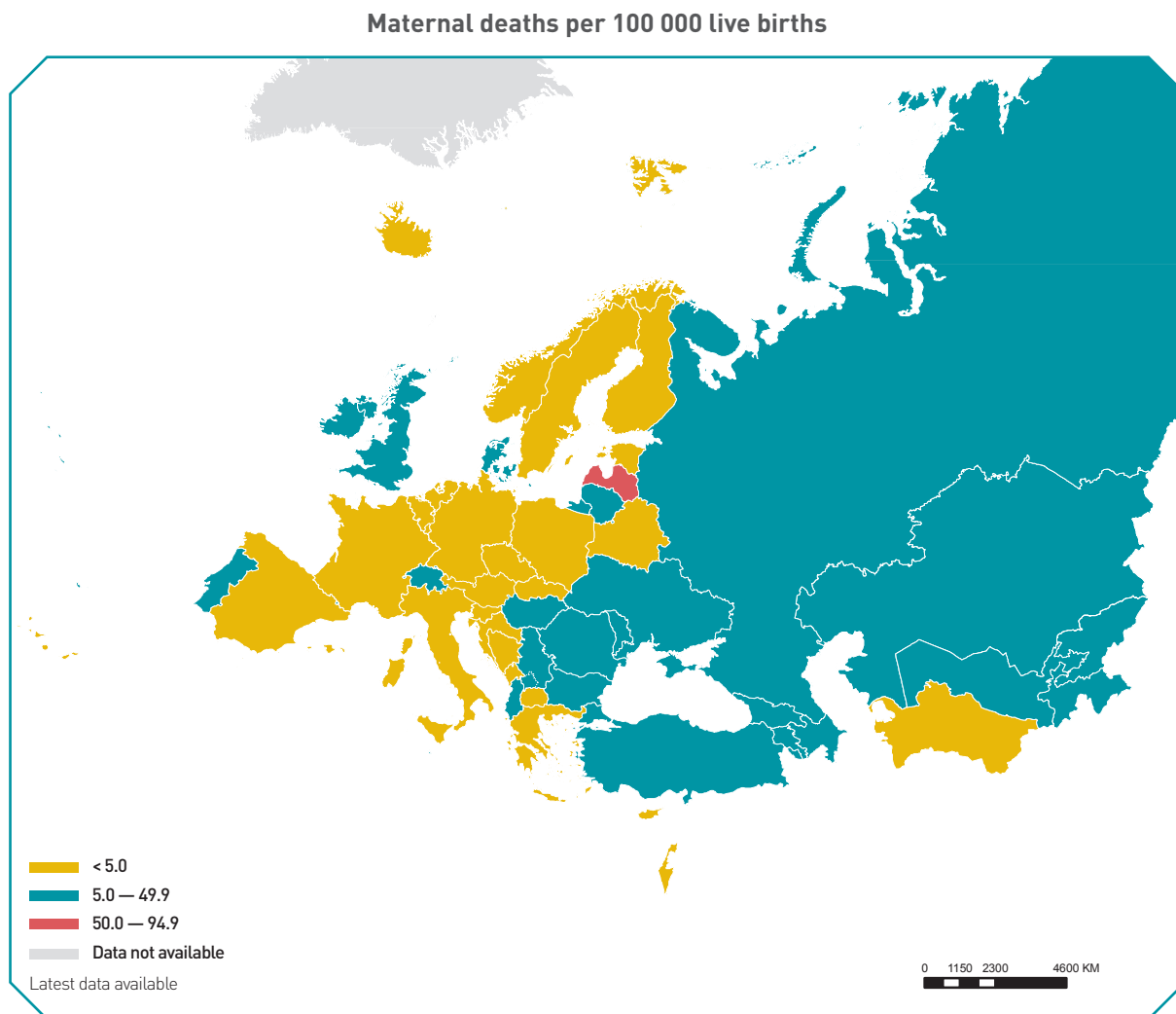
Certain indicators – such as infant and maternal mortality, as well as various communicable diseases – can be affected by small numbers of events and the small population size, and therefore most year-to-year variation seen at the national level is random. The maternal mortality indicator is therefore presented by calculating annual values using an average from the last three years for which data are available, having been adjusted using the moving averages method. The regional three-year moving average of maternal mortality rates decreased from 20 deaths per 100 000 live births in the period 2000–2002 to 13.7 deaths per 100 000 live births in 2009–2011 and 11.3 deaths per 100 000 live births in 2013–2015 (see Fig. 2.36). Further, there were large differences between the countries in three-year averages for maternal mortality (see Map 2.2).

