

Republic of Moldova Profile of Health and Well-being



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Abstract

Country profiles on health and well-being give an overview of a country's health status, describing data on mortality, morbidity and exposure to key risk factors along with trends over time. They are developed in collaboration with Member States. When possible, each report also compares a country to one or more reference groups, which are in this report the whole WHO European Region and the Commonwealth of Independent States. To make the comparisons as valid as possible, data are as a rule taken from one source to ensure that they have been harmonized in a reasonably consistent way. The data in the report are drawn from the European Health for All database of the WHO Regional Office for Europe. These data are collected from Member States on an annual basis and include metadata that specify the original source of data for specific indicators.

Keywords

HEALTHY PEOPLE PROGRAMS – STATISTICS AND NUMERICAL DATA, HEALTH STATUS, HEALTH POLICY, REPUBLIC OF MOLDOVA

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Abbreviations and acronyms

| BMI | body mass index |
|------|--|
| CIS | Commonwealth of Independent States |
| DALY | disability-adjusted life-year |
| GDP | gross domestic product |
| HFA | Health for All (database) |
| ICD | ICD-10 International Classification of Diseases, tenth edition |
| IHME | Institute for Health Metrics and Evaluation |
| PPP | purchasing power parity |
| ТВ | tuberculosis |

Summary of situation and trends in health and well-being in the Republic of Moldova

The country profiles on health and well-being give an overview of a country's health status, describing data on mortality, morbidity and exposure to key risk factors along with trends over time. They are developed in collaboration with Member States. In the Republic of Moldova, the health situation has improved substantially in the past decade, although the gap compared to the average for the WHO European Region is still substantial for a large number of indicators. There have, however, been noticeable improvements for several key indicators in recent years. As the national health policies have been aligned with Health 2020 (the WHO policy framework for health and well-being), it can be expected that this will further accelerate progress towards the Health 2020 targets.

During the economic downturn in the 1990s, the living conditions and health status of the population deteriorated rapidly, as in other countries of the Commonwealth of Independent States (CIS).¹ Since 2000, however, the health situation has started to improve and progress has picked up in recent years. Life expectancy has reached 72 years, and although this is six years lower than the average for the Region, it is 1.5 years higher than the average for the CIS. Infant and maternal mortality, although in line with CIS averages, are still 39% and 78% higher, respectively, than the averages for the Region. More than three out of four deaths in the Republic of Moldova are caused by noncommunicable diseases, but infectious diseases (especially tuberculosis) still represent a considerable burden. Compared to the regional average, mortality from cardiovascular diseases is nearly twice as high and mortality from cancer is increasing, in contrast to the downward trends in most European countries.

Improved trends have been observed for 10 of the 19 core indicators in the Health 2020 targets in Europe (see table below) since 2000. In particular, the age-standardized premature mortality rates for the four major noncommunicable diseases as well as for diseases of the digestive system have fallen more quickly than the Health 2020 target of a 1.5% annual reduction. Rising trends have, however, been noted for the following three indicators: the prevalence of overweight and obesity, the proportion of children of official primary school age not enrolled and the proportion of private households' out-of-pocket expenditure.

¹ Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

The trends for one indicator show both favourable and unfavourable aspects: immunization rates have increased for rubella and measles but decreased for poliomyelitis.

Core indicators for monitoring Health 2020 policy targets in The Republic of Moldova, most recent years available

| Target | Indicator | | Value | | Year |
|--|--|----------------|----------------|-------------------|----------------------|
| | | Male | Female | Total | |
| 1. Reduce premature mortality ^a | Age-standardized mortality rate from cardiovascular disease, cancer, diabetes mellitus and chronic respiratory diseases among people aged 30 to under 70 years, per 100 000 population | 822 | 406 | 591 | 2013 |
| | Age-standardized mortality rate from diseases of the digestive system among people aged 30 to under 70 years, per 100 000 population | 171 | 101 | 133 | 2013 |
| | Prevalence of tobacco use among adults aged 15 years and $over^b$ | 44.8 | 5.4 | 23.8 | 2013 |
| | Pure alcohol consumption per capita among adults aged 15 years and over (recorded and unrecorded) (1) | - | - | 16.1 | 2012 |
| | Prevalence of overweight and obese (BMI \geq 25) adults aged 18 years and over (age-standardized estimate) | 46.4 | 46.7 | 46.6 | 2014 |
| | Age-standardized mortality rate from external causes of injury and poisoning, all ages, per 100 000 population | 130 | 33 | 78 | 2013 |
| 2.Increase life expectancy | Life expectancy at birth, in years | 68.2 | 75.7 | 72 | 2013 |
| 3. Reduce inequities ^c | Infant mortality rate per 1000 live births | 9.3 | 9.6 | 9.5 | 2013 |
| | Proportion of children of official primary school age not enrolled (net enrolment rate) | 9.4 | 9.4 | 9.4 | 2013 |
| | Unemployment rate (2) | 4.6 | 3.1 | 3.9 | 2014 |
| | National policy addressing reduction of health inequities established and documented | NA | NA | Yes | 2014 |
| | Gini coefficient | - | - | 28.5 | 2014 |
| 4. Enhance well- | Life satisfaction among adults aged 15 years and older (3) | - | - | 6 | 2007–201 |
| being ^d | Availability of social support among adults aged 50 years and older (4) | - | - | 76 | 2014 |
| | Percentage of population with improved sanitation facilities | - | - | 76 | 2015 |
| 5. Universal | Private household out-of-pocket expenditure as proportion of total health expenditure | NA | NA | 44.6 | 2013 |
| coverage and right to health | Percentage of children vaccinated against measles (one dose by second birthday) | - | - | 91 | 2013 |
| | Percentage of children vaccinated against poliomyelitis (three doses by first birthday) | - | - | 92 | 2013 |
| | Percentage of children vaccinated against rubella (one dose by second birthday) | - | - | 91 | 2013 |
| | Total health expenditure as a percentage of GDP | NA | NA | 11.8 | 2013 |
| 6. National targets | Establishment of process for target-setting documented | NA | NA | Yes | 2014 |
| | Evidence documenting: (a) national health service aligned with Health 2020 (b) implementation plan (c) accountability mechanism | NA NA NA | NA NA NA | Yes Yes Yes | 2014 2014 2014 |

NA: not applicable.

^a Target 1 includes percentage of children vaccinated against measles, poliomyelitis and rubella.

^c Target 3 includes life expectancy at birth.

^d Target 4 includes Gini coefficient, the unemployment rate and the proportion of children not enrolled in primary school.

^b Prevalence includes both daily and occasional (less than daily) use among adults aged 15 years or more.

Source: WHO European Health for All database (5) unless otherwise specified.

Life satisfaction, a measure of subjective well-being, is in line with the regional average. Among objective well-being measures, 76% of people in the Republic of Moldova aged 50 years and over reported that they had relatives or friends on whom they could count when in trouble, which is in line with the CIS average but lower than the regional average (82%).

References

- Global Health Observatory (GHO) data [online database]. Geneva: World Health Organization; 2015 (http://www.who.int/gho/en/, accessed 31 August 2016).
- ILOSTAT database [online database]. Geneva: International Labour Organization; 2016 (http://www.ilo.org/ilostat/faces/oracle/ webcenter/portalapp/pagehierarchy/Page137,jspx?locale=en%20&_ afrLoop=259664688076998&clean=true#!%40%40%3Flocale%3De n%2B%26_afrLoop%3D259664688076998%26clean%3Dtrue%26_adf. ctrl-state%3D159yzwiw2n_9, accessed 1 September 2016).
- 3. Human Development Index (HDI) [website]. New York (NY): United Nations Development Programme; 2016 (http://hdr.undp.org/en/ content/human-development-index-hdi, accessed 31 August 2016).
- Global AgeWatch Index 2015 [online database]. London: HelpAge International; 2016 (http://www.helpage.org/global-agewatch/, accessed 1 September 2016).
- European Health for All database (HFA-DB) [online database]. Copenhagen: WHO Regional Office for Europe; 2016 (http://data.euro. who.int/hfadb/, accessed 31 August 2016).

Introduction

In 2012, Member States of the WHO European Region adopted Health 2020 (1,2), the European policy framework supporting action across government and society for health and well-being. With the accelerated implementation of Health 2020, the WHO Regional Office for Europe has revitalized the previous series of highlights on health by providing two new types of publication, the country profiles of health and well-being and the highlights on health and well-being. The profiles provide comparative analyses of the situation and trends in health and well-being in countries, describing recent data on mortality, morbidity and exposure to key risk factors and giving special emphasis to all Health 2020 indicators (3), including well-being. The highlights on health and well-being form a separate series, with policy-makers as the target audience, highlighting the main findings from the more detailed health and well-being profiles. Profiles and highlights are developed in collaboration with Member States and do not constitute a formal statistical publication.

