

# Health in Slovenia



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## Abbreviations and acronyms

<b>ARSO</b>	Slovenian Environment Agency
<b>ATC</b>	Anatomical Therapeutic Chemical Classification of Medicines The ATC classification of medicines is an international universal classification system for medicines. The ATC classification serves as a tool in research on the use of medicines, where the basic aim is to improve the quality of the use of medicines. The ATC classification system classifies medicines according to their main indication (in the case of several component medicinal products, the indication refers to the main active substance).
<b>BMI</b>	Body Mass Index BMI is the ratio of body weight to the square of body height, expressed in kg / m <sup>2</sup> . According to the BMI, the nutritional status of adults is divided into the following categories: up to 18.4 malnutrition, from 18.5 to 24.9 normal nutrition, from 25.0 to 29.9 overnutrition, from 30.0 to 34.9, obesity level I, from 35.0 to 39.9 obesity level II, 40.0 and over extreme obesity (level III).
<b>CINDI</b>	Health-Related Behavioural Style Survey The Health-Related Behavioural Style survey was conducted among the adult population of Slovenia in 2001, 2004, 2008, 2012 and 2016. It aims to identify the prevalence and interrelationship of risk factors for non-communicable diseases in adults, in terms of smoking, drinking, eating and exercise habits, as well as road safety behaviour and the use of certain health services. Based on the collected data, it will be easier to design future programmes for improving the health of all those who live in Slovenia inhabitants, and the data also help in meaningful planning of preventive health activities.
<b>DDD</b>	Defined Daily Dose By definition, a DDD is a statistical unit defined by the World Health Organization to determine the consumption of a medicine. DDDs are used for standardized comparisons of the consumption of different drugs with each other or between environments with different health care systems.
<b>DID</b>	Defined Daily Doses per 1,000 inhabitants per day
<b>DORA</b>	DORA is an organized population screening programme for early detection of breast cancer in women aged 50 to 69.
<b>ECDC</b>	European Centre for Disease Prevention and Control
<b>ECIS</b>	European Cancer Information System
<b>EEA</b>	European Environment Agency
<b>EHIS</b>	European Health Interview Survey The European Health Interview Survey asks about the health status of inhabitants, how often they use different health services and what their health-related lifestyle is.
<b>EMCDDA</b>	European Monitoring Centre for Drugs and Drug Addiction
<b>EU</b>	European Union
<b>EUR</b>	Euro
<b>EUROSTAT</b>	Eurostat is the European Union's statistical service responsible for publishing high-quality, pan-European statistics and indicators that allow comparisons between countries and regions.
<b>GDP</b>	Gross Domestic Product GDP is equal to the value added at basic prices by activities, as increased by taxes on products and services and reduced by subsidies by products and services. GDP is therefore equal to the sum of value added at basic prices of all domestic (resident) production units and net taxes on products and services (taxes on products and services, less subsidies for them).

<b>HBSC</b>	Health Behaviour in School-Aged Children study Health Behaviour in School-Aged Children is an international study conducted every four years. A survey was conducted by the National Institute of Public Health in 2002, 2006, 2010, 2014 and 2018. The international questionnaire includes a series of mandatory questions on demographic, behavioural and psychosocial aspects of health. In addition to these, participating countries can add a number of optional questions to help them observe individual content areas more closely. Mandatory questions cover the following content areas: demography, dietary habits, weight loss and physical self-image, physical activity, sedentary behaviours, risky behaviours, sexual health, injuries and violence, family, peers, school, health and well-being, social inequalities.
<b>HIV</b>	Human Immunodeficiency Virus
<b>ICD</b>	International Statistical Classification of Diseases and Related Health Problems is an international standard for health data, clinical documentation, and statistical aggregation.
<b>NIJZ</b>	National Institute of Public Health
<b>NLZOH</b>	National Laboratory of Health, Environment and Food
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PM</b>	Particulate matter Atmospheric particles or aerosols are small solid and liquid particles that are suspended in the gas phase. Therefore, we say that an aerosol is a dispersion system.
<b>PM<sub>10</sub></b>	Particulate matter with an aerodynamic diameter of less than 10 µm
<b>PM<sub>2.5</sub></b>	Particulate matter with an aerodynamic diameter of less than 2.5 µm
<b>PPP</b>	Purchasing Power Parity PPP is a code for an artificial, fictitious currency, which is equal to one euro at the level of the EU average. At present, 1 PPP is equal to 1 euro at the EU-28 level. The PPP or “EU-28 Euro” is the “currency” that reflects the average price level in the EU-28.
<b>SARS-CoV-2</b>	Virus that causes COVID-19
<b>SDR</b>	Standardized death rate When standardizing by age in epidemiological analyses we use the European standard population (Doll 1976) in international comparisons when countries from Europe are included
<b>SHA</b>	System of Health Accounts
<b>SLO</b>	Slovenia
<b>SURS</b>	Statistical Office of the Republic of Slovenia
<b>Svit Programme</b>	The Svit Programme is a national screening and early detection programme for colorectal cancer, which has been operating at the national level since 2009. It runs under the auspices of the Ministry of Health of the Republic of Slovenia and is managed by the National Institute of Public Health.
<b>TB</b>	Tuberculosis
<b>TBE</b>	Tick-borne meningoencephalitis
<b>URI</b>	University Rehabilitation Institute of the Republic of Slovenia – Soča
<b>WHO</b>	World Health Organisation
<b>ZORA</b>	ZORA is a preventive programme for the detection of precancerous and early cancerous changes in the cervix.
<b>ZZZS</b>	Health Insurance Institute of Slovenia

## Introduction

Health has become the greatest value during the syndemic period, which is affecting all other aspects of life. Monitoring information on population health and health system use proved even more important during the COVID-19 epidemic than before. We measure health and performance of the health care system with a number of indicators that are internationally comparable, as only geography- and time-comparable quality indicators can provide an appropriate basis for decision-making on health and social policies.

Slovenia has a well-developed health information system that draws data from regular databases, managed by the NIJZ, The Oncology Institute, ZZZS, SURS, University Clinic Golnik and many other institutions, as well as from national surveys also conducted by several institutions (NIJZ, SURS, IER, etc.) and in combination with some other databases, which further enrich the above with additional information. In 2019, the health information system was assessed by the World Health Organization as adequate, both in terms of the scope and completeness of information as well as the quality of data. This confirms that our system meets international data processing and reporting standards.

In the last decade, the NIJZ has been building a system for the dissemination of health information, and we specially emphasise the following key cornerstones:

- The data portal ([podatki.nijz.si](http://podatki.nijz.si)) is a single website for data in the field of health and health care, and thus enables the simplification of information retrieval and the re-use of already published data. Published data are free of charge and accessible to everybody. Links to other organizations that collect data related to health and health care of the population have been added to the portal (e.g., [www.stat.si](http://www.stat.si), [www.slora.si](http://www.slora.si), etc.).
- The Health Statistical Yearbook of Slovenia is an extensive publication that presents information on population health, the health care system, health care financing and the importance of the environmental impact on population health in the broadest sense. The beginnings of the publication date back to 1965, and in 2013 it was thoroughly renewed and updated.
- Health in the Municipality ([obcine.nijz.si](http://obcine.nijz.si)) is a portal aimed to serve local decision-makers. The portal provides health indicators at the municipal level and some related information such as thematic maps, thematic articles, etc.
- Interactive displays of current data on COVID-19 and vaccination against COVID-19.

All these cornerstones are created in cooperation with other institutions that manage databases in a quality manner and therefore their participation in the creation of health information is invaluable. Interinstitutional cooperation has also proved to be very important in this case.

Last but not least, we must also thank all the data providers – health care providers at all levels and the people involved in national health and health care research.

The present publication is a brief summary of all the dissemination cornerstones listed. The aim of the publication is to offer the reader a quick insight into various indicators of health and health care, to show a comparison with the European Union, and at the same time to direct them to find more information on one of the listed extensive portals and publications.

We wish the publication to find its way among users – from policy makers, the general public, the professional public, to journalists, and direct them to where they can find even more detailed information and additional explanations.

Milan Krek, MD

The director of the National Institute of Public Health



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# DEMOGRAPHIC AND SOCIOECONOMIC DATA



## BASIC DEMOGRAPHIC AND SOCIOECONOMIC DATA



The population of Slovenia has increased by 39% since 1953 and in 2019 amounted to 2,089,310, while, in the same period, the number of live births per 1,000 population decreased by 59%. In 2019, a total of 19,054 live births occurred and 20,588 persons died. Life expectancy at birth was 78.7 years for men and 84.5 years for women in 2019. Socioeconomic factors have a significant impact on health status and health inequalities among the population in individual geographical areas. GDP per capita in Slovenia has been increasing over the years on average. The registered unemployment rate in Slovenia has been declining in recent years, standing at 7.7% in 2019.



Population:  
2,089,310

GDP:  
EUR 23,170  
per capita

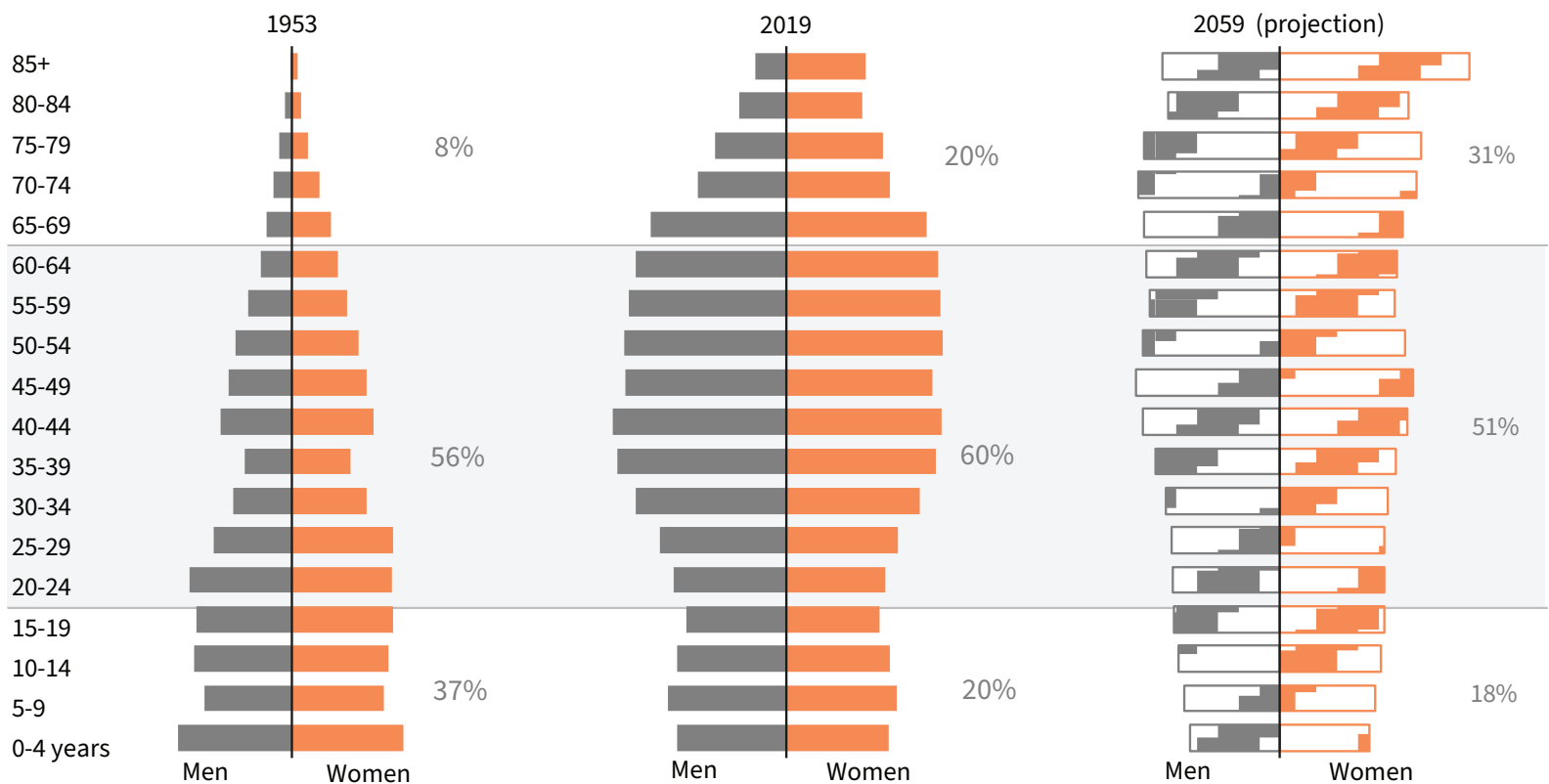


Population:  
513,093,556

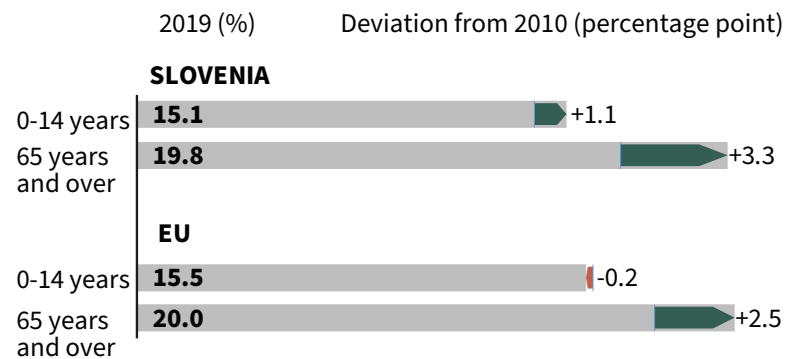
GDP:  
EUR 32,020  
per capita

The Slovenian population has been slowly increasing since 1953, mainly due to immigration and longer lifespans, while the number of live births has been mostly decreasing. Due to major changes in the age structure of the population, the population pyramid no longer has the appearance of a pyramid. The share of children and young people up to the age of 25 has decreased significantly, while the share of the population aged 50 and over has increased. The dynamics of population ageing are very fast, which needs to be considered when preparing country specific strategies.