**Figure 2.36. Maternal deaths per 100 000 live births, three-year moving average**



Source: Health for All database on the WHO European Health Information Gateway (9).

**Map 2.2. Maternal deaths per 100 000 live births, three-year moving average, latest available data**



**Source:** Health for All database on the WHO European Health Information Gateway (9).

**Note:** The map represents the average value per country based on the three most recent years for which data were available. See Table A2.1 in Annex 2 for information on the data underlying this map.

## Modest treatment success rates for new pulmonary TB cases: 77% by 2015

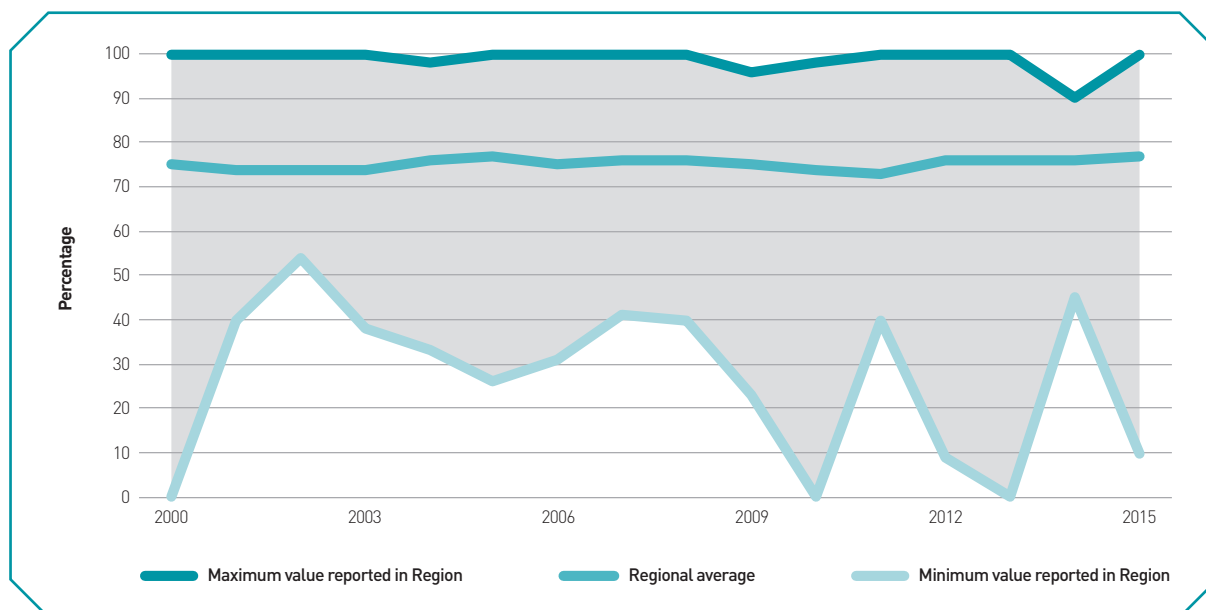
A third additional indicator for this target is treatment success rate (%) for new smear-positive pulmonary TB cases (1).

The cure rate or treatment success rate (those cured plus those that successfully completed treatment without bacteriological evidence) of sputum smear-positive pulmonary TB cases is the most reliable indicator (1). The TB treatment

success rate is the proportion of new smear-positive TB cases registered under a national TB control programme in a given year that successfully completed treatment (without bacteriological evidence of success) (1).