To make the comparisons as valid as possible, data are taken from a single source to ensure that they are consistent. Unless otherwise noted, data in the reports are drawn from the European Health for All (HFA) database² of the Regional Office (4). The HFA data and metadata are collected from Member States and other international sources on an annual basis. Other data and information used in the report are referenced accordingly. The selected International Classification of Diseases, tenth edition (ICD-10) codes for causes of death are given in Annex 1. Where possible, each report also compares a country to one or more reference groups of countries, which in this report are the whole WHO European Region and, separately, the Commonwealth of Independent States (CIS), of which the Republic of Moldova is a member.

² The European HFA database (4) covers data since 1970. Data on mortality for the Republic of Moldova are available from 1985 to 2013. The reference year is 2000 and data are compared to the latest available year.

Selected demographic and economic information

A particular challenge for the Republic of Moldova is the decreasing population due to low birth rates and uninterrupted out-migration of the working-age population. Moreover, an estimated 0.6 million people live in the Transnistria Region of the Republic of Moldova. Basic demographic and health data for this territory have not been available to the Regional Office since 1997 and are not, therefore, included in this report.

Between 2000 and 2014, 16 countries in the Region faced declining populations, including the Republic of Moldova with an overall decline of 2.3%. Of the country's 3.6 million inhabitants, 42% live in urban areas (5), significantly fewer than the averages for the Region (70%) and the CIS (64%).

In 2013, 16.2% of the population was aged under 15 years, representing a decrease of 31% since 2000 (Fig. 1, Table 1) and 16% lower than the CIS average. As in most countries of the Region, the proportion of the population aged 65 years or more has increased,

30% 20% 10% — Republic of Moldova — CIS

WHO European Region

2005

1995

Fig. 1. Percentage of population aged

0–14 years. Republic of Moldova, WHO

European Region and CIS, 1985 to latest

available year

Table 1. Selected demographic indicators, Republic of Moldova, WHO European Region and CIS, 2013 or latest available year

| Indicators | Republic of Moldova | WHO European Region | CIS |
|------------------------------------|---------------------|------------------------|---------|
| Population (in 1000s) | 3 559 | 904 598 | 279 893 |
| Age distribution: | | | |
| 0–14 years | 16.1% | 17.7% | 19.4% |
| 15–64 years | 74% | 67.6% | 69.6% |
| 65 years or more | 9.9% | 14.8% | 11.1% |
| Urban population | 42%ª | 70.3% | 64% |
| Live births per 1000 population | 10.6 | 12.3 | 15.3 |
| Deaths per 1000 population | 10.7 | 9.9 | 11.7 |
| Natural population growth per 1000 | -0.06 | 2.59 | 3.37 |

^a National Bureau of Statistics (5).

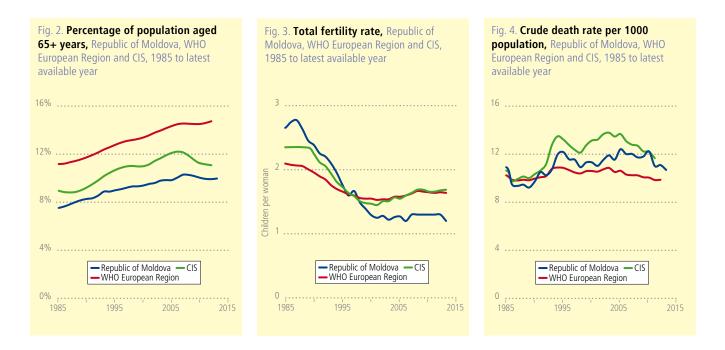
2015

0%

rising from from 9.4% to 10% since 2000 (Fig. 2). This 6% increase is smaller than the increase in the Region (10%) but greater than the CIS average (1%).

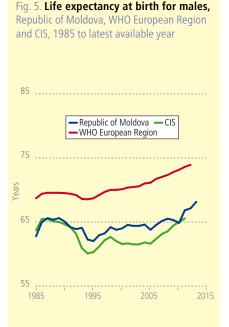
After a decade of decrease, the total fertility rate stabilized in 2000 and has remained constant at approximately 1.3 children per woman, 25% lower than the averages for the Region (1.64) and the CIS (1.69) (Fig. 3). Similarly, the live birth rate declined substantially up to 2000. While it has increased slightly since then, the current rate remains below the averages for the CIS and the Region. The crude death rate has varied between 11 and 12 per 1000 population, which is lower than the CIS average but higher than the decreasing average for the Region (Fig. 4). The natural growth rate³ per 1000 population in the Republic of Moldova has been negative since 2000 but in recent years the trends have reversed with natural growth rates reaching values close to 0 since 2011. The current natural growth rate is lower than in the Region (2.59 per 1000) and in the CIS (3.37 per 1000).

The real gross domestic product (GDP), calculated as purchasing power parity (PPP) US\$ per capita, more than doubled after 2000, but the 2014 rate (US\$ 4982) remained well below the 2014 averages for the Region (US\$ 29 007) or CIS (US\$ 18 397).

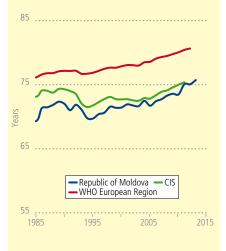


³ Birth rate minus death rate.

Health status and burden of disease







Life expectancy

Life expectancy at birth is defined as the average number of years that a newborn infant would live if prevailing patterns of mortality at the time of birth were to continue throughout his or her life. As it reflects mortality levels over the whole life span, it is a widely used indicator of mortality and, as a proxy, of health conditions in general. Life expectancy at birth increased from 67.8 years in 2000 (64 years for males and 71.5 years for females) to 72 years in 2013 (68.2 years for males and 75.7 years for females) (Table 2, Fig. 5, 6), which is two years more than the CIS average but five years below the average for the Region. Between 2000 and 2010, the annual average increase in life expectancy for the Republic of Moldova was only 0.2% yearly, half the regional average. After 2010, however, life expectancy started to increase more quickly, at the rate of 1.4% per year, resulting in a narrowing of the gap in life expectancy between the Republic of Moldova and the regional average.

Life expectancy at 65 years, defined as the average number of years that a 65-year-old would expect to live based on prevailing mortality statistics, followed a similar pattern as life expectancy at birth. It remained relatively stable between 2000 and 2010 and then started to increase, reaching 13.3 years for males and 16.2 years for females in 2013 (Fig. 7, 8). The values are 3.0 and 3.6 years lower than the regional averages for males and females, respectively.

Healthy life expectancy

Healthy life expectancy summarizes mortality and morbidity in a single measure of average population health and applies disability weights to health states to compute the equivalent number of years of life expected to be lived in full health (6). It has been used to compare health between countries and to measure changes over time.

WHO's estimates for the Republic of Moldova show that healthy life expectancy increased by 2.4 years to 59 years for men and by 3.6 years to 66 years for women between 2000 and 2013. These estimates were four to five years lower than the estimates for the Region (64.3 years for men and 69.6 years for women) but one to two years higher than the CIS averages (56.7 years for men and 65.1 years for women) (Table 3).

Fig. 7. Life expectancy at 65 years for males, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year

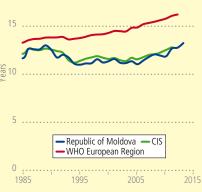
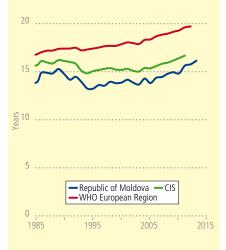


Fig. 8. Life expectancy at 65 years for females, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year



Morbidity

Information on morbidity is more limited than comparable information for mortality. Data are, however, available on certain infectious diseases and various types of cancer and mental disorder based on routine health reporting systems. The coverage, completeness and quality of these data vary between countries and over time, and comparisons should be interpreted with caution. Primary sources of data are diverse and include registries, surveillance systems and hospital data.

Table 2. Life expectancy at birth and at age 65 years by sex, Republic of Moldova, WHO European Region and CIS, latest available data

| Life expectancy in years | Republic of Moldova (2013) | WHO European Region (2012) | CIS (2011) |
|-----------------------------|-------------------------------|-------------------------------|---------------|
| At birth, both sexes | 72 | 77.3 | 70.4 |
| At birth, females | 75.7 | 80.7 | 75.4 |
| At birth, males | 68.2 | 73.9 | 65.5 |
| At age 65 years, both sexes | 15 | 18.2 | 15.1 |
| At age 65 years, females | 16.2 | 19.7 | 16.7 |
| At age 65 years, males | 13.3 | 16.2 | 12.8 |

Table 3. **Healthy life expectancy estimates,** Republic of Moldova, WHO European Region and CIS, 2000, 2013 and percentage change between 2013 and 2000

| | 5 5 | | | |
|-------------------------------|------------|------|------|----------|
| Country/group of countries | Sexes | 2000 | 2013 | % change |
| | Both sexes | 59.5 | 62.5 | 5 |
| Republic of Moldova | Males | 56.6 | 59 | 4.2 |
| | Females | 62.4 | 66 | 5.8 |
| | Both sexes | 64.1 | 66.9 | 4.4 |
| WHO European Region | Males | 61 | 64.3 | 5.3 |
| | Females | 67.3 | 69.6 | 3.5 |
| | Both sexes | 57.6 | 60.9 | 5.6 |
| CIS | Males | 53 | 56.7 | 6.9 |
| | Females | 62.7 | 65.1 | 3.9 |

Infectious diseases and vaccinations

The most recent rates of incidence for infectious diseases are shown in Table 4.