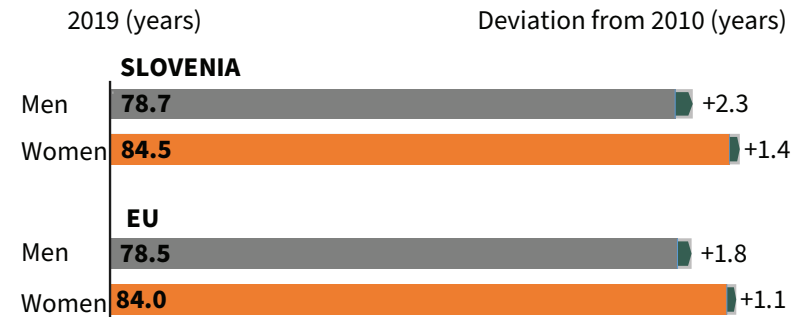
The comparison of Slovenian population pyramids for the years 1953 and 2019, and a projection for 2059



### Population aged 0-14 years and 65 years and over, Slovenia and the EU, 2019 and deviation from 2010



### Life expectancy at birth, by gender, Slovenia and the EU, 2019 and deviation from 2010

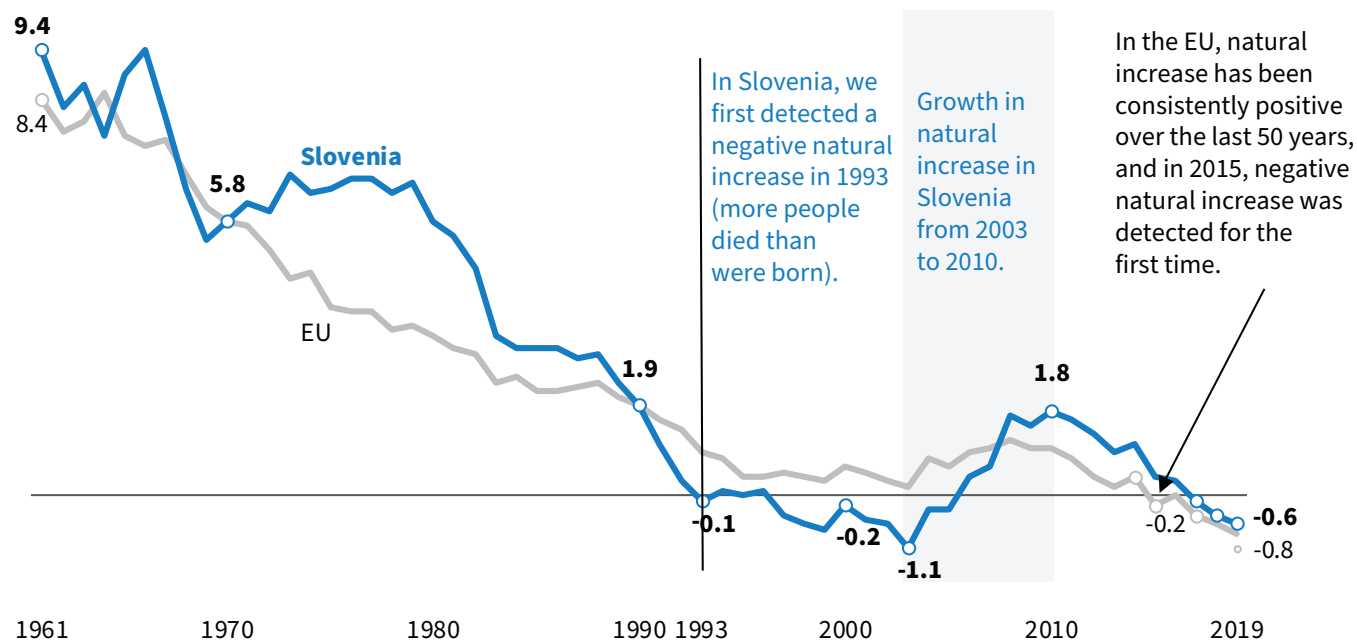


Life expectancy at birth in Slovenia, as in other EU countries, is higher for women than for men. In Slovenia in 2019, we are still recording an increase in the life expectancy of men and women, but it is slowing down.

The registered unemployment rate in Slovenia is higher for women than for men. In 2019, it was 6.9% for men and 8.5% for women.

### Natural increase, Slovenia and the EU, 1961-2019

Per 1,000 inhabitants



Natural increase is the difference between the number of live births and the number of deaths in the observed period.



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HEALTH STATUS

## DELIVERIES AND CHILDBIRTHS



In 2019, a total of 18,794 deliveries or 19,141 childbirths occurred in Slovenia. 19,054 children were born alive, of which 52% were boys and 48% girls. Among live births in Slovenia, 96% were singletons and 4% were children from multiple pregnancies. Both the birth rate and overall fertility rate have declined compared to 2018. With 9.1 live births per 1,000 population, we are below the EU average. The overall birth rate has been relatively stable over the last decade, but not enough for the natural regeneration of the population.

More than 80% of fathers are present at births.

Health during pregnancy, childbirth and early childhood has a key impact on adult health and is therefore a cornerstone of public health. The average age of pregnant women has increased by one year in the last decade and it exceeded 31 years in 2019. The average age of primigravidae is a year and a half lower. The increasing trend of the average age of pregnant women has been slowing down in recent years.

### Live births, Slovenia, 2019

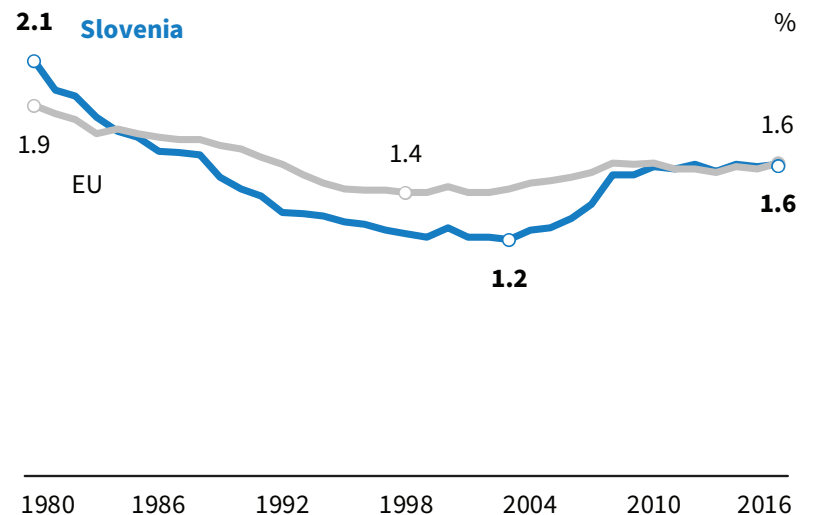


The most recent quadruplets were born in 2013.

The highest birth rate is typically for women aged 25 to 34 years. In 2019, women in this age group gave birth to two-thirds of all children. The birth rate among adolescents is low in Slovenia.

Premature birth and low birth weight are among the most important causes of morbidity and mortality in newborns in the developed world. In 2019, 0.9% of live births in Slovenia were born with a birth weight of less than 1,500 grams, and 5.0% of live births weighing between 1,500 and 2,499 grams, which is comparable to previous years and the EU average.

### Total fertility rate, Slovenia and the EU, 1980-2016



Perinatal mortality is one of the most significant health and health care indicators of mothers and newborns, and of the general population. In 2019, the perinatal mortality of children weighing 1,000 grams and over was 2.2 per 1,000 births. Perinatal mortality regardless of the birth weight of the child, was 5.3 per 1,000 births. Both values are comparable to previous years. Stillbirth represented 85% of all perinatal mortality.

In Slovenia, the share of children born by caesarean section has risen sharply in the last two decades, with more than one in five children is born this way, but we still rank below the EU average.



## MORTALITY

In 2019, a total of 20,588 Slovenian inhabitants died, out of which 10,112 were men and 10,476 women, or 103 persons (0.5%) more than in the year before. The mean age at death is increasing. Thus, on average, men lived for 74 years and women for 82. The standardized death rate (SDR) has been declining in Slovenia over the last three decades.

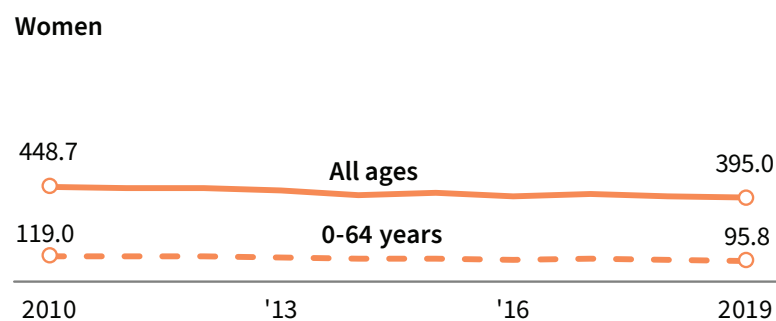
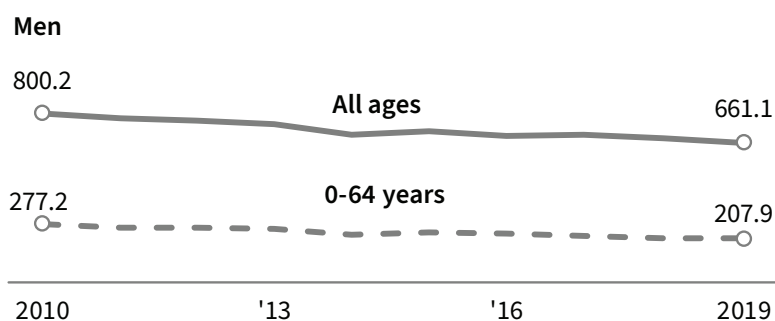
The leading causes of death in Slovenia remain diseases of the circulatory system (among the most common are heart attack, stroke and other heart diseases) and neoplasms (lung, gastrointestinal, prostate and breast cancer), which were the cause of 69% of all deaths in 2019. This is followed by injuries, poisonings and other external causes, as well as diseases of the gastrointestinal tract and respiratory system. Regarding the distribution of the underlying causes of death, Slovenia is comparable to other EU countries.

In Slovenia, 3,288 persons died before the age of 65 in 2019 (representing 16% of all deaths). Among men, mortality (SDR) is 1.7 times higher, whereas premature mortality (0-64 years) is more than twice as high (2.2 times) compared to women.

On average, we die older or live longer than thirty years ago. In 1990, the average age at death was 70, and in 2019 it was 78.

### Standardized death rate (general and premature), by gender, Slovenia, 2010-2019

SDR per 100,000 inhabitants



Infant mortality is an important indicator of the quality and accessibility of health care and of the impact of other determinants of population health and culture. In 2019, 40 infants died in Slovenia (2.1 per 1,000 live births). The infant mortality rate in Slovenia has been decreasing in the last decade and is one of the lowest among EU Member States.

### Premature standardized death rate (0-64 years), Slovenia and the EU, 2015

Premature SDR per 100,000 inhabitants (0-64 years)

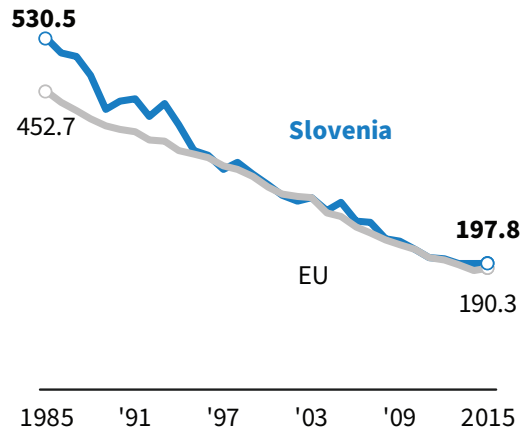
	Men	Women	TOTAL
<b>SLOVENIA</b>	<b>238.1</b>	<b>106.7</b>	<b>173.4</b>
EU	244.1	122.2	181.9

The premature standardized death rate is gradually decreasing, both in men and women. Leading causes of premature mortality in terms of age-standardized data are neoplasms, external mortality causes and diseases of the circulatory system.

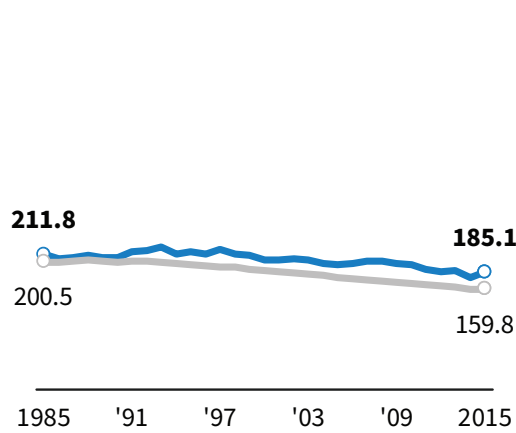
### Standardized death rate, by leading causes, Slovenia and the EU, 1985-2015