The regional average treatment success rate has slightly increased over recent years from 74% in 2010 to 77% in 2015 (see Fig. 2.37). There remain large differences between countries, with treatment success rates ranging from a very low value of 10% to a maximum value of 100% in 2015.

**Figure 2.37. Treatment success rate: new TB cases**



Source: WHO Global Health Observatory (15).

## Target 6. Set national goals and targets related to health

### Introduction

An important element of Health 2020 is its accountability mechanisms through Target 6 which requests Member States to set national goals and targets related to health.

In 2016, the majority of Member States provided feedback and evidence documenting their actions in relation to Target 6 (27). Using data obtained from a survey conducted by the WHO Regional Office for Europe on the qualitative indicators for Target 6, this midpoint assessment of the Health 2020 policy deployment in the Region showed that an increased number of Member States are effectively aligning national policies with Health 2020 policy, adopting the required implementation plans, and establishing accountability mechanisms for monitoring and assessing their progress.

Member States have shown a high level of commitment by the adoption of various approach-

es to align their national policies and strategies with Health 2020 policy, which has been infused into the national policies in many countries in the Region (27). The most common approaches addressed a whole-of-government approach, improved governance for health and improved universal health coverage.

There are still, however, many opportunities to continue developing policies and strategies to adopt, implement and integrate the Health 2020 values into policies across the Region. The implementation of Health 2020 should be sustained to ensure that health and well-being continue to be systematically addressed at country level through the comprehensive lens of the Health 2020 policy framework and its core values. These actions will also directly implement the strategic priority (and goal) that the World Health Assembly set forth in WHO's Thirteenth general programme of work 2019–2023: "Through an integrated and multi-sectoral approach, 1 billion more people enjoying better health and well-being" (33).

### Box 2.13. Health 2020 Target 6 and indicators

Target 6 is "national targets/goals set by Member States" and is linked to Health 2020 area 3 "Processes, governance and health systems". The description of this target is the establishment of processes for the purpose of setting national targets (if not already in place). The core indicators linked to this target are:

- establishment of a process for target-setting documented
- evidence documenting:
  - › establishment of national policies aligned with Health 2020
  - › implementation plan
  - › accountability mechanism.



## Thirty-eight countries have either set goals and targets for health and well-being or are planning to do so in the near future

Target-setting processes are established national procedures for setting health goals, objectives, targets or indicators aligned with Health 2020 (1). They are expected to be documented in Member State reports (1).

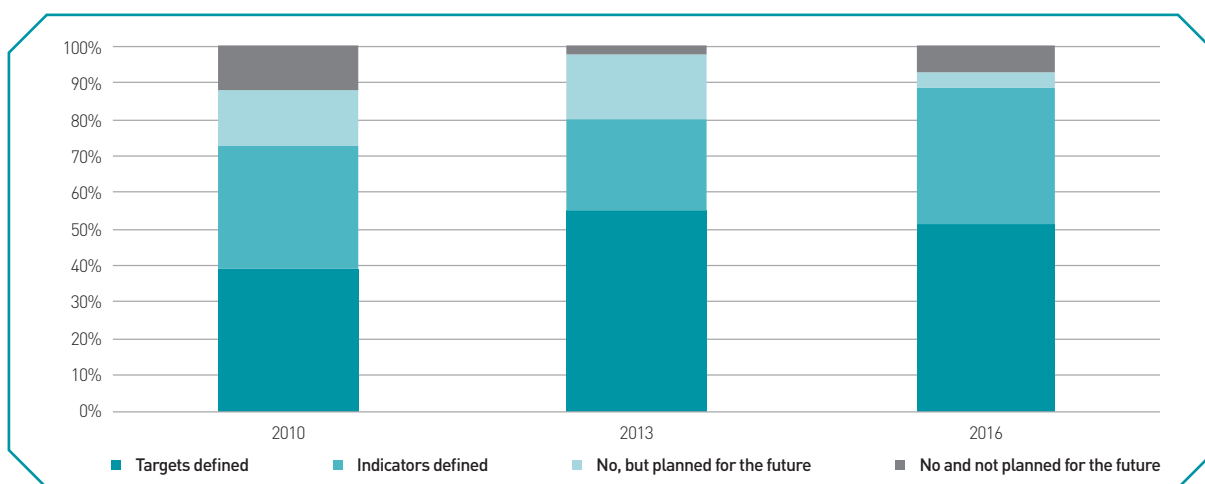
In 2014, the Regional Office conducted the first survey among Member States to collect information for the qualitative indicators linked to Target 6, for the baseline year (2010) and the first comparison year (2013). A follow-up survey was conducted in 2017 and the report with the complete analysis and findings was published and made available online (27).