The incidence of tuberculosis (TB) increased by 83% between 2000 and 2013 (Fig. 9). Despite a decrease after 2005, the 2013 rate (126/100 000) was 65% higher than the CIS average and remains the highest in the Region.

For viral hepatitis A and B, the incidences have decreased since 2000. The incidence rate for viral hepatitis A in 2010 (0.8/100 000) was substantially lower than the averages for the Region (10.2/100 000) and the CIS (26.8/100 000). For viral hepatitis B, the incidence rate in the Republic of Moldova in 2013 (1.9/100 000) was similar to the averages for the Region (1.4/100 000) and the CIS (2/100 000).

An epidemic of syphilis was reported in 2009, when the incidence rate reached 139 cases per 100 000 inhabitants. Despite a decline in recent years, the rate in the Republic of Moldova in 2013 (63.8/100 000) was still more than six times the average for the Region (9.2/100 000) and more than double the average of the CIS (25.3/100 000).

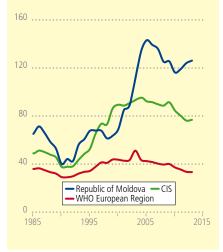
The incidence of gonorrhoea peaked in 2009 with a rate of 86/100 000. Although the number of new cases has declined in recent years, the rate in 2013 (27.2/100 000) was almost double the average for the Region (15/100 000) but similar to the average of the CIS (28.3/100 000).

The incidence of HIV increased almost fivefold between 2000 and 2013 and the most recent value of 19.8 per 100 000 is the third

Table 4. **Incidence of selected infectious diseases per 100 000 population,** Republic of Moldova, WHO European Region and CIS, latest available data

| Disease | Republic of Moldova | WHO European Region | CIS |
|-------------------|---------------------|------------------------|------|
| ТВ | 126 | 33 | 77 |
| Viral hepatitis A | 0.8 | 10.2 | 26.8 |
| Viral hepatitis B | 1.9 | 1.4 | 2 |
| Syphilis | 63.8 | 9.2 | 25.3 |
| Gonorrhoea | 27.2 | 15 | 28.3 |
| HIV | 19.8 | 6.7 | 10.1 |
| AIDS | 6.6 | 1.8 | 4 |





highest in the Region and twice as high as the CIS average (Fig. 10). Moreover, the incidence of AIDS has increased greatly since 2000, with large annual variations (Fig. 11). The incidence in 2013 (6.6/100 000) was among the highest in the Region and two thirds higher than the CIS average.

Overall, trends in vaccination rates for measles and poliomyelitis have varied over time but the coverage has remained above 90% since 2000. In 2013, 91% of infants were vaccinated against rubella and viral hepatitis B. The vaccination rate for TB remained high in 2013 at 96%, but lower rates have been recorded for measles (Fig. 12) and mumps (91%), poliomyelitis (92%) (Fig. 13) and for diphtheria, pertussis and tetanus (90%). Outbreaks of measles and rubella (2002), mumps (2008) and tetanus (2010) have been reported, indicating a need for improved immunization programmes.

Other diseases

Between 2000 and 2013, the reported incidence of cancer increased by half to reach 237 cases per 100 000. This was still, however, 44% lower than the average for the Region (420/100 000) and one fifth below the average for the CIS (298/100 000). The reported prevalence of cancer (1.3%) in 2013 was substantially lower than the average for the Region (2.2%) and also below the average for the

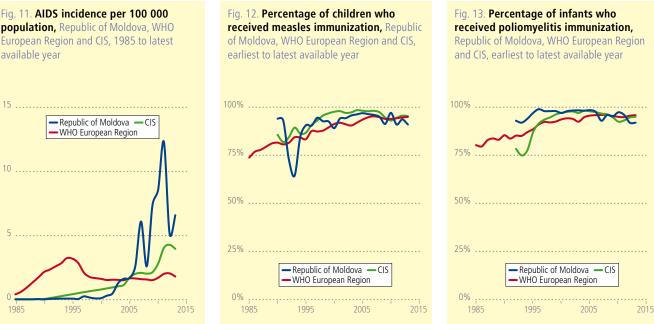
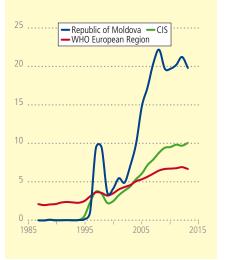


Fig. 10. HIV incidence per 100 000 population, Republic of Moldova, WHO

European Region and CIS, 1985 to latest available year





2005

1995

1985

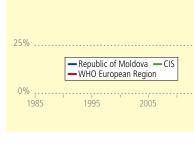
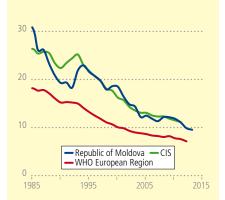
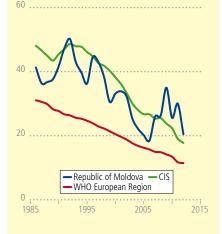


Fig. 14. Infant deaths per 1000 live births, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year



40





the reported prevalence of diabetes increased by 150%; the 2013 rate (2.3%) was identical to the average for the CIS (2.3%) but one third lower than the average for the Region (3.6%).

CIS (1.7%) but had increased by 43% since 2000. In the same period,

The prevalence of reported mental and behavioural disorders⁴ increased by 16% between 2000 and 2013 to a rate of 4.4%, more than 50% higher than the average for the Region (2.4% in 2009, latest available data) and for the CIS (2.7%, 2013).

Infant and maternal mortality

The infant mortality rate reported by the Republic of Moldova has followed the CIS average in its downward trend (Fig. 14). Between 2000 and 2013, the infant mortality rate halved to 9.5 deaths per 1000. This level had, however, been reached in the Region 13 years earlier, and the current rate is still one third higher than the average for the Region (7/1000). Infant mortality is falling at a faster pace in the Republic of Moldova (5% annual reduction) than in the Region as a whole (2.9% annual reduction), so that the gap is closing.

The maternal mortality ratio has been decreasing in the Republic of Moldova for decades (Fig. 15). The three-year rolling averages decreased by one third between 1999–2001 and 2010–2012, while more substantial decreases were recorded for the Region (44%) and the CIS (53%). The rate in 2011–2013 in the Republic of Moldova (21/100 000 live births) was 78% higher than the average for the Region (12/100 000) and 15% higher than the average for the CIS (18/100 000).

Leading causes of death

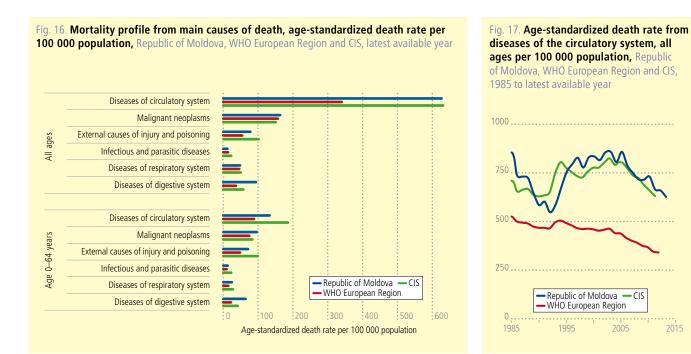
A comparison of age-standardized mortality rates⁵ between countries highlights population differences in the most common causes of death, allowing an easier identification of which deaths could be prevented for subsequent prioritization in national health

- ⁴ Cumulative number of patients at the end of the calendar year registered with the diagnosis of mental and behavioural disorders (Chapter V of ICD-10).
- ⁵ Age-standardized death rates are calculated using the direct method: that is, they represent what the crude rates would have been were the population to have had the same age distribution as the standard European population.

policies. Deaths from diseases of the circulatory system, malignant neoplasms (cancers) and external causes of injury and poisoning (accidents, homicides and suicides) are the main killers in the Region: in 2012 they caused 73% of all deaths. In the Republic of Moldova, the share of these three main causes is higher at 81% (Fig. 16).

Diseases of the circulatory system and digestive system and external causes of injury and poisoning account for higher rates of mortality in the Republic of Moldova compared to the regional average. This is true for both overall and premature mortality (Fig. 16).