SDR per 100,000 inhabitants

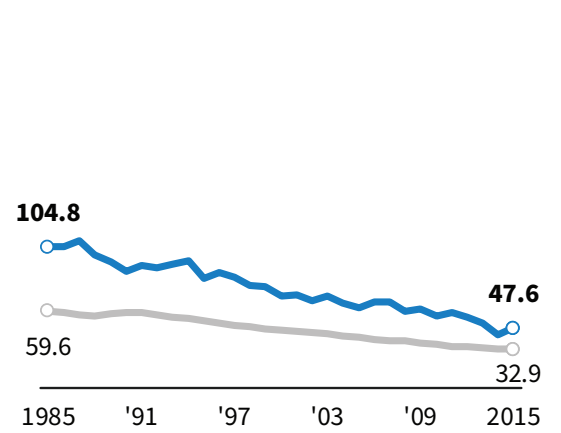
#### Diseases of the circulatory system



#### Neoplasms

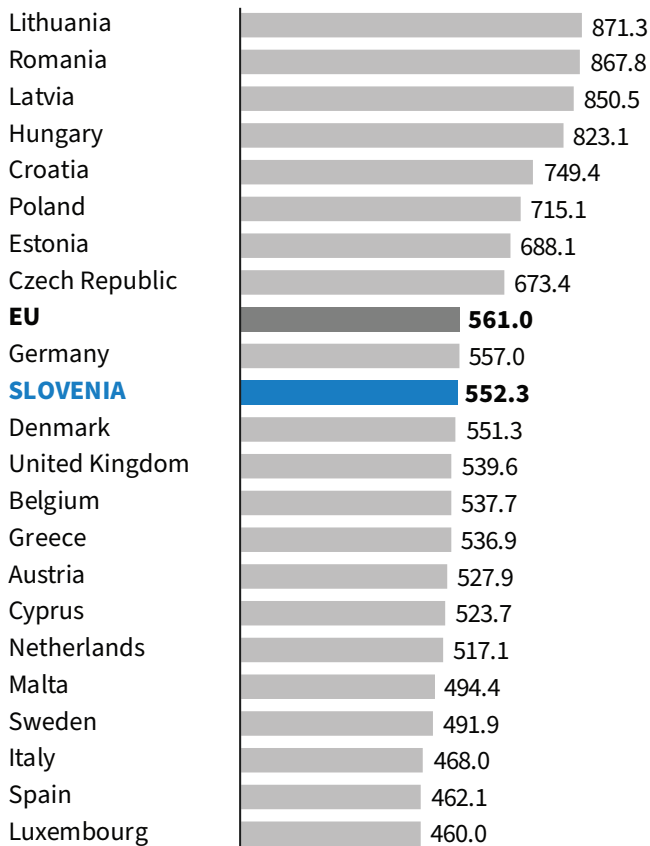


#### External causes



### Standardized death rate, Slovenia and some EU countries, 2015

SDR per 100,000 inhabitants



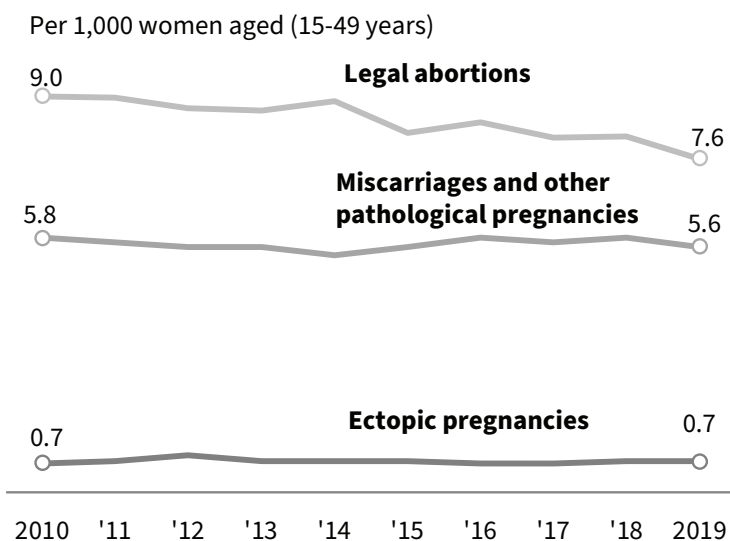


## FETAL DEATHS

Fetal deaths are deaths of embryos and fetuses that have not reached 500 grams and 22 weeks of gestation. These include ectopic pregnancies, miscarriages and other pathological pregnancies, and legal abortions.

In 2019, 5,972 fetal deaths or 14 cases of fetal deaths per 1,000 women of childbearing age were recorded in Slovenia. Of all fetal deaths, 5% were ectopic pregnancies, 40% were miscarriages and other pathological forms of pregnancy, and 55% were legal abortions.

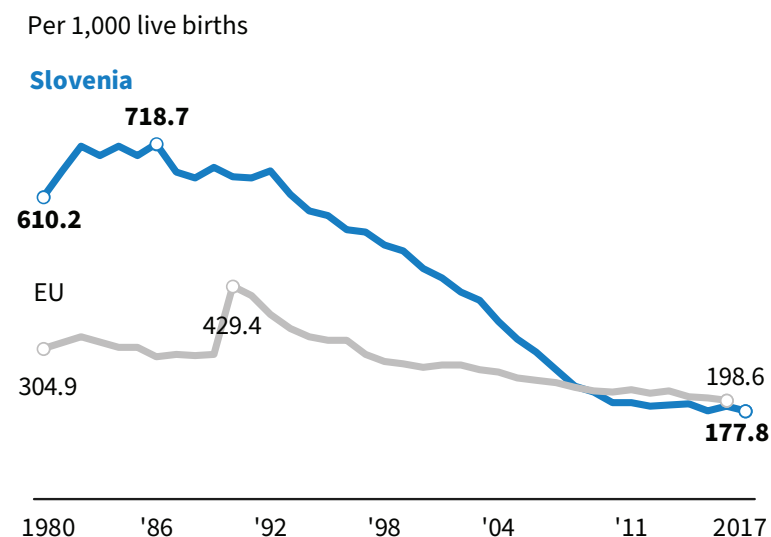
### Fetal deaths, by type, Slovenia, 2010-2019



The number of ectopic pregnancies and number of miscarriages and other pathological forms of pregnancy per 1,000 women of childbearing age have been relatively stable over the last decade. The legal abortion rate fell from 9.0 / 1,000 women of childbearing age in 2010 to 7.6 / 1,000 women of childbearing age in 2019. Three out of four fetal deaths were recorded in women aged 25 to 39 years.

The ratio between the number of legal abortions and the number of live births has been better in Slovenia in recent years than the EU average.

### The number of legal abortions, Slovenia and the EU, 1980-2017



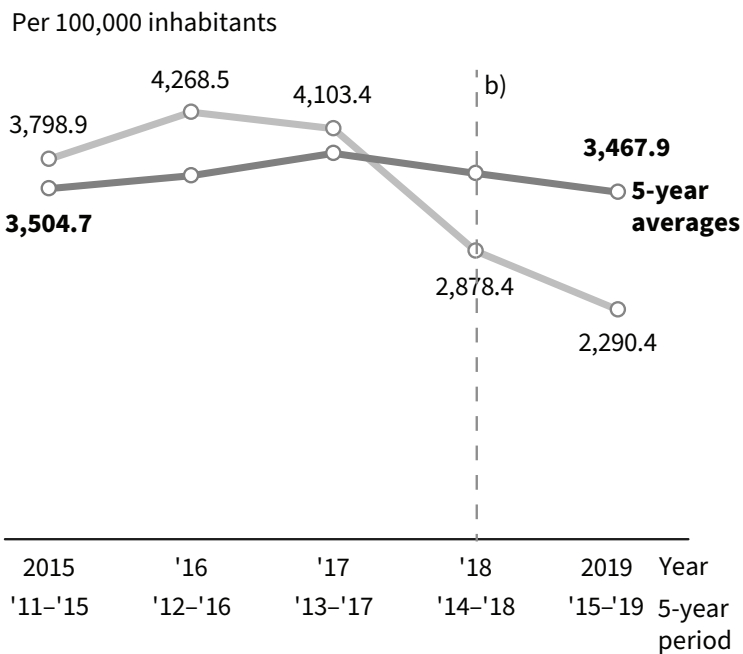
The ratio between the number of legal abortions and the number of live births fell by 12% between 2010 and 2019, which is better than the EU average. Legal abortions have declined in women of all ages in the last decade, but are not declining in some age groups in recent years. We are also consistently recording large regional differences in this.

## INFECTIOUS DISEASES



In 2019, a total of 47,853 cases of infectious diseases (excluding AIDS / HIV, sexually transmitted infections and tuberculosis) with a rate of 2,290.4 / 100,000 inhabitants were reported to the Register of Infectious Diseases at the National Institute of Public Health (NIJZ). In the same period, 101 newly diagnosed cases of tuberculosis were reported to the Central Tuberculosis Register, managed by the University Clinic Golnik, which is 2% more than in 2018. In 2019, as many as 1,951 cases of sexually transmitted infections (93.4 / 100,000 inhabitants) and 34 cases of new HIV diagnoses (1.6 / 100,000 inhabitants) were reported.

Reporting incidence rates of infectious diseases, Slovenia, 2015-2019 and 5-year averages (from 2011-2015 to 2015-2019)

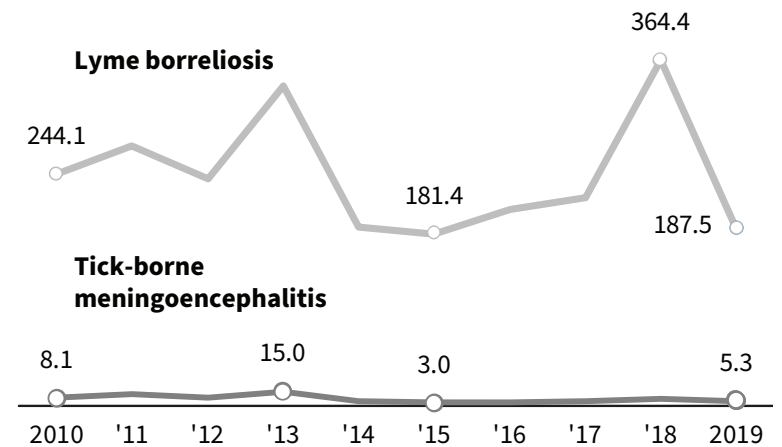


*b) A break in the time series due to a change in European data protection legislation that does not allow the collection of unspecified acute gastroenteritis.*

Epidemiological data on individual communicable diseases form the basis for situation analysis and contribute to the bases for the development of preventive programmes (vaccination, screening) and other measures for the prevention and control of communicable diseases.

Reporting incidence rates of tick-borne meningoencephalitis and Lyme borreliosis, Slovenia, 2010-2019

Per 100,000 inhabitants



In 2019, 111 cases of tick-borne meningoencephalitis (TBE) were reported (5.3 / 100,000 inhabitants), which is less than the average in previous years. The incidence of TBE in 2019 in Slovenia was one of the highest in the EU. Higher incidence rates of reported cases were only seen in Lithuania (25.4 / 100,000 inhabitants), the Czech Republic (7.3 / 100,000 inhabitants) and Estonia (6.2 / 100,000 inhabitants). The incidence of TBE in Slovenia did not differ from the EU countries where TBE is endemic in terms of gender, age groups and months with the highest number of cases.

In 2019, the incidence of TBE in Slovenia was one of the highest in the EU.





## DISEASES OF THE CIRCULATORY SYSTEM

Despite a significant decline in recent decades, diseases of the circulatory system remain the leading cause of death in Slovenia, accounting for 38% of all deaths in 2019 (45% in women and 31% in men). Since 2009, diseases of the circulatory system in men are no longer the leading cause of death but are in the 2<sup>nd</sup> place, following neoplasms. Among the causes of premature mortality, diseases of the circulatory system occupy the third place.

Among heart diseases, most deaths are due to acute myocardial infarction (also called heart attack or cardiac arrest), while among cerebrovascular diseases, most deaths occur due to stroke.

More women than men died of diseases of the circulatory system in 2019, with the highest number of deaths in the age group of 75 years and over in both genders. In women, such deaths were mainly caused by cerebrovascular diseases, while in men they were more often the consequences of ischaemic heart disease.

In the age groups up to 74 years, more men than women died from diseases of the circulatory system.

Acute myocardial infarction and stroke are important and preventable causes of premature mortality (before the age of 65).

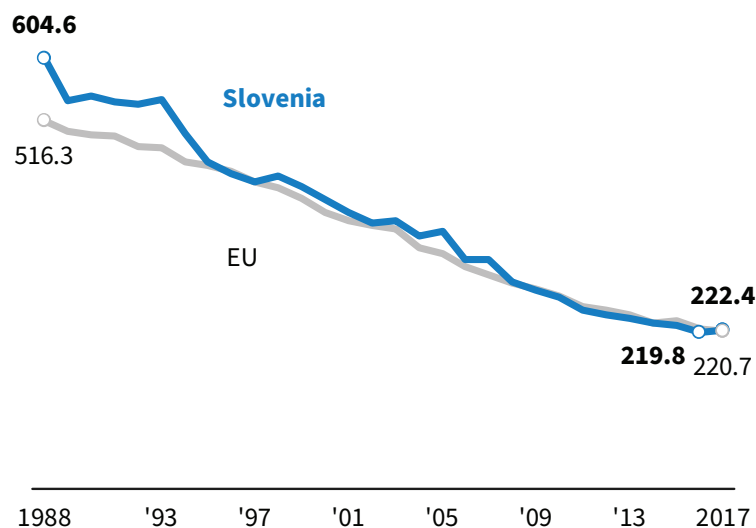
In Slovenia, the SDR due to diseases of the circulatory system exceeded the EU average in the 1980s and 1990s but it decreased in both genders and has been at the level of the EU average since 2000 and continues to decline.

SDR due to diseases of the circulatory system is 1.5 times higher in men compared to women, while the age-specific mortality is higher in women.

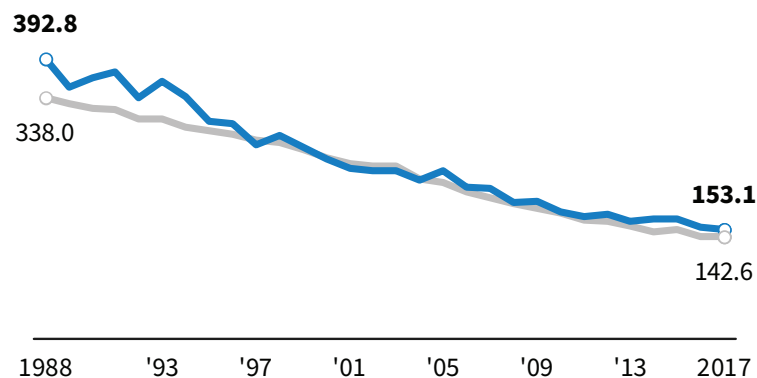
### Standardized death rate due to diseases of the circulatory system, by gender, Slovenia and the EU, 1988-2017

SDR per 100,000 inhabitants

#### Men



#### Women



Diseases of the circulatory system are classified as diseases with a higher age-standardized hospitalization rate, which equalled 12.4 per 100,000 inhabitants in 2019. In the period 2010-2019, a downward trend in the age-standardized hospitalization rate

due to diseases of the circulatory system was observed. The most common causes of hospitalization due to the diseases of circulatory system are ischaemic heart diseases, heart failure and cardiac arrhythmias.

The most common reasons for outpatient visits, both in specialist outpatient treatment and at the primary level, are hypertensive diseases, peripheral vascular diseases and cardiac arrhythmias.

Diseases of the circulatory system are the most common reason for visiting specialist clinics among the older population, aged 65 years and over.