This section briefly reports on the results of the three surveys on Health 2020 policy indicators

linked to Target 6 for 2010, 2013 and 2016. Thirty-three countries provided responses in 2010, 40 in 2013, and 43 in 2016 (see Fig. 2.38). Between 2010 and 2016, Member States were actively setting targets and indicators for health and well-being, with only a few countries left in the initial planning stages by 2016.

The percentage of responding countries that reported that they had set either targets or indicators for health and well-being, or were planning to do so in the near future increased from 73% in 2010, to 80% in 2013, and 88.4% (38 countries of the 43 that responded to the survey) in 2016 (see Fig. 2.38). Meanwhile, the percentage of countries that reported that they did not yet have a process or did not plan at all to define the process of setting targets and indicators dropped from 27% in 2010, to 20% in 2013 and 12% in 2016. By 2016, less than 7% of the countries in the Region reported that they had no plans to set up such processes in the future.

**Figure 2.38. Number of countries with a process for target-setting for health and well-being, in 2010, 2013, and 2016 (2010: n = 33; 2013: n = 40; 2016: n = 43)**



**Source:** WHO Regional Office for Europe (27).

**Note:** A different number of countries responded in each year (2010: n = 33; 2013: n = 40; 2016: n = 43). Twenty-eight countries responded in all three years.

## Rapid implementation of health policies aligned with Health 2020

Considering data from countries that responded to the surveys (in 2010, 2013, and 2016), the proportion of countries in the Region with a comprehensive national health policy aligned with Health 2020 has increased from 36.4% in 2010 to 62.5% in 2013 and 62.7% in 2016 (see Fig. 2.39). Furthermore, the proportion of countries in the Region who reported that they had another similar strategy has increased from 21% in 2010 to 30% in 2016. Overall, by 2016, 95% of the countries in the Region reported that they had either developed the required health policy, had a similar strategy or were planning to develop such a strategy in the near future. Meanwhile, the proportion of countries in the Region who reported that they had not established such policies decreased from 42% in 2010 to 22.5% in 2013 and 7% in 2016.

Diverse approaches have been taken by Member States to align their national policies and strategies with Health 2020 (27), including:

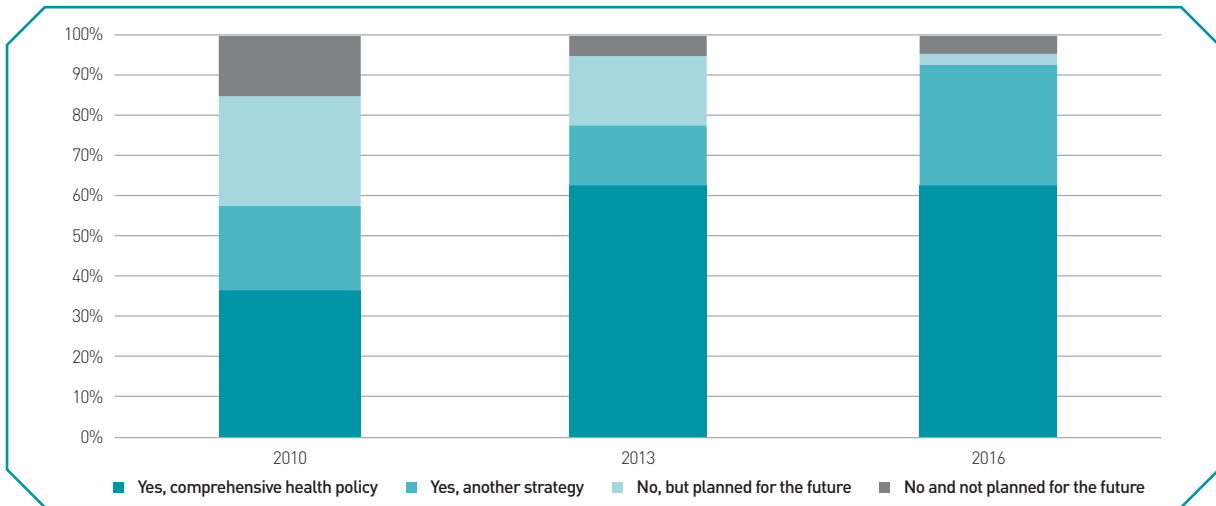
- addressing improved governance for health and taking a whole-of-government approach;
- addressing the reduction of health inequality or tackling the social determinants of health;
- adopting participatory approaches for policy development;
- featuring investment in a life-course approach and improving personal health and well-being skills and resilience;
- addressing major national health threats and challenges;