Mortality from diseases of the circulatory system follows closely the trends in the CIS and has decreased by more than one quarter since 2000. Although declining faster since 2005, the most recent rates are still almost twice as high as the average for the Region (Fig. 17). Mortality from malignant neoplasms (cancers) has increased by 11% since 2000 (Fig. 18), in contrast to the decreasing trends in the Region and the CIS. Although deaths from external causes of injury and poisoning decreased by one fifth after 2000, the decrease was slower than the averages for the CIS and the Region (Fig. 19). Historically very high, the number of deaths from diseases of the respiratory system nearly halved between 2000 and 2013 and the most recent values exceed the regional level by only 7% (Fig. 20).

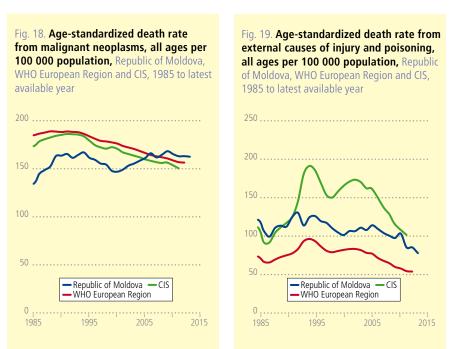


Other major causes of death

After increasing for more than a decade, the mortality rate from infectious and parasitic diseases started to decrease in 2005. The most recent values, which are 50% lower than the values observed in 2000, are in line with the regional average and half the average for the CIS (Fig. 21). Deaths from TB account for 72% of all infectious disease mortality in the Republic of Moldova, one of the highest proportions in Europe (Fig. 22).

In contrast to the CIS average, mortality from diseases of the digestive system has fallen by 23% since 2000 (Fig. 23). The current rate (94/100 000) is, however, almost three times higher than the average for the Region (36/100 000) and 65% higher than the average for the CIS (57/100 000). In particular, chronic liver disease and cirrhosis cause around 80% of all deaths in this group, a substantially higher share than in the regional and CIS averages (43% and 68%, respectively, latest available data).

The rate of chronic lower respiratory diseases fell by more than half between 2000 and 2013, from 56/100 000 to 26/100 000. As a consequence, overall mortality from diseases of the respiratory system (Fig. 20) decreased significantly, especially between 2005 (92/100 000) and 2013 (48/100 000).



The suicide mortality rate for men decreased by 10% between 2000 (31/100 000) and 2013 (28/100 000) (Fig. 24), while the rate for women remained unchanged at 5/100 000 (Fig. 25). The annual rate of decrease for both sexes combined has been much smaller in the Republic of

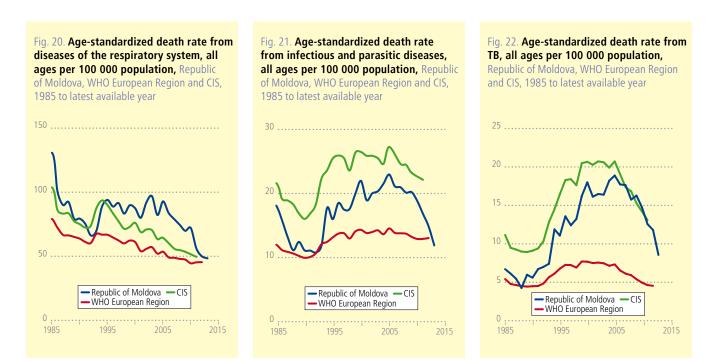


Fig. 23. Age-standardized death rate from diseases of the digestive system, all ages per 100 000 population, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year

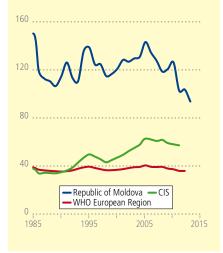


Fig. 24. **Age-standardized death rate from suicide and self-inflicted injury, males, all ages per 100 000 population**, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year

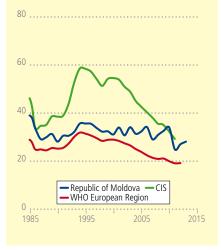


Fig. 25. Age-standardized death rate from suicide and self-inflected injury, females, all ages per 100 000 population, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year

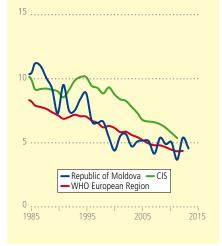
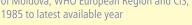


Fig. 26. Age-standardized death rate from homicide and intentional injury, males, all ages per 100 000 population, Republic of Moldova, WHO European Region and CIS,



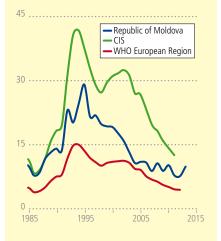
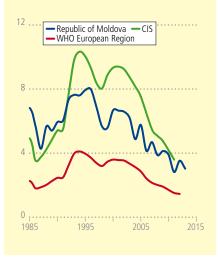


Fig. 27. Age-standardized death rate from homicide and intentional injury, females, all ages per 100 000 population, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year

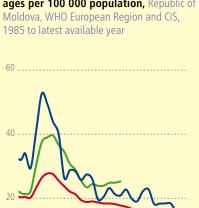


Moldova (0.4%) than the average rates for the Region (3.2%) and CIS (4.7%). Mortality from homicides and intentional injury approximately halved between 2000 and 2013 for both males (from 19 to 10/100 000) (Fig. 26) and females (from seven to three per 100 000) (Fig. 27). The most recent rate is, however, nearly double the average for the Region although still one third lower than the average for the CIS. The mortality rate from motor vehicle accidents decreased by a quarter for males (from 20 to 15 per 100 000) (Fig. 28) and 40% for females (from five to three per 100 000) (Fig. 29) between 2000 and 2013. The rate for both sexes is 7% higher than the average for the Region.

In addition to the trends highlighted in this section, selected causes of mortality are presented in Annex 2 comparing the percentage changes from 2000 to the latest available year in the Republic of Moldova (2013) with the averages for the Region (2012) and the CIS (2011). The data are available for different years, which should be borne in mind when interpreting the results as mortality rates change from year to year. In general they are decreasing for most countries and subregions.

Premature mortality

Since a large share of premature deaths from cardiovascular diseases, cancer and accidents are influenced by, among other factors, health-related



Republic of Moldova - CIS

2005

2015

WHO European Region

1995

Fig. 29. Age-standardized death rate from motor vehicle accidents, females, all ages per 100 000 population, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year

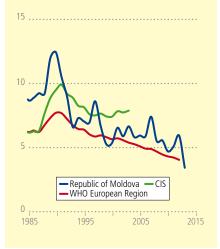


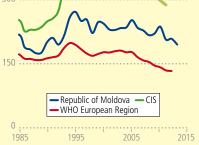
Fig. 28. Age-standardized death rate from motor vehicle accidents, males, all ages per 100 000 population, Republic of

1985



Fig. 30. Age-standardized death rate from

diseases of circulatory system, males



behaviour and habits, trend analyses of premature mortality between countries can confirm which, if any, treatments and health promotion and prevention measures have been successfully implemented (2).

Premature mortality from diseases of the circulatory system has decreased in most European countries in the last decade. Since 2000, the age-standardized mortality rate for males has been decreasing at a rate of 1.7% annually in the Republic of Moldova, more slowly than the averages for the Region (2.4%) and the CIS (1.9%). Most recent data show that the rate for the Republic of Moldova is 47% higher than the average for the Region (194 compared to 132/100 000) but almost one third lower than the CIS average (287/100 000) (Fig. 30). For females, premature mortality levels are less than half the mortality levels for males and the decline has been much faster at 4.2% annually (Fig. 31).

Only limited progress has been observed since 2000 for overall premature cardiovascular mortality (Fig. 30, 31). In particular, premature mortality from ischaemic heart disease for males has only decreased by 0.9% annually in the Republic of Moldova, three times more slowly than the regional average, and the gap is increasing (Fig. 32). Although the rate for females is 120% higher than the regional average, the annual rate of decline is faster in the Republic of Moldova (3.2%) than the average for the Region (2.9%) (Fig. 33).