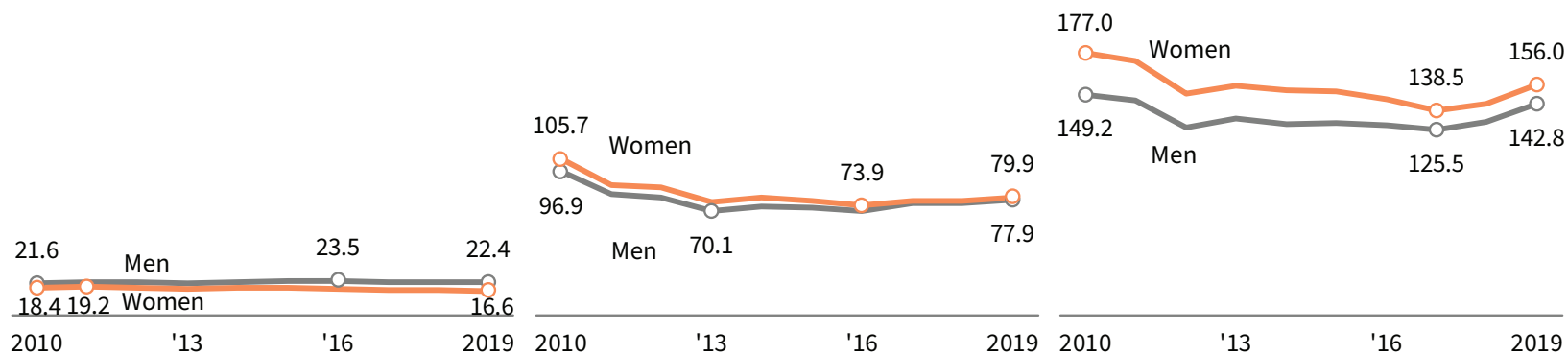
### Hospitalizations and visits to outpatient health care due to diseases of the circulatory system, by gender, Slovenia 2010-2019

Per 1,000 inhabitants

#### Hospitalizations

#### Outpatient treatments – specialist outpatient service

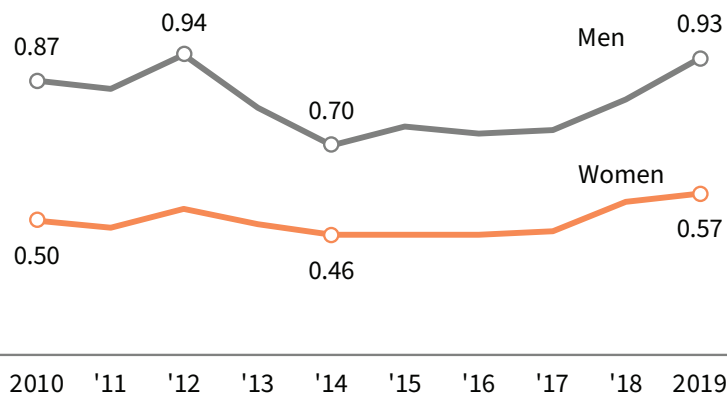
#### Outpatient treatments – primary level<sup>1)</sup>



<sup>1)</sup> Community health service not included.

### Days off due to sick leave per employee due to diseases of the circulatory system, by gender, Slovenia, 2010-2019

Disability index



Diseases of the circulatory system are more often the cause of sick leave in men than in women. From 2012 to 2014, the frequency of absences from work due to diseases of the circulatory system decreased and then remained at approximately the same level until 2017, whereas in 2018 and 2019, it increased significantly.

In 2019, as many as 4,740,545 prescriptions were issued for cardiovascular system medicines, which represents more than a quarter of all prescription medicines (26%), or the largest share among all other classifications of medicines.

In Slovenia, most prescriptions were issued for medicines for cardiovascular system (26% of all prescriptions worth 79 million euros).

## DIABETES



Diabetes with the accompanying morbidity, social and economic consequences for patients and their families, and burden on the health system and society as a whole, is a major challenge in developed countries. The number of patients is increasing each year. At the end of 2019, more than 116,000 people (5.5% of the total population) in Slovenia were receiving medicines for lowering blood sugar levels. In addition to these patients, there are patients who have been able to control their blood glucose levels without medications (especially through diet), and those who are still unaware that they have developed diabetes.

In the 2016 Health-Related Behavioural Style (CINDI) survey, 7% of respondents aged 25-74 answered affirmative to the question about the presence of diabetes in the last 12 months. The prevalence of diabetes and trends can be described with the help of data on recipients of blood glucose lowering medicines, which in 2019 were received by approximately 116,370 people.

Between 2010 and 2019, the number of diabetic patients receiving blood glucose lowering medicines increased by 26%. The largest increase was among the population aged 60 years and over.

### The recipients of blood glucose lowering medicines, by age groups, Slovenia, 2010, 2015 and 2019

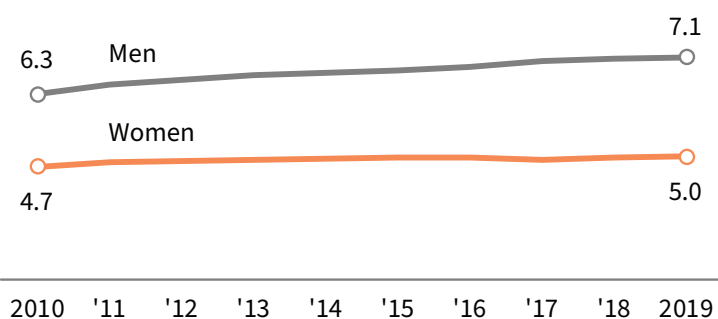
	2010	2015	2019	TOTAL
65 years and over	50,277	61,263	71,738	116,374
60-64	12,631	16,488	16,453	
55-59	12,026	11,480	11,076	
50-54	7,423	6,940	6,722	
Up to 50 years	10,109	10,147	10,385	
<b>TOTAL</b>	<b>92,466</b>	<b>106,318</b>	<b>116,374</b>	

The risk of developing type 2 diabetes is higher in men and older people. After the age of 40, the proportion of those with diabetes is higher among men than women, and in those aged between 50 and 69 diabetes is 1.6 times more common in men than in women.

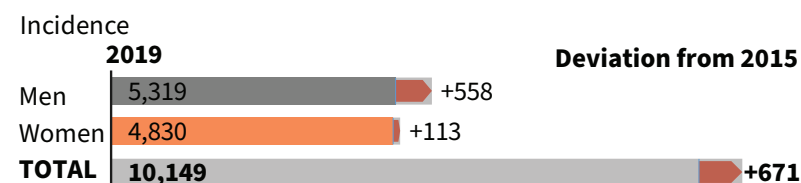
The incidence of men with diabetes has increased faster than that of women (2010-2019).

### Age-standardized prevalence rate of pharmacologically-treated diabetes in adults (20-79 years), by gender, Slovenia, 2010-2019

Age-standardized prevalence rate per 100 inhabitants (20-79 years)



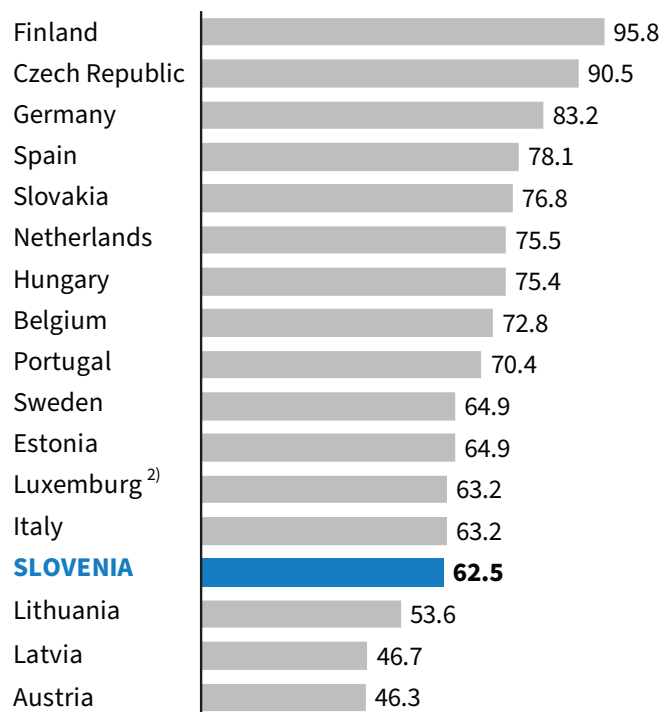
### New cases of diabetes treated with blood glucose lowering medicines, by gender, Slovenia, 2019 and deviation from 2015



In Slovenia, there are around 10,000 new recipients of blood glucose lowering medicines every year. There are more men than women among the newly diagnosed patients. In men over the age of 40, the incidence rate is higher in all age groups compared to women.

## Anti-diabetic drug consumption A10<sup>1)</sup>, Slovenia and some EU countries, 2018

Defined daily doses per 1,000 inhabitants per day



<sup>1)</sup> Data refer to ATC class A10-drugs used in diabetes.

<sup>2)</sup> Temporary value.

Slovenia ranked 14<sup>th</sup> among 17 EU countries in terms of medicines prescribed for diabetes.

The WHO estimates that 65 to 80% of new type 2 diabetes cases are attributed to being overweight.



## CANCER

According to the Cancer Registry of the Republic of Slovenia, in 2017 a total of 14,987 people (7,974 men and 7,013 women) were newly diagnosed (incidence) with cancer, and 6,365 (3,570 men and 2,795 women) died of cancer (mortality). At the end of December 2017, there were 111,696 people alive who at some point during their lifetime had been diagnosed with cancer (prevalence). Among these there are typically more women (60,755), as more men (50,941) suffer from cancers with a worse prognosis. The number of cancer patients has been increasing by an average of 2% per year over the last decade. Prostate cancer is the most common among men (20%), and non-melanoma skin cancer among women (23%). The five most frequent cancers in Slovenia – non-melanoma skin, prostate, colorectal, breast and lung – account for 60% of all new cancer cases. The survival of Slovenian cancer patients is improving over time, and in recent years the five-year net survival is more than 58%.

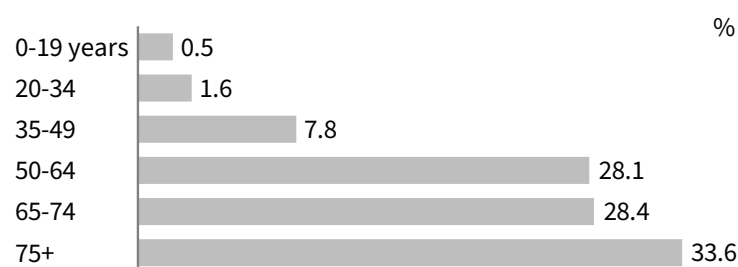
### Cancer burden, Slovenia, 2017

	Men	Women	TOTAL
Incidence	7,974	7,013	14,987
Deaths	3,570	2,795	6,365
Prevalence	50,941	60,755	111,696

The incidence of cancer is increasing. More than half of the increase in incidence can be attributed to the ageing of the population. It is encouraging, however, that cancer mortality (after adjusting for ageing) is declining.

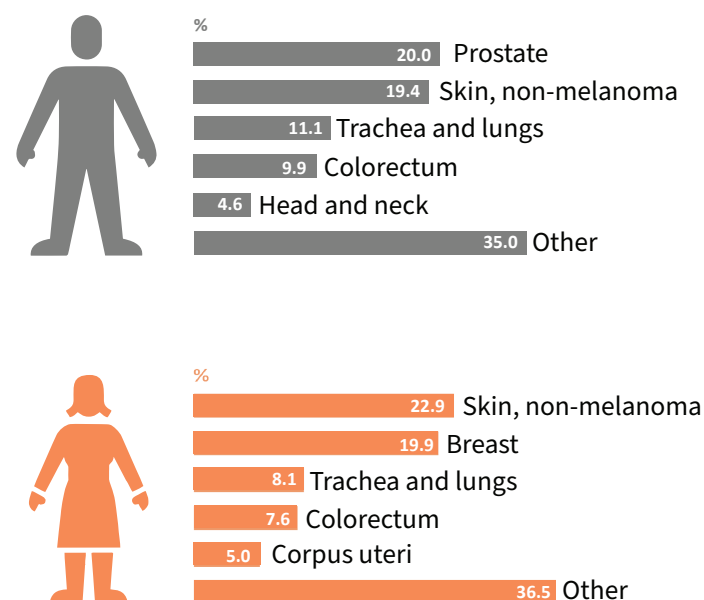
The age structure of cancer patients in Slovenia in 2017 illustrates that cancer is a disease of older people, as 90% of patients are diagnosed at the age of 50 or over, whereas 62% of them are aged 65 years or over.

### The percentage of new cancer cases, by age group, Slovenia, 2017

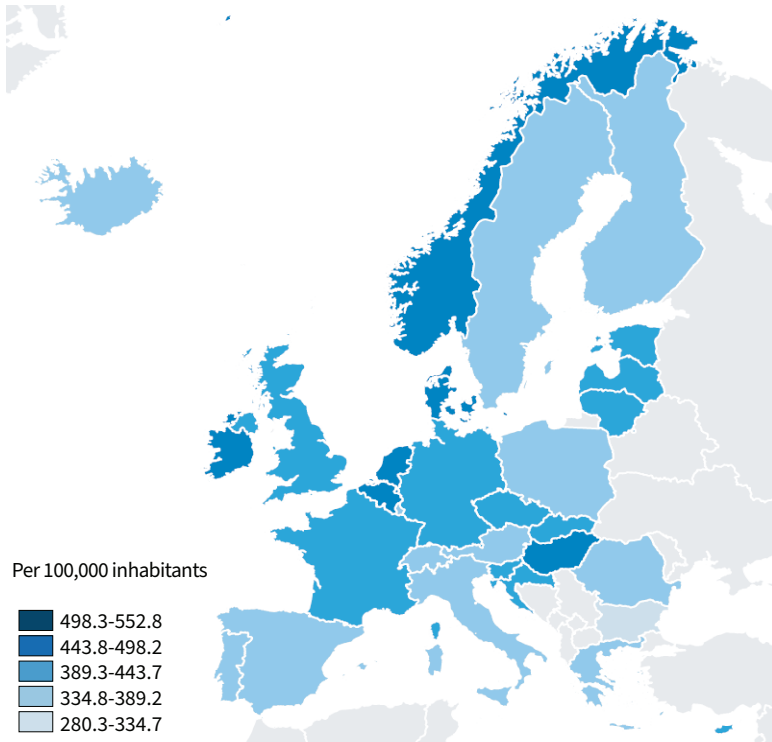


In men, prostate cancer was most frequent, accounting for 20% of all cancers, followed by skin cancer (excluding melanoma), lung cancer, and colorectal cancer. In women, non-melanoma skin cancer and breast cancer each accounted for one-fifth of all cancers, followed by lung cancer and colorectal cancer.