- addressing universal health coverage and patient-centred health care and public health services;
- including a whole-of-society approach, increasing social capital and empowerment; and
- implementing supportive environments conducive to health and well-being.

In 2010, the most common approaches for aligning national health policies and strategies with Health 2020 were to address major health challenges and threats (67%), health inequalities (61%) and foster participation among stakeholders (64%). By 2016, use of these approaches continued to increase, but the ones most frequently used were those improving governance or taking a whole-of-government approach, and those focused on improving universal health coverage and patient-centred care. The latter two also have the largest increase in the share of responses between 2010 and 2016.

The proportion of responding countries with an implementation plan for national policies and strategies aligned with Health 2020 has increased from 28% in 2010 to 50% in 2013 and 67% in 2016 (see Fig. 2.40). Overall, by 2016, 86% of the countries in the Region reported that they had either adopted an implementation plan or were in the process of doing so. In line with that, the proportion of countries that reported that they did not have any implementation plans (and had no plans to introduce any in the future) decreased from 27% in 2010, to 10% in 2013 and 12% in 2016.

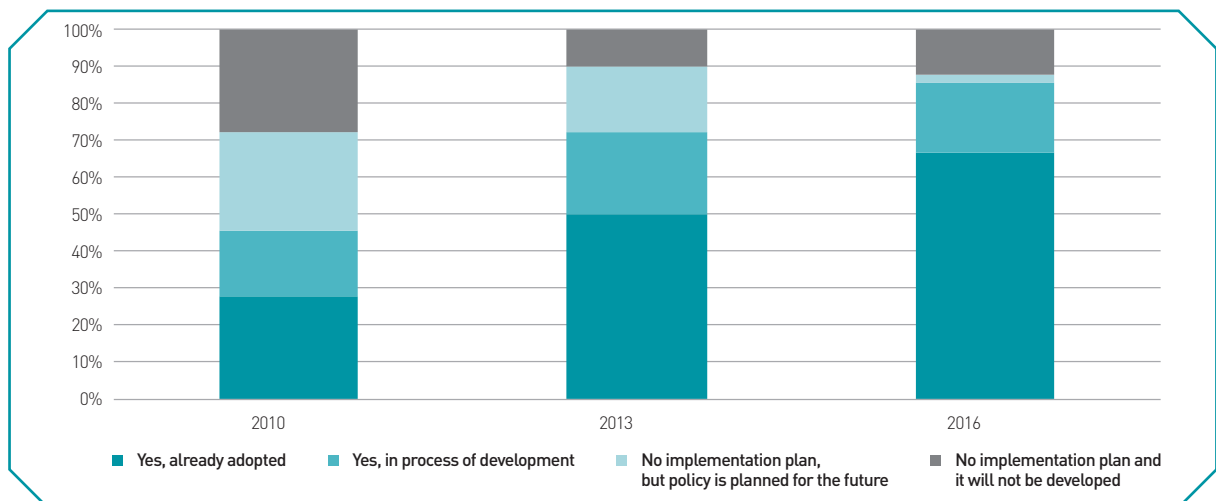
**Figure 2.39. Proportion of countries with national policies and strategies aligned with Health 2020, in 2010, 2013, and 2016 (2010: n = 33; 2013: n = 40; 2016: n = 43)**



**Source:** WHO Regional Office for Europe (27).

**Note:** A different number of countries responded in each year (2010: n = 33; 2013: n = 40; 2016: n = 43). Twenty-eight countries responded in all three years.