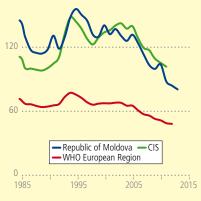


Fig. 32. Age-standardized death rate from ischaemic heart disease, males aged 0–64 years per 100 000 population, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year

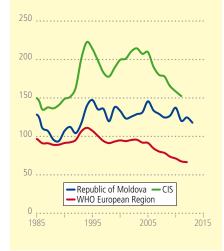


Fig. 33. Age-standardized death rate from ischaemic heart disease, females aged **0–64 years per 100 000 population**, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year

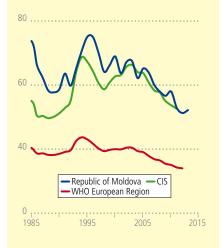


Fig. 34. Age-standardized death rate for cerebrovascular diseases, males aged 0-64 years per 100 000 population,

Republic of Moldova, WHO European Region and CIS, 1985 to latest available year

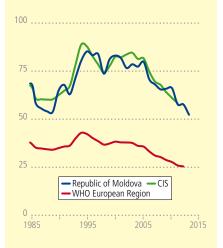
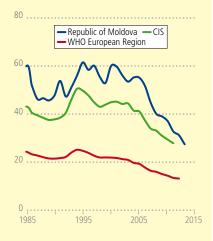


Fig. 35. Age-standardized death rate for cerebrovascular disease, females aged 0-64 years per 100 000 population, Republic of Moldova, WHO European Region

and CIS, 1985 to latest available year



The rates of premature mortality from cerebrovascular diseases for both males and females are in line with the CIS averages, although these rates are twice as high as the regional averages (Fig. 34, 35). They are, nonetheless, decreasing substantially for both sexes.

For males, premature mortality from malignant neoplasms has stagnated in the last decade. In 2013, it was 129 deaths per 100 000, which is 46% higher than the average for the Region and 21% higher than the CIS average (Fig. 36). Since 2000, the annual rate of decrease has been 0.1%, which is substantially lower than the rates in the Region (1.7%) and CIS (2%). This has resulted in a widening of the gap in premature cancer mortality levels compared to the regional and CIS averages. For females, the rates are 18% above the regional average but the rate of decrease is similar, resulting in a constant gap (Fig. 37).

The premature mortality rate from trachea, bronchus and lung cancer for males remained close to 32 deaths per 100 000 between

2005

2015



Fig. 38. Age-standardized death rate from trachea, bronchus and lung cancer, males aged 0–64 years per 100 000 population, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year

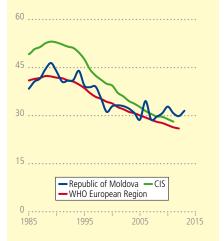
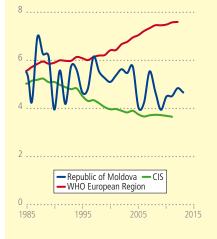


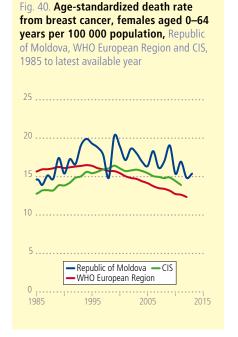
Fig. 39. Age-standardized death rate from trachea, bronchus and lung cancer, females aged 0–64 years per 100 000 population, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year



2000 and 2013, while the averages for the Region and the CIS showed decreases of 23% and 29%, respectively (26 and 28 deaths per 100 000, respectively) (Fig. 38). Conversely, this rate of premature mortality for women remains comparatively lower than that for men. Female mortality for this group of cancers fluctuated between 2000 and 2013, with an average rate of five deaths per 100 000 females. The regional average rose slightly, however, from six to eight deaths per 100 000 during this period (Fig. 39).

With respect to premature mortality from malignant neoplasm of the female breast (breast cancer), this rate decreased by a fifth between 2000 and 2013 (from 19 to 15/100 000), although it remains higher than the regional and CIS averages of 12 and 14 per 100 000, respectively (Fig. 40).

The premature mortality rate from cancer of the cervix uteri has fluctuated during the 2000s (Fig. 41). The current rate of six deaths per 100 000 is twice that of the average for the Region (three per/100 000) but equivalent to the average for the CIS.





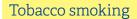
Risk factors and determinants of health

Several factors, including genetics and physical, social and cultural environments and health behaviour, affect the health and well-being of individuals and the population. Risk factors such as an unhealthy diet, low levels of physical activity, smoking and harmful alcohol consumption are linked to elevated blood pressure, high serum cholesterol and overweight. These risk factors contribute to premature mortality from cardiovascular diseases and cancers in particular, the two main causes of death in the Region. Risk factors also contribute to a wide range of other chronic illnesses and thus affect the quality of life in general (2).

Alcohol consumption

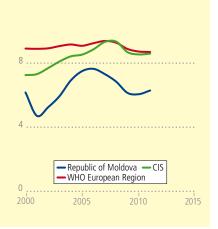
The consumption of alcohol is measured as the recorded amount of alcohol consumed per person aged 15 years or more over a calendar year in a country, in litres of pure (100%) alcohol. The recorded alcohol consumption per capita in the Republic of Moldova has varied in recent years, but the values in 2000 and 2011 remained at the same level (Fig. 42). At 6.3 litres per capita in 2011, this rate was one quarter lower than the averages for the Region (8.7 litres) and the CIS (8.6 litres).

It is, however, estimated that the unrecorded consumption of alcohol in the Republic of Moldova is the highest in the world at 10.5 litres per capita, resulting in a total estimated alcohol consumption of 16.1 litres per capita in 2012 (8). This is due to a high estimated consumption of alcohol produced outside government control.



Data on prevalence of smoking are obtained through surveys, so comparability of the data may be limited due to the different methods used. Over the last decade, the prevalence of tobacco smoking among males has been hovering between 40% and 50% (Fig. 43) (7). For females, the smoking prevalence has been much lower, at approximately 5% to 8%. In addition, smoking prevalence varies significantly by age. To increase the comparability of data, WHO has produced estimates of age-standardized tobacco use. In 2013, the estimated age-standardized prevalence of tobacco use was 44.8% for males aged 15 years and over,





which is 16% higher than the average for the Region but 14% lower than the CIS average. It was estimated that only 5.4% of females use tobacco, three quarters lower than the average for the Region and 67% lower than that for the CIS. In addition, 6% of girls and 15% of boys aged 13–15 years in the Republic of Moldova were current tobacco users in 2013 *(8)*.

Diet, consumption of macronutrients and overweight

In the Republic of Moldova, the average number of calories available per person per day increased by 11% between 2000 and 2009 to reach 2707 kcal, although that was still 19% lower than the regional average (3488 kcal) and 12% lower than the CIS average. In the Republic of Moldova, 25% of total energy is provided by fats. This share is similar to the average for the CIS (26%) but one fourth below the regional average (33%). The average number of fruits and vegetables available per person per year in the Republic of Moldova (158 kg) has decreased by one third since 2000 and is one fourth lower than the average for the CIS (205 kg) and one third lower than the regional average (228 kg).

WHO estimates that in 2014, 47% of the Moldovan population aged over 18 years was overweight with a body mass index (BMI) of 25 kg/m² or more, which is one fifth lower than the regional average and 10 percentage points below the CIS average. The prevalence of overweight was almost identical among men and women in the country, in contrast to average figures for the Region, where the prevalence is seven percentage points higher among men. Fifteen percent of the population aged over 18 years was obese (BMI of 30 kg/m² or more), one third lower than the averages for the Region and the CIS. As in most countries in Europe, obesity was more prevalent among women (18%) than among men (12%).

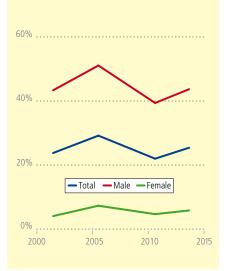


Fig. 43. Percentage of regular daily

smokers in the population aged 15+

years, Republic of Moldova, 2001–2013

Comparative risk assessment

The disability-adjusted life-year (DALY) is a summary measure of disease burden that combines mortality and loss of health due to morbidity into a single measure. One DALY is the sum of potential life lost due to premature mortality and disability (6). DALYs allow comparisons of the burden of disease across geographical locations, time and health conditions.

WHO has produced estimates for the number of DALYs attributable to selected risk factors only at regional level, but not at country level. The country-level estimates produced by the Institute for Health Metrics and Evaluation (IHME) (9) are, therefore, used in this publication. IHME estimates that the highest burden of disease in the Republic of Moldova is caused by dietary risks, high systolic blood pressure and high BMI, followed by alcohol and drug use and high fasting plasma glucose (10). Estimates of the top 10 risk factors and the associated burden of disease measured in DALYs for the Republic of Moldova are given in Table 5.

| Risk factor | DALYs per 100 000 population |
|--------------------------------|---------------------------------|
| Females | |
| Dietary risks | 6 136 |
| High systolic blood pressure | 5 639 |
| High BMI | 4 698 |
| Alcohol and drug use | 2 316 |
| High fasting plasma glucose | 2 060 |
| High total cholesterol | 1 497 |
| Low glomerular filtration rate | 1 311 |
| Air pollution | 1 172 |
| Low physical activity | 1 053 |
| Tobacco smoke | 956 |
| Males | |
| Dietary risks | 9 109 |
| High systolic blood pressure | 7 182 |
| Tobacco smoke | 6 747 |
| Alcohol and drug use | 6 706 |
| High BMI | 4 017 |
| High fasting plasma glucose | 2 349 |
| Air pollution | 2 035 |
| High total cholesterol | 1 976 |
| Low physical activity | 1 389 |
| | |

| Table 5. Ten leadin | g risk factor | s as causes o | f disease burden | estimated in DALYs, |
|---------------------|---------------|---------------|------------------|---------------------|
| Republic of Moldova | i, 2013 | | | |

Source: IHME (10).