### The most frequent cancers, by gender, Slovenia, 2017



**Estimated age-standardized incidence rate of all cancers (excluding non-melanoma skin cancer), Slovenia and the EU, 2020**

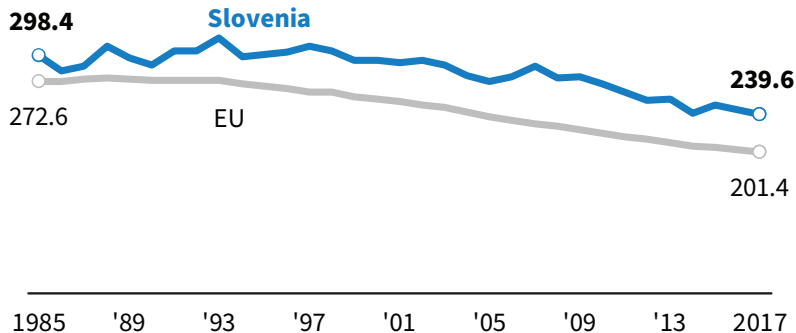


The estimated age-standardized incidence rate of all cancers (excluding non-melanoma skin cancer) for Slovenia for 2020 is higher than the EU average.

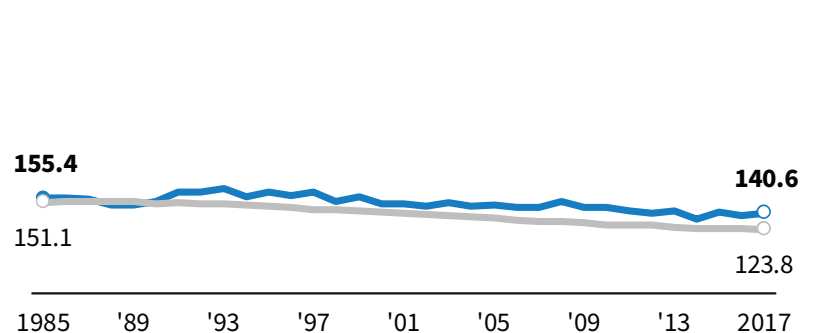
**Standardized death rate due to cancer, by gender, Slovenia and the EU, 1985-2017**

SDR per 100,000 inhabitants

**Men**



**Women**



The SDR due to cancer is slowly declining in both Europe and Slovenia. In Slovenia, it is higher than the European average, with the difference being even larger for men.

## ACCIDENTS AT WORK



In Slovenia, 13,927 accidents at work were reported in 2019, or 15 accidents per 1,000 employees. Of these, 15 resulted in death. Men represent three quarters of all reported injured workers, and women the remaining quarter. Every year, around 2.5 million employed people in the EU Member States are affected by accidents at work that require more than three days of absence from work. In the EU Member States, around 3,500 employed people die each year due to accidents at work. There are far fewer fatal accidents at work among women than among men.

According to age and gender, the younger male population is more at risk. In all age groups, accidents at work are more common among men than among women.

The severity and frequency of accidents at work is indicated by sick leave. In 2019, 1.4 % of all cases of sick leave were caused by accidents at work, and thus 805,871 working days were lost (5% of all days of sick leave). The percentage of sick leave days per person due to accidents at work was 0.24%, and the average duration of one absence was 54 calendar days.

## Accidents at work, Slovenia, 2019

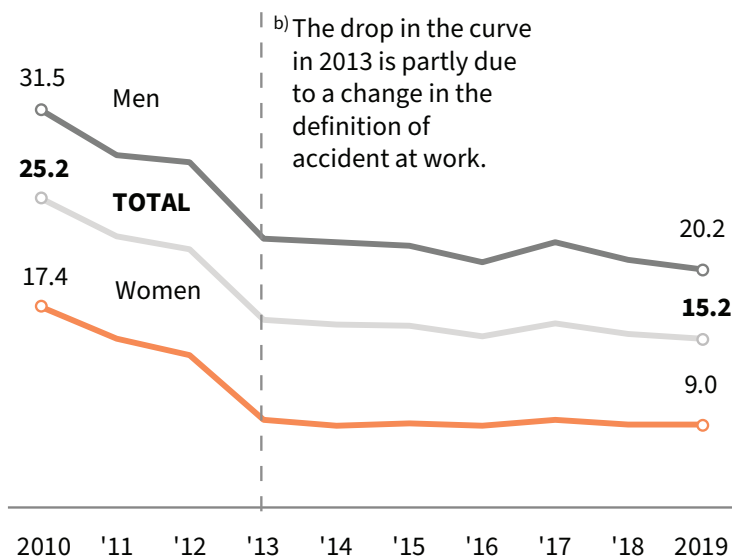


**13,927**  
ACCIDENTS AT WORK  
**15 FATAL**

**3 TIMES MORE INJURED**  
MEN THAN WOMEN

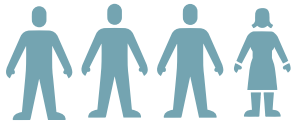
## Accidents at work, by gender, Slovenia, 2010-2019

Per 1,000 employed persons



b) A break in the time series due to a change in the definition of an accident at work.

### The most frequent accidents at work, by gender, cause, economic service and injured body part, Slovenia, 2019



Men get injured app. 3 times more than women.

Young males are most exposed to accidents at work.



Accidents at work are most common in mining industry.



Fingers are the most frequently injured of the body part.

In 2019, fingers were the most affected body parts in injuries at work.

The main causes of all accidents, including fatal, are slips and falls.

In 2019, the most fatal accidents at work occurred in manufacturing and construction (53% of all fatalities).

### Accidents at work<sup>1)</sup> with sick leave longer than three days, Slovenia and the EU, 2008-2018

Age-standardized incidence rate of accidents at work per 100,000 employed persons



2009 '10 '11 '12 '13 '14 '15 '16 '17 2018

<sup>1)</sup> The figure does not include accidents that occur on the way to and from work, as Eurostat is not monitoring them.

In terms of frequency of accidents at work, Slovenia ranks 10<sup>th</sup>, close to the EU average.



## TRANSPORT ACCIDENTS



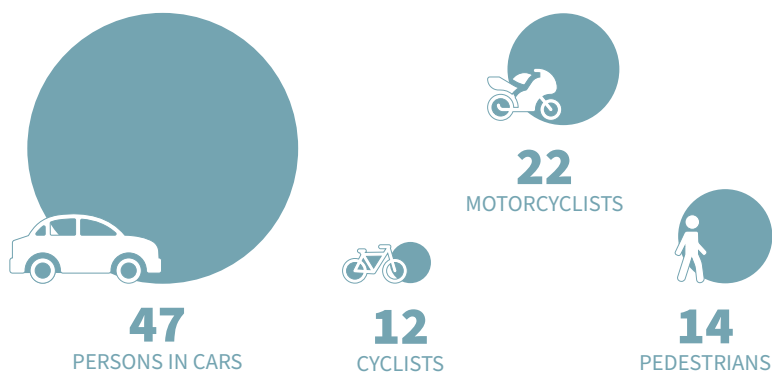
In Slovenia, 121 people died in transport accidents in 2019, the majority of them men. The most common are road accidents. In 2019, there were 18,945 such accidents in Slovenia, in which 102 people died. Thus, 11 more people died in road accidents in 2019 than in the year before.

The data on mortality due to transport accidents include deaths from accidents involving a means of transporting people or goods by land, water or air.

There is a significant difference in the mortality rate due to transport accidents between the genders, as four times more men than women die in this way, and this rose to six times more in 2019. The high mortality rate due to traffic accidents is also affected by drink-driving. In 2019, 31% of all fatal road accidents were caused by drink-drivers, which is five percentage points more than in 2018.

In 2019, most people who died in traffic accidents were in a car, followed by motorcyclists. The majority of deaths due to other accidents during transport by land were suffered by persons in a special agricultural vehicle.

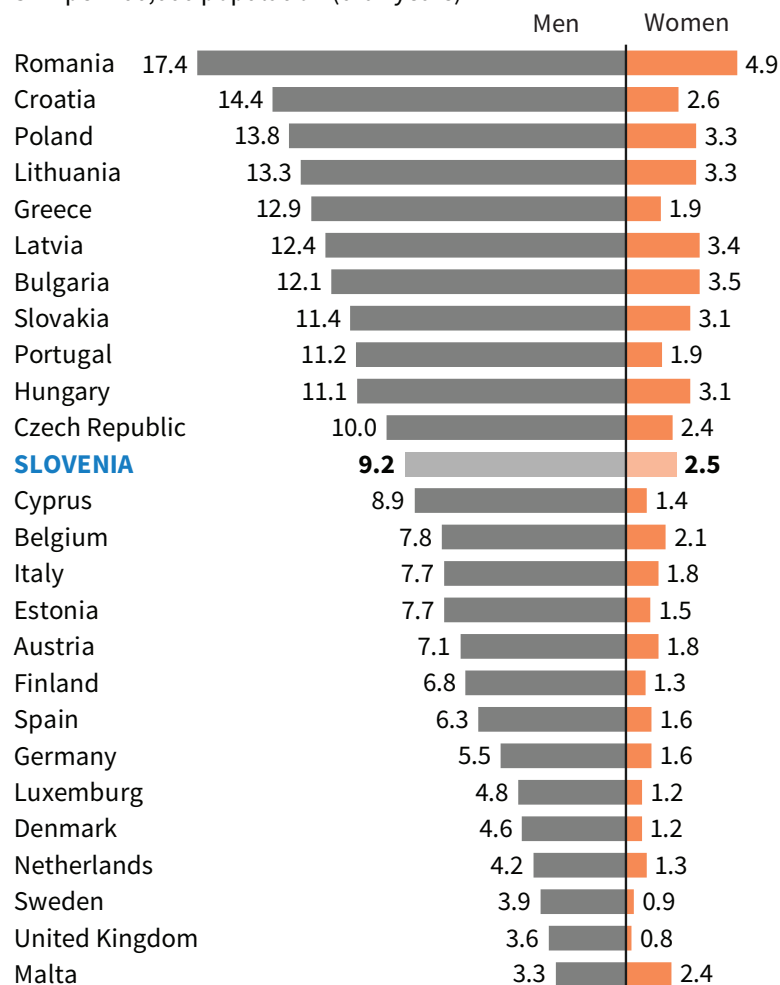
### Deaths due to some land transport accidents according to ICD-10, Slovenia, 2019



According to the European Commission, the number of fatalities in road accidents in Slovenia fell by 26% in the period 2010-2019, and by 23% in the EU as a whole.

### Premature standardized death rate (0-64 years) due to transport accidents, by gender, Slovenia and some EU countries, 2017<sup>1)</sup>

SDR per 100,000 population (0-64 years)



<sup>1)</sup> Temporary data.

## SICK LEAVE



In 2019, a total of 16,242,330 sick leave days were recorded among employed and the self-employed persons. The proportion of sick leave was 59% higher in women than in men. Illnesses (62% of days) and injuries (19% of days) contributed the most to absence from work, namely 14% of injuries outside work and 5% of injuries at work.

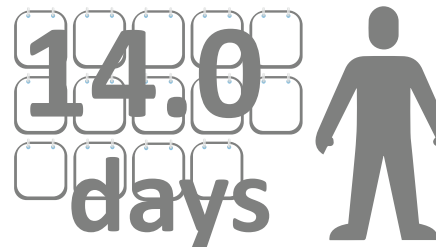
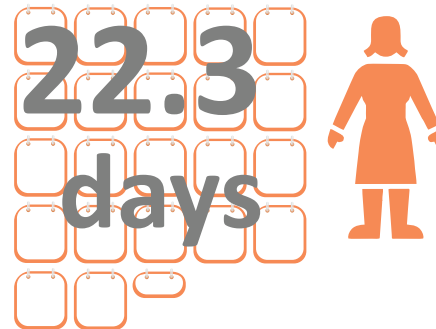
In the period 2010-2019 we can see a gradual decline in sick leave until 2014, after which sick leave starts increasing again. In 2019, the percentage of sick leave was 4.86%, or 19% higher than in 2010.

In most cases (71%), the absence was short and lasted no more than seven days, while 7% of cases lasted more than 30 days and required 68% of all days lost due to sick leave.

For many years, we have been noticing that the proportion of absences from work due to health reasons is higher for women than for men. Women spent twice as many days on sick leave as men, and the average duration of one absence was almost five days longer for men than for women.

In Slovenia, there were 17.7 calendar days of sick leave per employed person in 2019 (women 22, men 14).

### Average number of calendar days of sick-leave days per person, by gender, Slovenia, 2019

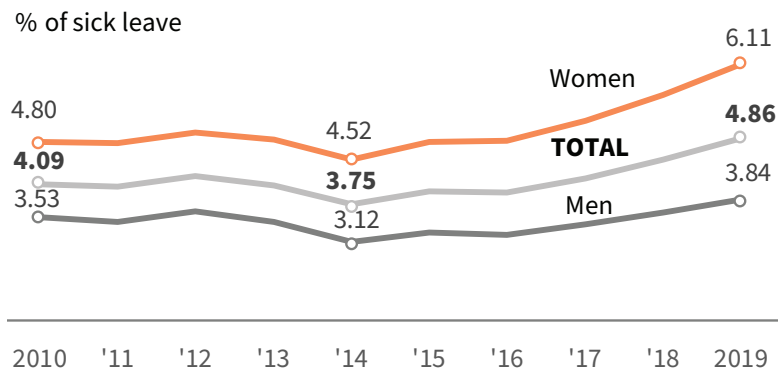


The most frequent causes of sick leave in men are injuries, among which injuries outside of work predominate, followed by diseases of the musculoskeletal system and connective tissue, and diseases of the circulatory system.

In women, absences due to diseases of the musculoskeletal system and connective tissue predominate, followed by injuries, followed by mental and behavioural disorders. Younger women are most commonly absent from work due to pregnancy and caring for family members.

53% of employed persons were never on sick leave in 2019.

### The percentage of sick leave days per employed person, Slovenia, 2010-2019

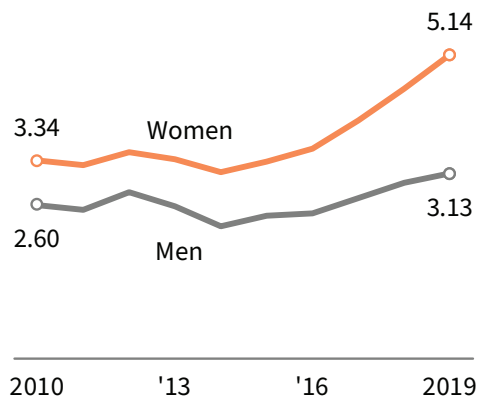


Employed women were on sick leave more often, but for a shorter period of time, compared to employed men.