**Figure 2.40. Proportion of countries with an implementation plan for national policies and strategies aligned with Health 2020, in 2010, 2013, and 2016 (2010: n = 33, 2013: n = 40; 2016: n = 43)**



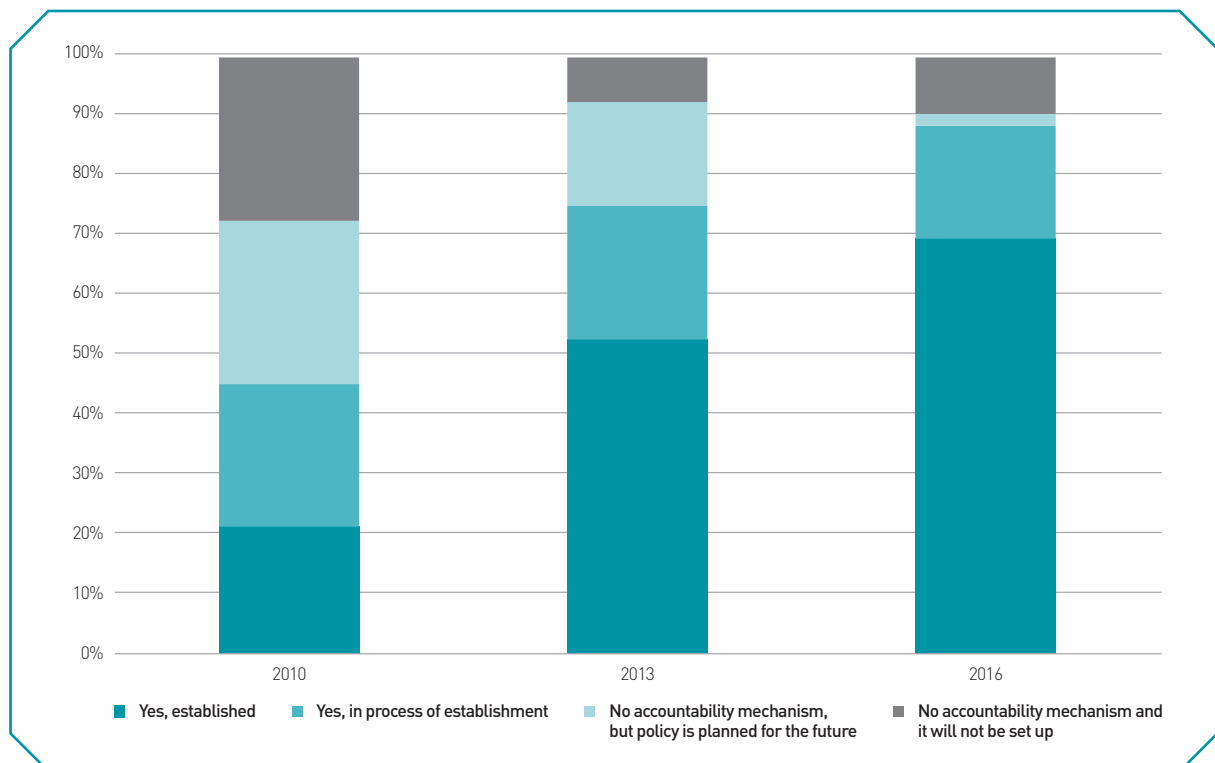
**Source:** WHO Regional Office for Europe (27).

**Note:** A different number of countries responded in each year (2010: n = 33; 2013: n = 40; 2016: n = 43). Twenty-eight countries responded in all three years.