Health system

The key indicators for the health system in 2013 are shown in Table 6. The availability of physicians, dentists and nurses has increased substantially since 2000 and has reached levels that are close to the regional averages. The availability of midwives, however, decreased by one third and has reached a level that is only half of the averages for the Region and the CIS.

The number of hospital beds has remained at the same level since 2000 and is in line with the average for the Region but one fourth lower than that for the CIS. Between 2000 and 2013, the number of inpatient care discharges increased by 35% and the average length of stay decreased by 37%, reaching values similar to the regional averages and 8% below the CIS average. The average number of outpatient contacts remained constant, lower than the averages for the Region and the CIS by 14% and 27%, respectively.

Total health expenditure, measured as a percentage of GDP, increased by 77% from 6.6% in 2000 to 11.8% in 2013. This is substantially higher than the averages for the Region (8.3%) or the CIS (6.5%). Total health

| Indicators | Republic of Moldova | Change since 2000 | WHO European Region | CIS |
|--|---------------------|-------------------|---------------------|---------|
| Physicians per 100 000 population | 293.3 | 20% | 307.9 | 270.4 |
| Dentists per 100 000 population | 49.2 | 58% | 53.4 | 34.8 |
| Nurses per 100 000 population | 628.3 | 13% | 729 | 617.2 |
| Midwives per 100 000 population | 20.9 | -34% | 40.2 | 47.4 |
| Hospital beds per 100 000 population | 583.4 | -3% | 566.8 | 745.2 |
| Inpatient care discharges per 100 population | 18.4 | 35% | 18.1 | 19.9 |
| Average length of stay, all hospitals | 9 | -37% | 8.6 | 11.2 |
| Outpatient contacts per person per year | 6.5 | 0% | 7.6 | 8.9 |
| Total health expenditure as % of GDP ^a | 11.8 | 5.2 ^b | 8.3 | 6.5 |
| Total health expenditure, PPP\$ per capita ^a | 553.4 | 352% | 2 455.1 | 1 112.8 |
| Public sector health expenditure as % of total health expenditure ^a | 46 | -2.6 ^b | 67.2 | 49.3 |
| Private households' out-of-pocket payments on health as % of total health expenditure ^a | 44.6 | 4% | 26.4 | 47 |

Table 6. **Comparison of key indicators on health resources, use of health services and health expenditure,** Republic of Moldova, WHO European Region and CIS, 2013 or latest available year

^a WHO estimates.

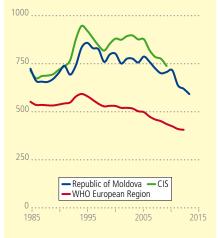
^b Change in percentage points.

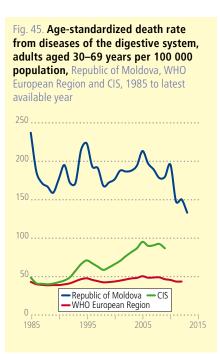
expenditure per capita adjusted for PPP is, however, 77% lower than the average for the Region and half that of the CIS. Since 2000, public sector spending has remained below 50% of total health expenditure. Private households' out-of-pocket expenditure reached 44.6% of total health expenditure, a very high level that is not protecting the population from catastrophic health expenditure.

A detailed description of the health system is given in *Health Systems in Transition (11).*

Health 2020 targets







As stated in the introduction, Health 2020 is the health policy of the WHO European Region, which aims to support action across government and society to significantly improve the health and wellbeing of populations, reduce health inequalities, strengthen public health and ensure people-centred health systems that are universal, equitable, sustainable and of high quality (2). European Member States have agreed on a set of core indicators to monitor the progress on Health 2020 policy targets in Europe and in all Member States (3).

The highlights on health and well-being and accompanying profiles on health and well-being publications constitute a country-by-country means of reporting progress towards achieving the overarching targets of Health 2020. The Health 2020 targets and core indicators for the Republic of Moldova are given in Table 7. Country-specific progress towards individual Health 2020 targets is described in the corresponding sections below.

Target 1. Reduce premature mortality by 2020

The Republic of Moldova has made considerable progress in reducing premature mortality.⁶ The age-standardized overall premature mortality rate combined for the four selected major noncommunicable diseases (cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases) has declined annually by 2.3% since 2000 for both sexes, faster than for the Region (2.2%) or for the CIS (1.9%) (Fig. 44). However, the premature mortality rate from the major noncommunicable diseases is still 50% higher than the regional average despite a remarkable 3.6% annual reduction since 2005. Premature mortality from the major noncommunicable diseases in the Republic of Moldova has fallen faster among females (3.1% annual decrease since 2000) than among males (1.9% annual decrease since 2000), in contrast to the situation in most other countries of the Region where steeper declines are observed among males. Premature mortality from digestive diseases has fallen by 2.1% annually since 2000 but levels are still very high – twice as high as the CIS average and 3.5 times higher than the regional average (Fig. 45). Alcohol consumption as well as the prevalence of tobacco smoking among

⁶ Defined as mortality between 30 to under 70 years of age in the Health 2020 monitoring framework (*3*) in order to be aligned with the noncommunicable diseases monitoring framework (*12*).

Table 7. Core indicators for monitoring Health 2020 policy targets in the Republic of Moldova, latest available year

| Target | Indicator | | Value | | Year |
|--|--|----------------|----------------|-------------------|----------------------|
| | | Male | Female | Total | |
| 1. Reduce premature mortality ^a | Age-standardized mortality rate from cardiovascular disease, cancer, diabetes mellitus and chronic respiratory diseases among people aged 30 to under 70 years, per 100 000 population | 822 | 406 | 591 | 2013 |
| | Age-standardized mortality rate from diseases of the digestive system among people aged 30 to under 70 years, per 100 000 population | 171 | 101 | 133 | 2013 |
| | Prevalence of tobacco use among adults aged 15 years and $over^b$ | 44.8 | 5.4 | 23.8 | 2013 |
| | Pure alcohol consumption per capita among adults aged 15 years and over (recorded and unrecorded) (8) | - | - | 16.1 | 2012 |
| | Prevalence of overweight and obese (BMI \geq 25) adults aged 18 years and over (age-standardized estimate) | 46.4 | 46.7 | 46.6 | 2014 |
| | Age-standardized mortality rate from external causes of injury and poisoning, all ages, per 100 000 population | 130 | 33 | 78 | 2013 |
| 2.Increase life expectancy | Life expectancy at birth, in years | 68.2 | 75.7 | 72 | 2013 |
| 3. Reduce inequities ^c | Infant mortality rate per 1000 live births | 9.3 | 9.6 | 9.5 | 2013 |
| | Proportion of children of official primary school age not enrolled (net enrolment rate) | 9.4 | 9.4 | 9.4 | 2013 |
| | Unemployment rate (13) | 4.6 | 3.1 | 3.9 | 2014 |
| | National policy addressing reduction of health inequities established and documented | NA | NA | Yes | 2014 |
| | Gini coefficient | - | - | 28.5 | 2014 |
| 4. Enhance well- | Life satisfaction among adults aged 15 years and older (14) | - | _ | 6 | 2007–2012 |
| being ^d | Availability of social support among adults aged 50 years and older (15) | - | - | 76 | 2014 |
| | Percentage of population with improved sanitation facilities | - | - | 76 | 2015 |
| 5. Universal coverage and | Private household out-of-pocket expenditure as proportion of total health expenditure | NA | NA | 44.6 | 2013 |
| right to health | Percentage of children vaccinated against measles (one dose by second birthday) | - | - | 91 | 2013 |
| | Percentage of children vaccinated against poliomyelitis (three doses by first birthday) | - | - | 92 | 2013 |
| | Percentage of children vaccinated against rubella (one dose by second birthday) | - | - | 91 | 2013 |
| | Total health expenditure as a percentage of GDP | NA | NA | 11.8 | 2013 |
| 6. National targets | Establishment of process for target-setting documented | NA | NA | Yes | 2014 |
| | Evidence documenting: (a) national health service aligned with Health 2020 (b) implementation plan (c) accountability mechanism | NA NA NA | NA NA NA | Yes Yes Yes | 2014 2014 2014 |

NA: not applicable.

^a Target 1 includes percentage of children vaccinated against measles, poliomyelitis and rubella.

^b Prevalence includes both daily and occasional (less than daily) use among adults aged 15 years or more.