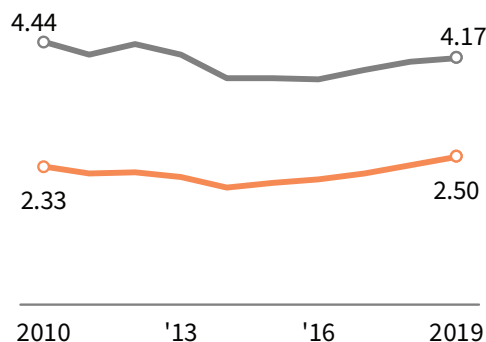
### Leading causes of sick leave – number of calendar days of sick-leave days per full-time employee, by gender, Slovenia, 2010-2019

Disability index

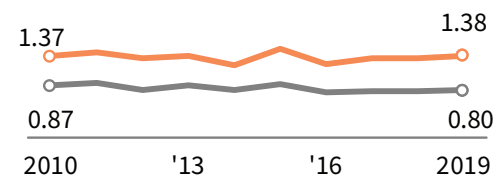
#### Musculoskeletal system and connective tissue diseases



#### Injuries and poisonings

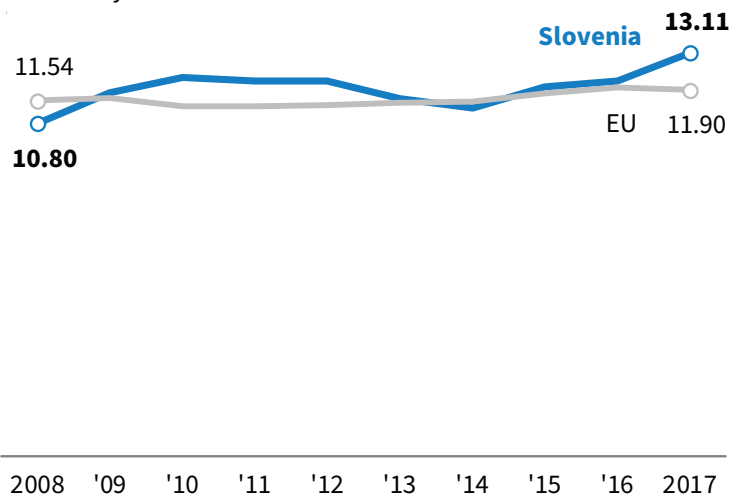


#### Respiratory diseases



### Number of working days<sup>1)</sup> of sick leave per employed person, Slovenia and the EU, 2008-2017

Disability index



Data on sick leave are published in international databases, but the comparison of Slovenian data with data from other European countries is very difficult and unreliable due to large differences in health and social care systems.

<sup>1)</sup> Reporting methodology for international databases: the number of working days per employed person is reported.



3

# HEALTH DETERMINANTS

## DIETARY HABITS



Surveys on dietary habits in Slovenia show that a large proportion of the population only partially follows the recommendations of a healthy diet. One third of the adult population aged 25 to 64 consumed three meals a day, and 58% ate breakfast every day. Only 37% of adolescents aged 11, 13 and 15 consumed fresh vegetables every day, and 43% consumed fresh fruit every day. Data show that among the adult population, dietary recommendations were more often followed by women than men, people with a higher level of educational attainment and those aged 55 and over.

Healthy nutrition is very important for human health. Diet and dietary habits have a significant impact on an individual's health and quality of life, as they can either protect health or increase the risk of developing a disease. According to available data, as many as 41% of chronic diseases are related to dietary risk factors.

The proportion of adolescents who consumed breakfast every day during the school week in 2018 was 42%. On average, boys consumed breakfast every day in a higher proportion (44%) compared to girls (40%).

### Adolescents who eat breakfast every day during the school week, by gender, at the ages of 11, 13 and 15, Slovenia, 2018

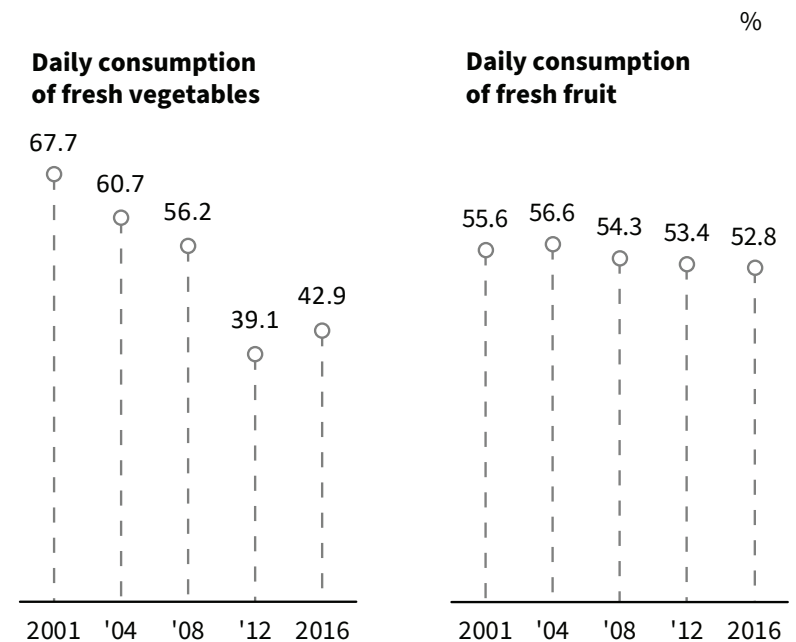
Age	Boys	Girls	TOTAL
11 years	52.6	48.7	50.7
13 years	42.0	38.7	40.4
15 years	36.9	32.7	34.9
<b>11, 13, 15<sup>1)</sup></b>	<b>44.0</b>	<b>40.4</b>	<b>42.2</b>

<sup>1)</sup> The average of all three ages.

In Slovenian adolescent boys and girls aged 11, 13 and 15 years, the daily consumption of vegetables decreases with age. This is also the case for most peers from countries included in the HBSC survey.

The results of Health-Related Behavioural Style survey from 2001-2004-2008-2012-2016 show an improvement in some dietary habits of the Slovenian population (increasing the use of olive oil and other vegetable oils in food preparation, reducing the consumption of flavoured carbonated and non-carbonated soft drinks, reducing daily consumption of fried dishes). An unfavourable trend in decreasing the consumption of fresh fruit was also discovered, while for the first time since 2012 the daily consumption of fresh vegetables increased.

### The proportion of population (25-64 years) who consumed fresh vegetables or fruits every day, Slovenia, 2001, 2004, 2008, 2012, 2016





## OVERWEIGHT AND OBESITY

According to the national Health-Related Behavioural Style (CINDI) survey, approximately 42% of adult respondents (aged 25-64 years) had normal weight in Slovenia in 2016, 39% were overweight and approximately 17% were obese. Clear differences were recorded in gender, age and education. A higher proportion of overweight and obesity were observed in men, the less educated and the elderly.

Since the first survey in 2001, the proportion of adults with the recommended body mass index (BMI 18.5-24.9) generally did not change significantly. Compared to the results of the 2012 research, in 2016 an increase in the proportion of the overweight population (BMI 25-29.9) was observed, amounting to 38.9%.

The proportions of overweight respondents and obese people were higher in the older age group (55-64 years) and in men. The increasing trend in the proportion of obese men in 2016 flattened at the value seen in 2012. The proportion of obese women remained approximately the same in all years of research.

### The proportion of the population (25-64 years) with normal weight according to body mass index<sup>1)</sup>, by gender, Slovenia, 2001, 2004, 2008, 2012, 2016

Year	Men		Women		TOTAL
	%	Bar	%	Bar	
2001	33.7		53.5		43.5
2004	34.1		55.1		44.4
2008	32.9		52.7		42.5
2012	33.0		54.8		43.7
2016	30.8		54.9		42.4

<sup>1)</sup> BMI is between 18.5 and 24.9.

### The proportion of adolescents (11, 13, 15 years) who are overweight and obese, by gender, Slovenia, 2018

Age	Boys	Girls
11 years	27	17
13 years	29	17
15 years	26	16

According to the international Health Behaviour in School-Aged Children (HBSC) survey, 27% of 11-year-old, 29% of 13-year-old and 26% of 15-year-old boys were overweight and obese in 2018. There was an obvious difference between the genders, as the proportion of overweight and obese girls was 17% in 11-year-olds, 17% in 13-year-olds and 16% in 15-year-olds.

According to BMI, Slovenian adolescents (aged 11, 13 and 15 years) rank close to the average of overweight and obese peers from the countries included in the HBSC survey.

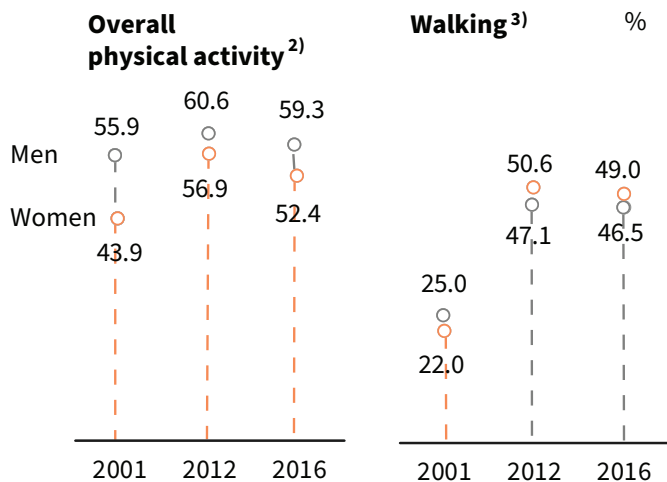
## PHYSICAL ACTIVITY



In 2016, approximately 56% of the population was vigorous- and moderate-intensity physically active in accordance with WHO recommendations for physical activity to promote adult health. The proportion was higher for men (59%) than for women (52%), but increased slightly with the level of education. Walking is a widespread physical activity, and 46% of adult men and 49% of adult women walked for 30 minutes a day for at least five days a week.

The proportion of the physically active population increased in the years from 2001 to 2012, and slightly decreased in the years from 2012 to 2016, in terms of total and moderate-intensity physical activity and walking, while it remained the same with regard to vigorous-intensity physical activity.

The proportion of the population (25-64 years) who achieved a sufficient amount of physical activity<sup>1)</sup> of vigorous- and moderate intensity and walking, by gender, Slovenia, 2001, 2012, 2016

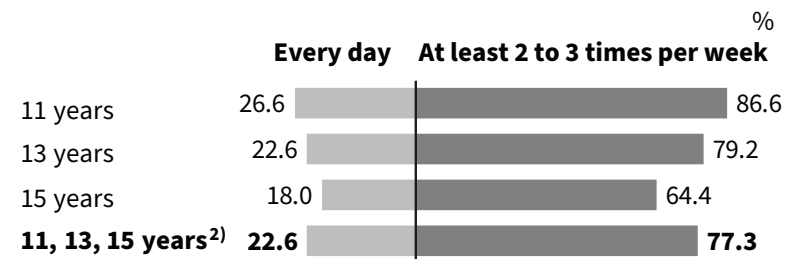


<sup>1)</sup> According to WHO recommendations for physical activity to promote adult health.

<sup>2)</sup> Vigorous- and moderate intensity physical activity combined in different combinations.

<sup>3)</sup> Walking for 30 minutes a day at least five days a week.

The proportions of adolescents by frequency of physical activity<sup>1)</sup>, at the ages of 11, 13 and 15, Slovenia, 2018



<sup>1)</sup> According to the WHO recommendation for physical activity of children and adolescents.

<sup>2)</sup> The average of all three ages.

The proportions of adolescents who engage in moderate- or vigorous-intensity physical activity for at least one hour every day is 27% for 11-year-olds, 23% for 13-year-olds and 18% for 15-year-olds, whereas the average for all three age groups equals 23%. The proportion of adolescents engaged in intense physical activity at least two to three times a week between the ages of 11 and 15 is 77% on average.

The proportion of adolescents aged 13 years who were physically active four or more times a week was 44% for girls and 59% for boys.

Compared to the 27 countries included in the data, Slovenia ranks 4<sup>th</sup> (HBSC).

## ALCOHOL USE



Alcohol is the most commonly used drug in Slovenia, and is used at least occasionally by the majority of the adult population. The society is dominated by a tolerant attitude towards consuming alcoholic beverages, which accompany many personal and social events. As many as 45% of Slovenian inhabitants, aged 25 to 64, drink excessively at least once a year. A significant proportion of adolescents also have experience with alcohol, as they encounter it for the first time at a very early age. Alcohol use is one of the key risk factors for premature mortality and disease burden, and contributes significantly to health inequalities. Slovenia ranks above the international average in terms of adverse health consequences attributable to alcohol.

In 2019, a total of 1,077 deaths were recorded due to causes attributable to alcohol use. Among those who died of these causes, there were 3.8 times more men than women, and almost half (47.5%) of those who died were under the age of 65, which is classified as a premature mortality.

Deceased due to causes exclusively attributable to alcohol use, Slovenia, 2019

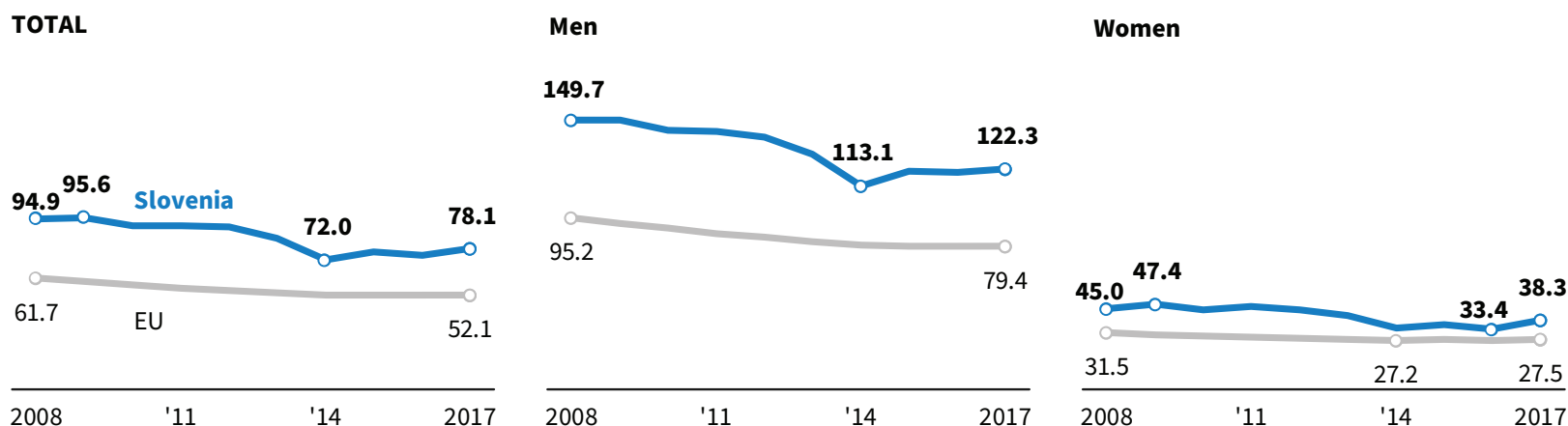
ON AVERAGE **3 PERSONS / DAY**  
DIED DUE TO CAUSES EXCLUSIVELY ATTRIBUTABLE TO ALCOHOL USE



In Slovenia, the registered consumption of pure alcohol in 2019 amounted to just over 11 litres per capita aged 15 and over. This represents as much as 91 litres of beer and 48 litres of wine and 3 litres of spirits per capita.