The proportion of responding countries with an accountability mechanism for national policies and strategies aligned with Health 2020 has increased from 21% (7 countries) in 2010 to 52.5% in 2013 (21 countries) and 70% (30 countries) in 2016 (see Fig. 2.41). Overall, by 2016, 88.4% of the countries (38 countries in the Region) reported that they had either developed the required accountability mechanisms or were

in the process of doing so. The proportion of countries in the Region that reported that they did not have accountability mechanisms in place (and had no plans to introduce them) decreased from 54.5% (18 countries) in 2010, to 25% in 2013 (10 countries) and 11.6% in 2016 (only five countries). This shows that the Member States are actively reporting and reviewing the impact of their national policies.

**Figure 2.41. Proportion of countries with an accountability mechanism for national policies and strategies aligned with Health 2020, in 2010, 2013, and 2016 (2010: n = 33; 2013: n = 40; 2016: n = 43)**



**Source:** WHO Regional Office for Europe (27).

**Note:** A different number of countries responded in each year (2010: n = 33; 2013: n = 40; 2016: n = 43). Twenty-eight countries responded in all three years.

Looking across all Health 2020 targets and indicators, the most significant changes were observed for Target 6. As Member States are effectively progressing towards the final implementation of Health 2020, the activities, policies and accountability mechanisms are an important complement to the achievement of Agenda 2030 along with its SDGs for health.

Since the inception of the Health 2020 policy framework in 2012, the Member States in the Region have increasingly embraced Health 2020's core concepts such as whole-of-government and whole-of-society approaches to policy-making, catalysing intersectoral action for health and well-being, and supporting the development of resilient communities and promoting healthy lives across all ages.

In line with these achievements, European Member States have adopted a number of recent European regional action plans and strategies such as the European action plan to strengthen the use of evidence, information and research for policy-making (39) and its accompanying resolution. In action area 4 of the plan, Member States directly emphasized the European Region's commitment to mainstreaming the use of evidence, information and research in the implementation of Health 2020 and other major regional policy frameworks. This commitment will further strengthen national policy-making and strengthen the monitoring and accountability mechanisms measuring the impact of policies on population health and well-being. The WHO European Member States have put principles and systems in place that recognize health and well-being's cross-cutting nature in the aspirations of Agenda 2030 for sustainable development.

## **Box 2.14. Implementing the sustainable development goals in the WHO European Region**

### **Background**

In 2017, Ministers of Health, at the Regional Committee, reaffirmed the importance of the adoption of Transforming our world: the 2030 agenda for sustainable development and, recognizing the sustainable development goals (SDGs), adopted the European roadmap to implement the SDGs, building on Health 2020, the European policy framework for health and well-being. The nationalization and localization of Agenda 2030 has been initiated in almost all of the WHO European Member States. Important discussions are being held on the identification of the indicators, the target benchmarks, mainstreaming the SDGs into policies and strategies, policy coherence and the identification of means of implementation, including financing. A range of tools and partnerships have been developed by the Regional Office to support implementation in countries.

### **UN coordination**

In May, within the Regional Coordination Mechanism of the Regional UN System for Europe and Central Asia, the Issue-based Coalition on Health and Well-being for All at All Ages (IBC-Health) was welcomed as a useful means by which agencies could cooperate on health (40). The coalition of partners acts as a pan-European enabling mechanism to facilitate and to promote the implementation of SDG 3 and its targets as well as the health-related targets of the other SDGs by coordinating activities of the relevant UN funds, programmes and specialized agencies and other intergovernmental organizations and partners, with a focus on leaving no one behind.

## Box 2.14 contd.

In response to Members States' call for more coordinated UN engagement, the UN Director-General introduced Mainstreaming, Acceleration and Policy Support (MAPS) missions, the common approach to support implementation of the 2030 Agenda at the country level.

### Generating evidence for action

WHO has created SDG health target fact sheets to synthesize the evidence base on key health targets in order to promote coherence and better address the burden of disease throughout the Region (41). These fact sheets integrate discussion on current trends, health benefits or influences on a variety of SDGs, with policies required, the tools available and indicators to measure progress.