^c Target 3 includes life expectancy at birth.

^d Target 4 includes Gini coefficient, the unemployment rate and the proportion of children not enrolled in primary school.

Source: WHO European HFA database (4) unless otherwise specified.

males is very high. The prevalence of overweight and obesity is relatively low but increasing.

The Republic of Moldova has been immunizing children against measles and mumps since the 1970s. In 2002, the measles, mumps and rubella combination vaccine was introduced into the routine immunization programme to include protection against rubella. Since then the immunization coverage has hovered with rates between 91% and 97%. In 2013, reported coverage for the first dose of measlescontaining vaccine in the Republic of Moldova was 91% compared to 95% in the Region and in the CIS. This rate is below the established target of at least 95% immunization at the national level needed to document and verify that elimination of measles and rubella has been achieved (16). Similarly, the immunization rate for receiving three doses of poliomyelitis vaccine and being fully protected was reported to be 92% in 2013, compared to 94% in the Region. It is essential to achieve high coverage at national and subnational levels covering the whole population with all antigens used in the routine immunization programme.

Target 2. Increase life expectancy

As detailed in the section on health status and burden of disease, life expectancy in the Republic of Moldova started to increase at a rate of 1.4% annually after 2010, faster than the regional target⁷ of 0.3% yearly, thus reducing the gap in the Region and reaching the Health 2020 target. This was true for both sexes combined, as well as for males and females.

Target 3. Reduce inequalities in health

The Republic of Moldova shows a mixed picture regarding indicators related to social determinants of health. In 2013, infant mortality rates were 9.3/1000 live births for boys and 9.7/1000 live births for girls, representing a decrease of 57% for boys and only 36% for girls since 2000. For both sexes, the infant mortality rate is 34% higher than the regional average and similar to the CIS average. The proportion of children of official primary school age not enrolled increased from 7.4% in 2000 to 9.4% in 2013.

⁷ The annual rate during 2006–2010.

As of 2014, the unemployment rates were 4.6% for males and 3.1% for females, representing decreases of more than 50% since 2000 (13) (Table 7). Unemployment among those aged 15–24 years was 9.8% in 2014, a decrease by one third since 2002, the year for which the first data were available. The Gini index (a measure of income inequality) decreased by one fifth after 2000 to 28.5 in 2013.

Target 4. Enhance the well-being of the population

Well-being, as monitored by a suite of indicators, is a relatively new construct and thus will require further country data before adequate trend analysis may be performed. Data from the Gallup World poll that are retrieved through the United Nations Development Programme Human Development Report for 2007–2012 give an overall life satisfaction index of six on a scale from zero (least satisfied) to 10 (most satisfied) for the Republic of Moldova, which is in line with the regional average (14). In 2013, 76% of people in the Republic of Moldova aged 50 years and over reported that they had relatives or friends on whom they could count when in trouble. This is nine percentage points lower than the regional average (85%). The percentage of the population with improved sanitation facilities rose by 5% from 2000 to reach 76% in 2015. The increase was, however, due to improvements in rural areas where availability increased 10 percentage points to 67%. The availability of improved sanitation facilities in urban areas increased by only one percentage point to reach 88% in 2015.

Target 5. Ensure universal coverage and the right to the highest attainable level of health

The proportion of private households' out-of-pocket expenditure was 44.6% in 2013, an increase of two percentage points since 2000. This was well beyond the threshold of 15% required to prevent catastrophic health expenditure (17), similar to the CIS average (47%) but 18 percentage points higher than the regional average. According to WHO estimates, total expenditure on health (as a percentage of GDP) increased by three quarters to 11.8% between 2000 and 2013, which is 3.6% percentage points higher than the average for the Region and almost twice as high as the CIS average of 6.5%. Despite the relatively large total health expenditure as a percentage of GDP, the total heath expenditure in PPP is only one fourth that of the Region and half the CIS average.

Target 6. Set national goals and targets related to health

By 2014, the Republic of Moldova had documented a process for targetsetting as well as a national policy aligned with Health 2020, including an implementation plan and accountability mechanism, in accordance with the recommendations of the policy (2,3).

Conclusions

This publication presents the health situation and analysis of trends in the Republic of Moldova. Although, as in other CIS countries, the burden of ill health was quite high in the past, the situation improved substantially after 2000. Life expectancy at birth increased by four years to 68.2 years for males and 75.7 years for females in 2013. Although those values are still six to seven years lower than the regional average, life expectancy has been increasing faster in the Republic of Moldova than in other European countries in recent years, which has resulted in a narrowing of the life expectancy gap. Healthy life expectancy increased by two years to 59 years for men and by four years to 66 years for women between 2000 and 2013. On the other hand, although infant mortality is declining at an increased pace, the current rate of 9.5 infant deaths per 1000 live births is still one third higher than the average for the Region. Maternal mortality is decreasing more slowly than the average for the Region and the most recent rate is higher than the average for the CIS.

Deaths from diseases of the circulatory system, malignant neoplasms (cancers) and external causes of injury and poisoning (accidents, suicides and homicides) are the main killers in the Region. Likewise, in the Republic of Moldova they account for 81% of all deaths. Although mortality from circulatory diseases is decreasing, closely following trends in other CIS countries, it is still twice as high as the regional average. In contrast to the decrease in mortality from cancer in most European countries, mortality from this group of diseases is increasing in the Republic of Moldova. High and increasing mortality, together with a rapid growth in the incidence and prevalence of malignant neoplasms, requires close monitoring of the situation in the future. Although deaths from external causes of injury and poisoning decreased by one fifth after 2000, this decline was slower than the averages for the CIS and the Region.

Great progress has been achieved in reducing mortality from diseases of the respiratory system and infectious diseases, and recent rates are in line with the average for the Region. A large part of this decrease might be attributed to the reduced burden of chronic lower respiratory diseases and TB, which are decreasing rapidly but are still significant. While trends are increasing in other CIS countries, mortality from diseases of the digestive system has fallen by almost one quarter since 2000, although levels are still almost three times higher than the regional average. Eighty percent of deaths in this group are due to chronic liver disease and cirrhosis.

Premature mortality from the major noncommunicable diseases (cardiovascular diseases, cancer, diabetes mellitus and lower respiratory diseases) is also falling faster in the Republic of Moldova compared to the averages for the Region and the CIS. Since 2005 the decline has been particularly fast although the levels are still 50% higher than the average for the Region. In contrast to most countries in the Region, these rates of improvement are occurring at a faster rate among females than males. There is cause for concern regarding limited progress in the reduction of premature mortality from ischaemic heart disease and cancer for males.

The incidence of TB in the Republic of Moldova is the highest in the Region and, despite a temporary decrease between 2005 and 2010, is again on the rise. Similarly, the incidences of HIV and AIDS have increased substantially since 2000 and are among the highest in the Region.

Of all risk factors, the largest disease burden is associated with dietary risks and high blood pressure. Smoking is a prominent risk factor among males, which is reflected in their tobacco use (45% of males vs 5% of females). Reported alcohol consumption per capita (based on sales figures) remained constant between 2000 and 2011. Unrecorded alcohol consumption is, however, estimated to be very high and alcohol use is estimated to be the fourth most important risk factor for both males and females. Although comparatively low, the prevalence of overweight and obesity is increasing, which is of concern because the disease burden attributed to these conditions will probably also increase in the future.

The availability of physicians, dentists and nurses has increased substantially since 2000 and has reached levels that are close to the regional average. Total health expenditure, measured as a percentage of GDP, rose from 6.6% in 2000 to 11.8% in 2013, which is substantially higher than the average for the Region (8.3%) and the CIS (6.5%). As a result of the relatively low GDP in the Republic of Moldova, however, the total health expenditure per capita adjusted for PPP is 77% lower than the average for the Region and half the CIS average. Public sector spending remains below 50%, and private households' out-of-pocket expenditure has reached 44.6% of total health expenditure, a very high level that leaves populations vulnerable to catastrophic health expenditure.

Most social determinants and health inequalities indicators are improving in the Republic of Moldova. After 2000 the unemployment rate more than halved, and the Gini index of income inequality decreased by more than one fifth. What is worrying, however, is the increase in the proportion of children of official primary school age not enrolled, which has reached almost 10%. One fourth of the population still does not have access to improved sanitation facilities although the situation is improving. Subjective well-being is in line with the average for the Region but the availability of social support is somewhat lower.

Although the health situation has improved substantially in the Republic of Moldova in the past decade, the gaps between national figures and the averages for the WHO European Region (as described above) are still substantial for a large number of indicators. The noticeable acceleration of improvement for several key indicators in recent years is, however, particularly encouraging. As the national health policies have been aligned with Health 2020, it can be expected that this will further accelerate progress towards the Health 2020 goals.