Standardized death rate due to selected alcohol-attributable causes of death<sup>1)</sup>, Slovenia and the EU average, 2008-2017

SDR per 100,000 inhabitants



<sup>1)</sup> The following causes are taken into account: throat and oesophageal cancer, alcohol dependence syndrome, chronic liver disease and cirrhosis, all external causes.

Mortality due to selected alcohol-attributable causes of death in Slovenia in the period 2008-2017 exceeded the EU average and was higher for men compared to women throughout the observed period, both in the EU and in Slovenia.

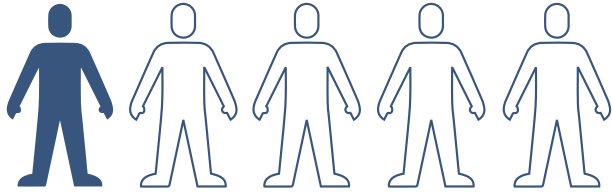


## TOBACCO SMOKING



In Slovenia, tobacco smoking is one of the leading preventable risk factors for death and healthy life-years lost. Every year, 3,123 inhabitants of Slovenia die from diseases attributable to tobacco smoking, i.e. around 60 every week, of which more than 40% before the age of 70.

### The proportion of smokers among the population aged 18-74, total and by gender, Slovenia, 2020



One fifth (19.9%) of the adult population smokes, most every day. Men smoke in a higher percentage (21.3%) compared to women (18.5%). The percentage of smokers also varies by age and education.

The percentage of smokers in Slovenia decreased between 2016 and 2020 in total and for both genders.

### The proportion of non-smokers<sup>1)</sup> (aged 15 years and over) exposed to second-hand tobacco smoke, total and by gender, Slovenia, 2019

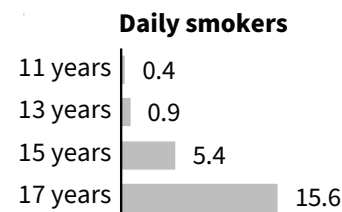
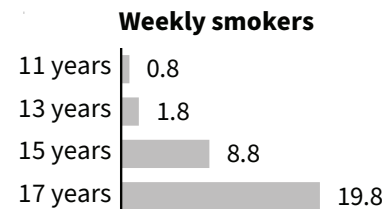
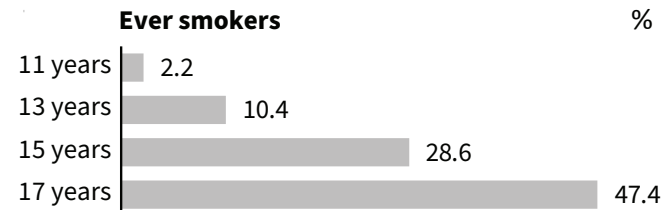
			Men	Women	TOTAL	%
Daily			4.4	3.6	4.0	
Weekly			5.1	3.6	4.3	
Monthly	10.9			7.0	8.9	

<sup>1)</sup> Non-smokers includes never-smokers and ex-smokers.

The exposure of those who live in Slovenia to tobacco smoke decreased significantly in 2007 after the introduction of a ban on smoking in all enclosed public and work spaces. It has also decreased in living quarters, but is still present in significant proportions.

Smoking is initiated mainly in teenagers and young adults. Nearly two thirds of ever smokers started smoking before the age of 18, and 99% before the age of 25. Smoking initiation after the age of 25 is thus very rare. There are no significant differences between the genders in the prevalence of smoking among adolescents.

### The prevalence of smoking among adolescents aged 11, 13, 15 and 17, Slovenia, 2018



In Slovenia, the prevalence of smoking among adolescents has been declining since 2002, and a decline was also recorded between 2014 and 2018, when the last HBSC surveys were conducted.

According to the prevalence of smoking, Slovenian adolescents aged 11, 13 and 15 rank close to the average of their peers from the countries included in the HBSC survey.



## ILLICIT DRUG USE

In Slovenia, 3,792 users were included in the drug addiction treatment programme in 2019. The most widespread illicit drug in Slovenia is cannabis. In 2019, 74 deaths related to drug use were registered in Slovenia (19 deaths due to drug addiction, 53 deaths due to drug poisoning and two deaths related to cannabis use). Heroin and cocaine were the most common causes of fatal poisoning.

Heroin remains the main drug that led drug users to enter the treatment programme, despite a declining proportion of users seeking help for heroin addiction.

Users who entered the treatment programme, by main drug and type of treatment (never previously treated, previously treated), Slovenia, 2013 and 2019

Drug	2013		2019		%
	First visit	Recurring visit	First visit	Recurring visit	
Heroin	52.1	84.9	52.9	80.0	
Methadone	4.3	1.6	2.9	1.5	
Other opioids	1.1	-	2.0	1.4	
Cocaine	6.4	2.1	3.9	4.4	
Amphetamines	1.1	0.5	2.0	0.7	
Benzodiazepines	-	1.6	-	1.5	
Cannabis	31.9	3.1	25.5	2.2	
Other	3.2	6.3	10.8	8.3	

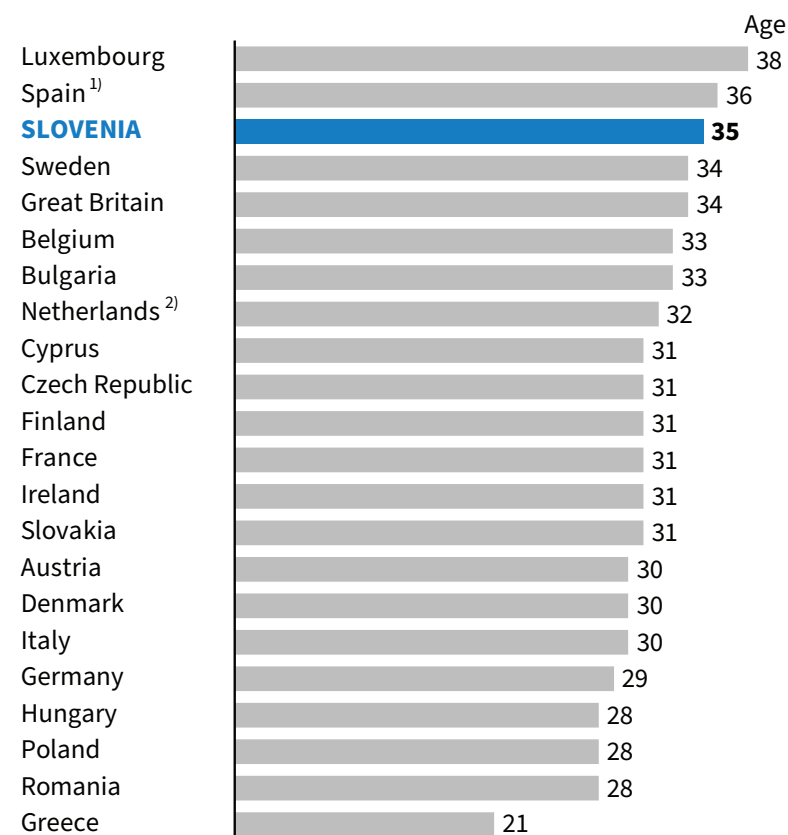
Illicit drug use-related deaths, by type of drug, Slovenia, 2019

Cause / Type of drug	Number of deaths
Addiction <sup>1)</sup>	19
Heroin	17
Methadone	7
Other opioids / narcotics	9
Cocaine	17
Cannabis	2
Psychostimulants	3
<b>TOTAL</b>	<b>74</b>

<sup>1)</sup> Addiction to one or more illicit drugs (ICD-10).

The average age of drug users involved in the programmes of the centres for the drug addiction prevention and treatment is increasing. As this population ages, health problems also increase, which puts a strain on the network of these programmes.

Average age of users, who entered a treatment programme (never previously treated and previously treated), Slovenia and some EU countries, 2018



<sup>1)</sup> Last available data from 2017.

<sup>2)</sup> Last available data from 2015.

In Slovenia, 21% of the population aged 15 to 64 have used an illicit drug at least once in their life.

## DRINKING WATER MONITORING



In 2019, 93% of the Slovenian inhabitants were supplied from drinking water supply systems or in supply areas where drinking water monitoring (quality monitoring) was carried out at the place of use (user faucet, public facilities, food production and trade facilities, drinking water packaging facilities). The quality of drinking water was not known for about 7% of the population, i.e. drinking water supply systems that supply less than 50 people (own drinking water supply, self-supply (e.g. rainwater)). Access to safe drinking water supply and drinking water quality improved slightly between 2010 and 2019.

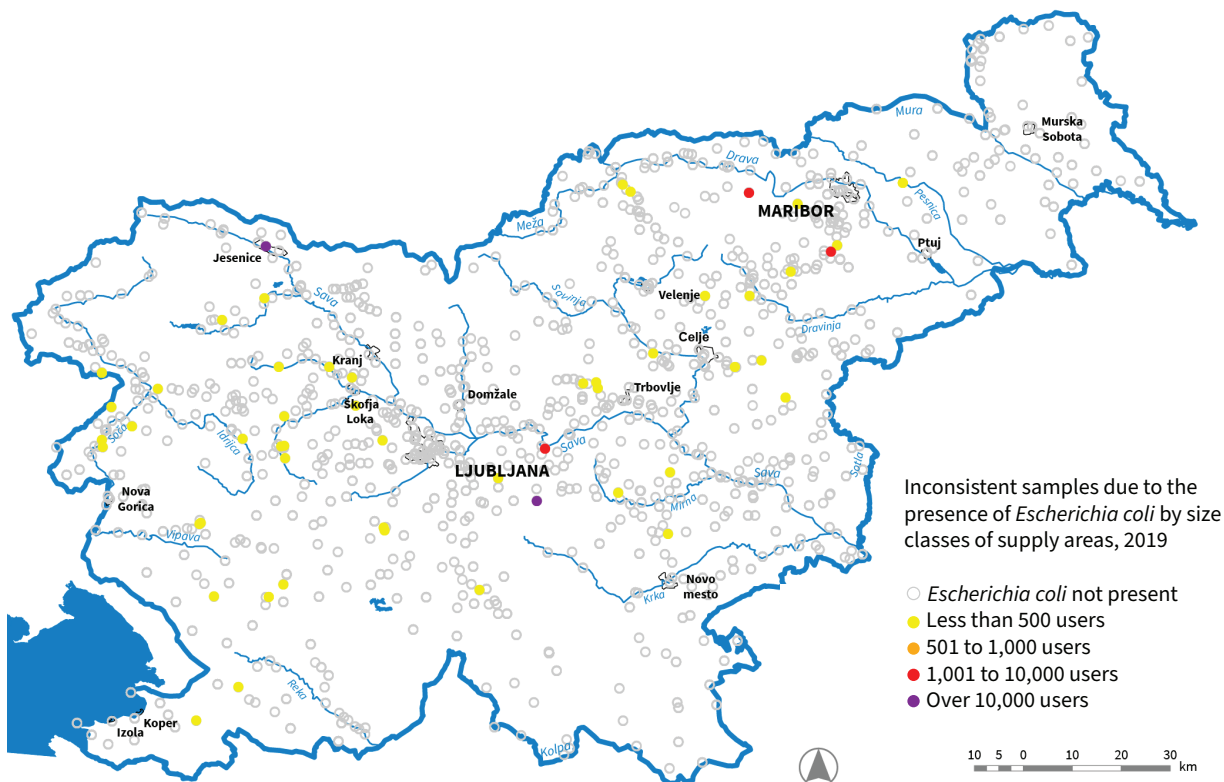
In 2019, a total of 3,147 samples were taken in 858 supply areas, which supply 93% of the population, as part of regular testing. Faecal contamination is important as an indicator of microbiological quality, non-compliance is shown due to the presence of *Escherichia coli*, which is tested for in all samples taken and in all supply areas; 11.4% of the samples were non-compliant due to at least one of the microbiological parameters, and in 1.7% of the samples due to *Escherichia coli*.