References

- Health 2020: a European policy framework supporting action across government and society for health and well-being. Copenhagen: WHO Regional Office for Europe; 2012 (EUR/RC62/9; http://www.euro.who.int/__data/assets/pdf_file/0009/169803/ RC62wd09-Eng.pdf?ua=1, accessed 1 September 2016).
- Health 2020: a European policy framework and strategy for the 21st century. Copenhagen: WHO Regional Office for Europe; 2013 (http://www.euro.who.int/__data/assets/pdf_file/0011/199532/ Health2020-Long.pdf?ua=1, accessed 1 September 2016).
- Targets and indicators for Health 2020. Version 2. Copenhagen: WHO Regional Office for Europe; 2014 (http://www.euro.who. int/__data/assets/pdf_file/0009/251775/Health-2020-Targets-andindicators-version2-ENG.pdf?ua=1, accessed 1 September 2016).
- 4. European Health for All database (HFA-DB) [online database]. Copenhagen: WHO Regional Office for Europe; 2016 (http://data. euro.who.int/hfadb/, accessed 1 September 2016).
- The structure of resident population of the Republic of Moldova, by age and sex, as of January 01, 2013 [web page]. Chisinau: National Bureau of Statistics of the Republic of Moldova; 2013 (http://www.statistica.md/newsview.php?l=en&id=4066&idc=168, accessed 1 September 2016).
- Murray CJL, Evans DB, editors. Health systems performance assessment: debates, methods and empiricism. Geneva: World Health Organization; 2003 (http://www.who.int/iris/ handle/10665/42735, accessed 1 September 2016).
- Tobacco control database for the WHO European Region [online database]. Copenhagen: WHO Regional Office for Europe; 2015 (http://data.euro.who.int/tobacco/, accessed 1 September 2016).
- Global Health Observatory (GHO) data [online database]. Geneva: World Health Organization; 2015 (http://www.who.int/gho/en/, accessed 1 September 2016).
- Forouzanfar MH, Alexander L, Anderson HR, Bachman VF, Biryukov S, Brauer M et al. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet. 2015;386(10010):2287–323. doi:10.1016/S0140-6736(15)00128-2 (http://www.ncbi.nlm.nih.gov/ pubmed/26364544, accessed 1 September 2016).

- 10. GBD Compare [online database]. Seattle (WA): Institute for Health Metrics and Evaluation; 2016 (http://vizhub.healthdata.org/gbdcompare/#, accessed 1 September 2016).
- 11. Turcanu G, Domente S, Buga M, Richardson E. Republic of Moldova: health system review. Health Syst Transit. 2012;14(7):1–151.
- Draft comprehensive global monitoring framework and targets for the prevention and control of noncommunicable diseases. Geneva: World Health Organization; 2013 (Sixty-sixth World Health Assembly A66/8; http://apps.who.int/gb/ebwha/pdf_files/WHA66/ A66_8-en.pdf, accessed 1 September 2016).
- 13. ILOSTAT database [online database]. Geneva: International Labour Organization; 2016 (http://www.ilo.org/ilostat/faces/oracle/ webcenter/portalapp/pagehierarchy/Page137.jspx?locale=en%20&_ afrLoop=259664688076998&clean=true#!%40%40%3Flocale%3De n%2B%26_afrLoop%3D259664688076998%26clean%3Dtrue%26_ adf.ctrl-state%3D159yzwiw2n_9, accessed 1 September 2016).
- Human development report 2014. Sustaining human progress: reducing vulnerabilities and building resilience. New York (NY): United Nations Development Programme; 2014 (http://hdr.undp.org/ sites/default/files/hdr14-report-en-1.pdf/, accessed 1 September 2016).
- 15. Global AgeWatch Index 2015 [online database]. London: HelpAge International; 2016 (http://www.helpage.org/global-agewatch/, accessed 1 September 2016).
- 16. Eliminating measles and rubella. Framework for the verification process in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2014 (http://www.euro.who.int/__data/ assets/pdf_file/0009/247356/Eliminating-measles-and-rubella-Framework-for-the-verification-process-in-the-WHO-European-Region.pdf, accessed 1 September 2016).
- 17. Xu K, Evans DB, Carrin G, Aguilar-Rivera AM. Designing health financing systems to reduce catastrophic health expenditure. Geneva: World Health Organization; 2005 (Technical Briefs for Policy-Makers, No. 2; http://apps.who.int/ iris/bitstream/10665/70005/1/WHO_EIP_HSF_PB_05.02_eng.pdf, accessed 1 September 2016).

Annex 1. ICD-10 codes for causes of death

| Cause of death | ICD-10 codes |
|--|--|
| Cancer of cervix uteri | C53 |
| Cancer of female breast | C50 |
| Cancer of trachea, bronchus and lung | C33–C34 |
| Cerebrovascular diseases | 160–169 |
| Chronic liver disease and cirrhosis | K70, K73, K74, K76 |
| Diseases of the circulatory system | 100–199 |
| Diseases of the digestive system | К00-К93 |
| Diseases of the respiratory system | 100–199 |
| External causes of injury and poisoning | V00–V99, W00–W99, X00–X99, Y00–Y99 |
| Homicide and intentional injury | X85–X99, Y00–Y09 |
| Infectious and parasitic disease | A00–A99, B00–B99 |
| Ischaemic heart disease | 120–125 |
| Malignant neoplasms | C00–C97 |
| Motor vehicle traffic accidents | V02–V04, V09, V12–V14, V20–V79, V82–V87, V89 |
| Suicide and self-inflicted injury | X60–X84 |
| Symptoms, signs and ill-defined conditions | R00–R53, R55–R99 |
| Tuberculosis | A15–A19, B90 |

Annex 2. Selected mortality data

Selected mortality for total population by sex in the Republic of Moldova (2013) compared to the WHO European Region (2012) and the CIS (2011). Age-standardized death rate per 100 000 population and percentage changes from 2000 to the latest available year.

| Cause of death | Sex | Republic of Moldova | | WHO European Region | | CIS | |
|--|---------|---------------------|------------|---------------------|------------|-----------|------------|
| | | 2013 Rate | Change (%) | 2012 Rate | Change (%) | 2011 Rate | Change (%) |
| All causes | Both | 1 072.4 | -25.6 | 752.3 | -20.7 | 1 127.1 | -18.5 |
| | Males | 1 388.3 | -24.1 | 980.6 | -22 | 1 539.7 | -19.5 |
| | Females | 835.8 | -28.4 | 577.8 | -19.8 | 833 | -17.4 |
| Infectious and parasitic diseases | Males | 19.7 | -48 | 18.1 | -17.9 | 34.4 | -23.9 |
| | Females | 4.8 | -40.2 | 8.5 | 11.5 | 11.4 | 6.8 |
| Malignant neoplasms | Males | 226.3 | 15.3 | 210.6 | -13.7 | 212.5 | -14.1 |
| | Females | 117.9 | 5.2 | 119 | -8.9 | 113.4 | -9 |
| Diseases of the circulatory system | Males | 750.7 | -25 | 426.8 | -25.6 | 822.9 | -17.3 |
| | Females | 536.6 | -26.6 | 275.7 | -26.9 | 499.8 | -20.7 |
| Diseases of the respiratory system | Males | 82 | -39 | 67 | -28.9 | 81.9 | -37.4 |
| | Females | 24.6 | -55.3 | 30.7 | -23.1 | 28.5 | -33.1 |
| Diseases of the digestive system | Males | 113.6 | -21.1 | 47.4 | -4.4 | 78.3 | 18.8 |
| | Females | 76.6 | -25.5 | 25.9 | -0.7 | 40.5 | 24.8 |
| Symptoms, signs and ill-defined conditions | Males | 12.4 | 48.1 | 43.7 | 6.4 | 72.8 | 4.6 |
| | Females | 3.7 | 2.8 | 28.8 | 9.5 | 50.3 | 3.4 |
| External causes of injury and poisoning | Males | 130 | -22.3 | 85.1 | -35.8 | 170.2 | -40.1 |
| | Females | 32.7 | -27.1 | 25 | -32.2 | 41.8 | -36.2 |
| Motor vehicle road traffic injuries | Males | 15.2 | -25.5 | 13.2 | -28.1 | 25.2ª | 5.7 |
| | Females | 3.3 | -36.6 | 4 | -29 | 7.8ª | 6.4 |
| Suicide and self-inflicted injury | Males | 28 | -9.6 | 19 | -33.9 | 29.1 | -46.5 |
| | Females | 4.6 | 3.9 | 4.4 | -29 | 5.4 | -38.7 |
| Homicide and intentional injury | Males | 10 | -48 | 4.6 | -58.7 | 12.7 | -59.2 |
| | Females | 3 | -54.8 | 1.4 | -59.9 | 3.6 | -61.6 |

^a Latest available data for this indicator for CIS are for 2003.

The WHO Regional Office for Europe

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