Out of chemical parameters, the pesticide desethylatrazine exceeded the limit value in drinking water in the period 2010-2019, and until 2017 atrazine and occasionally bentazone, metolachlor and the sum of all pesticides also exceeded the limit

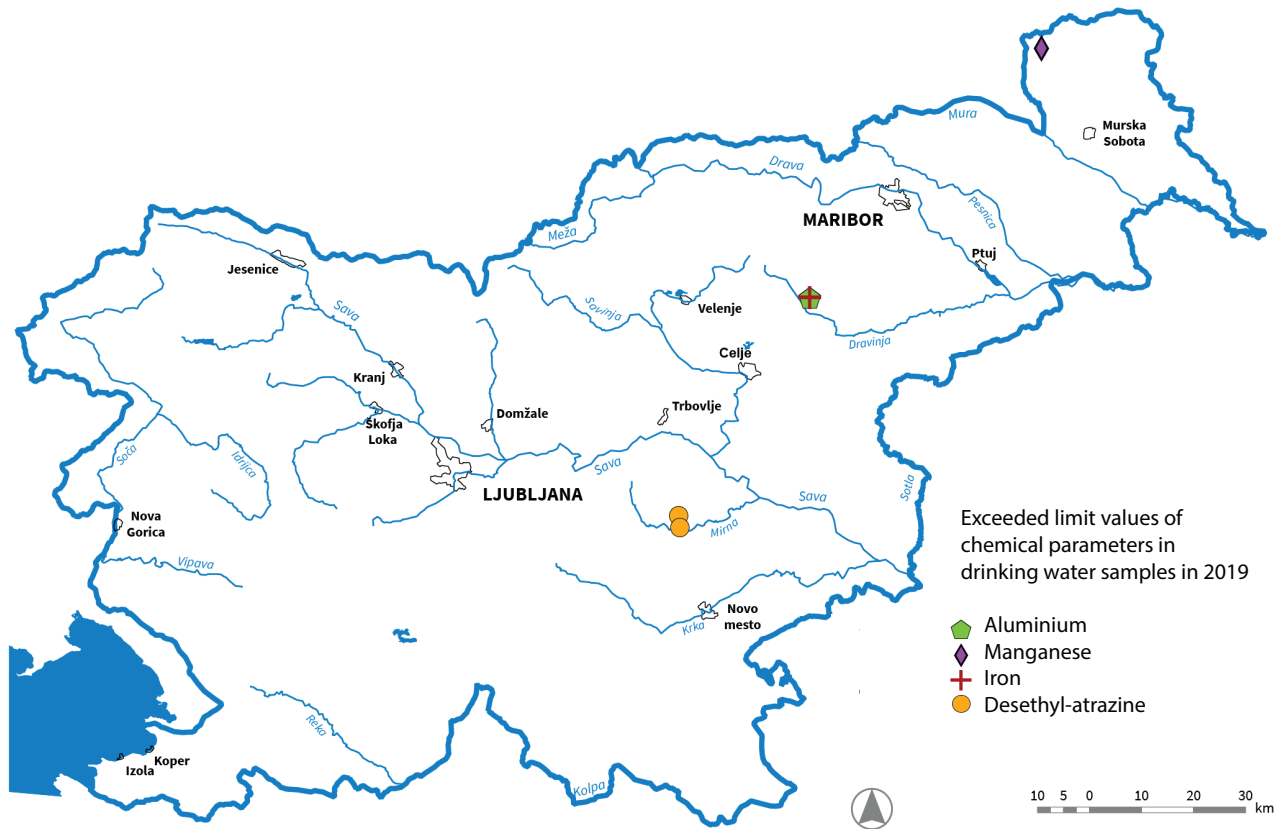
values. In individual years the limit values were also exceeded for the following pesticides: bromacil, dicamba, dimethenamid, chlortoluron, mecoprop, metazachlor, mesotrione, permethrin and terbuthylazine.

In 2019, as many as 1,130 water users were exposed to pesticides. Nitrates constantly exceeded the limit value in some places, except in 2016-2017 and 2019, and in some years also nickel and lead as well as indicator chemical parameters such as aluminium, manganese and iron. Pesticides and nitrates are present in water resources mainly in areas with intensive agriculture, especially in north-eastern Slovenia.

### Inconsistent samples due to the presence of *Escherichia coli*, Slovenia, 2019



## Inconsistent samples due to the presence of chemical parameters, Slovenia, 2019



Drinking water monitoring in Slovenia is prescribed by the Rules on Drinking Water and is carried out according to the annual monitoring programme.

## AIR POLLUTION – GROUND-LEVEL OZONE



In 2019, ground-level ozone values were similar to in previous years and slightly higher than in 2018. The maximum daily eight-hour average value was exceeded at all measuring sites. The information threshold was exceeded thirty-five times. The alert threshold was not exceeded at any measuring sites.

Slovenia belongs to the group of EU countries that are more burdened with ozone.

Average annual ground-level ozone concentrations in Slovenia do not show a pronounced trend in recent years. The years 2012 and 2013 stand out regarding high concentrations. Differences in individual years are a consequence of weather conditions. The maximum daily eight-hour target value is exceeded at most measuring sites, with the exception of those at busy traffic locations, especially in the warm half of the year (between April and September). At traffic measuring sites, ozone levels are lower because it reacts rapidly with the nitrogen monoxide from exhaust gases. High levels of ozone are particularly characteristic of hot days, when temperatures exceed 30°C for extended periods of time and especially with western air circulation, which can bring more polluted air from Italy.

Short-term (several hours or days) or long-term (several months or years) human exposure to ozone can cause a number of harmful structural, functional and biochemical changes in the respiratory system. Recent research has also shown systemic adverse effects of ozone (effects on heart function, development of atherosclerosis), and due to the effect of accumulation also an impact on higher morbidity and mortality due to respiratory diseases and diseases of the circulatory system.

Air pollution with ozone is the highest in the Primorska region, mainly due to the influence of favourable weather conditions and the transport of ozone and its precursors from Italy. On average, the highest values are measured at the measuring site on Krvavec, which is typical for locations in the highlands.

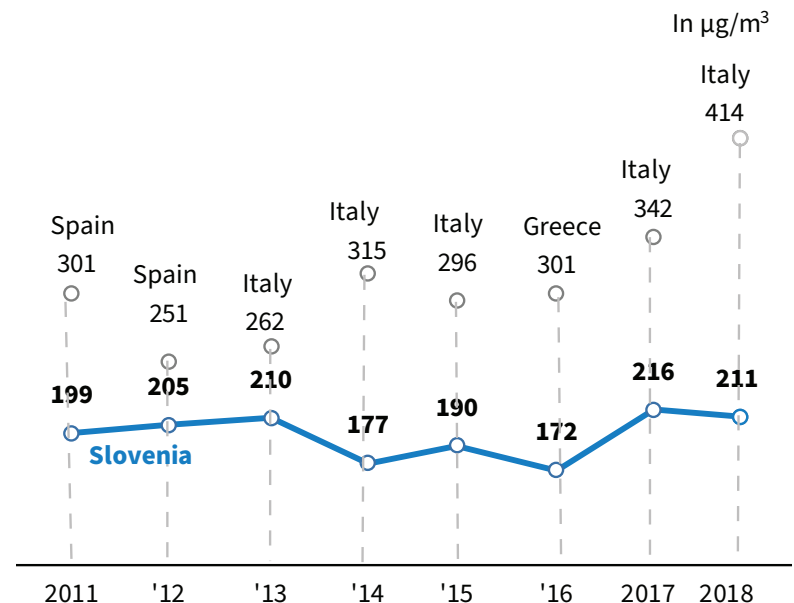
To protect human health, a target value for ozone is set at 120  $\mu\text{g} / \text{m}^3$  as the maximum daily eight-hour mean value, and must not be exceeded more than 25 days within a calendar year (calculated as the average for the last three years). The annual limit value of 25 days, however, was exceeded at most measuring sites. The worst situation with regard to the target

value was seen in 2017 due to above-average high temperatures in all three summer months.

The information value (180  $\mu\text{g} / \text{m}^3$ ) and alert values (240  $\mu\text{g} / \text{m}^3$ ) are also set to protect human health. In 2019, the information value was exceeded at three measuring points, a total of thirty-five times. The alert value was not exceeded in 2019. In Slovenia, in general, the alert value for ozone is rarely exceeded.

In the period 2011-2018, maximum one-hour concentrations of ozone in Slovenia ranged between 172  $\mu\text{g} / \text{m}^3$  (2016) and 216  $\mu\text{g} / \text{m}^3$  (2017), for an average of 198  $\mu\text{g} / \text{m}^3$ . During the same period, maximum hourly ozone concentrations elsewhere in Europe ranged between 251  $\mu\text{g} / \text{m}^3$  (2012) and 414  $\mu\text{g} / \text{m}^3$  (2018), for an average of 310  $\mu\text{g} / \text{m}^3$ .

### Maximum one-hour ozone concentrations, Slovenia and some EU countries <sup>1)</sup>, 2011–2018



<sup>1)</sup> Selected EU Member States that recorded the highest values of ozone concentration in a given year.

## AIR POLLUTION – PM<sub>10</sub> AND PM<sub>2.5</sub>



The data show that air pollution with particulate matter is decreasing. Nevertheless, the population is still exposed to exceeded values, mainly due to pollution from small combustion plants and in larger cities also due to road transport. Children and the elderly are most at risk due to the negative effects of particles on human health. Air pollution with particulate matter affects the development of health problems such as asthma, bronchitis, cardiovascular diseases, lung damage and cancer.

The air in Slovenia is among the most polluted in Europe due to PM<sub>10</sub>. The average annual concentration of PM<sub>10</sub> did not exceed the permitted annual limit value for environmental protection (40 µg / m<sup>3</sup>) in 2019. In bigger cities where the majority of people live, the average annual limit value for the protection of human health (20 µg / m<sup>3</sup>), which is recommended by the WHO, was exceeded.

Instances of exceeding the daily limit values of PM<sub>10</sub> are almost exclusively limited to the cold part of the year, when meteorological conditions are particularly unfavourable and at the same time air is polluted by small combustion plants.

The annual limit value of PM<sub>2.5</sub> (20 µg / m<sup>3</sup>) was not exceeded at any measuring station in 2019. The WHO proposes 10 µg / m<sup>3</sup> as the recommended limit value of PM<sub>2.5</sub> for the protection of human health.

Prolonged exposure to particles increases the risk of morbidity and mortality from lung and cardiovascular diseases. The effects of exposure are determined by the concentration and duration of exposure. Smaller particles are especially dangerous to health because they penetrate deeper into the lungs.

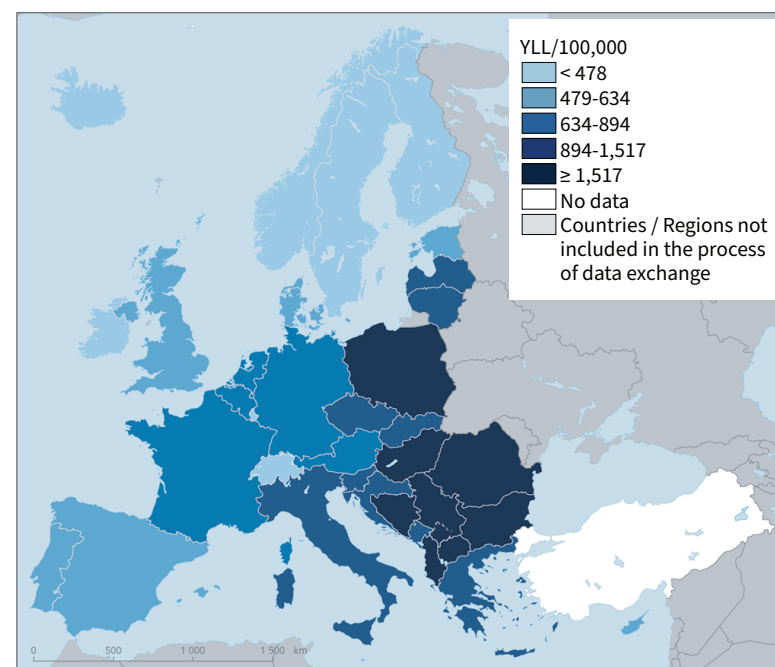
Children are especially exposed to particulate matter (PM). Data for the period 2010-2019 show that the largest proportion of children aged 0-15 years were on average exposed to PM<sub>10</sub> concentrations in the range between 21 and 30 µg / m<sup>3</sup>. According to data on hospital admissions in children, admissions due to respiratory diseases represent a good 15% of all their admissions. According to WHO calculations, the number of hospital admissions in children due to respiratory diseases would decrease by around 200 per year if the average annual concentration of PM<sub>10</sub> was 20 µg / m<sup>3</sup> (or less).

In 2018, the highest number of life-years was lost due to air pollution with PM<sub>2.5</sub> per 100,000 inhabitants in the countries of Central and Eastern Europe, where the highest concentrations of PM<sub>2.5</sub> are observed. The lowest impact of air pollution due to PM<sub>2.5</sub> are in the countries of Northern and North-western

Europe. Slovenia has been estimated at 1,016 lost years of life per 100,000 inhabitants – one of the most affected countries within the EU.

Due to the decline in economic activities, including the decline in road transport in many cities, concentrations of PM throughout the EU dropped significantly during the pandemic.

### Lost years of life due to air pollution with PM<sub>2.5</sub>, per 100,000 inhabitants, Slovenia and some European countries, 2018



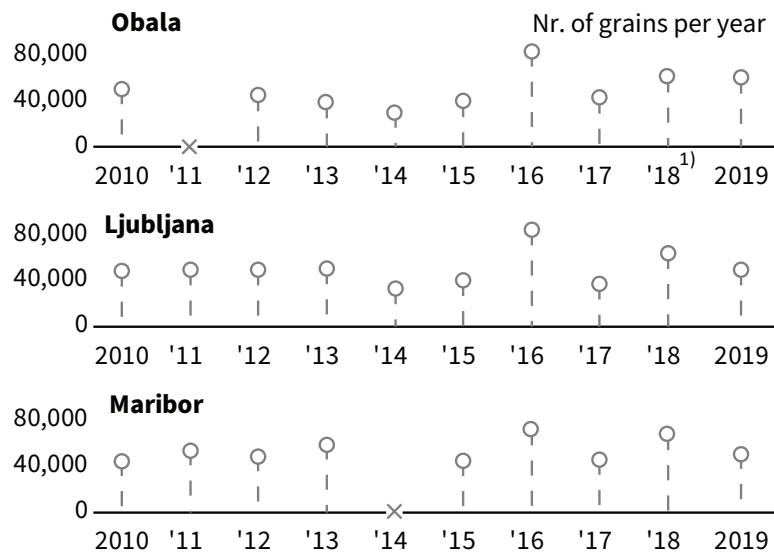
Slovenia is well on its way to achieving the WHO goals.

## AIR POLLUTION – POLLEN



For Slovenia, the map of the most important groups of allergenic pollen lists plant species typical of Central Europe, the Mediterranean area and the non-native genus of ragweed. Most pollen in the air is released by plants in our environment, but it is also brought by the winds. In addition to natural influences, people also impact air pollution through activities that introduce long-term changes in the environment at the level of climate, land use, environmental pollution, changes in the cultivation of agricultural and industrial crops and forest cover, as well as the planting of new allergenic species.

Annual pollen total, by measuring stations, Slovenia, 2010-2019



X – No data.

<sup>1)</sup> Obala: in 2018, data for one month are missing.

Pollen measurements have been carried out since 1996 by the National Laboratory of Health, Environment and Food. In 2019, year-round measurements took place at four measuring stations (Obala, Ljubljana, Maribor and Lendava) and during the flowering of ragweed in the Brežice basin. In 2019, the course of the season at the measuring points differed according to the periods of the highest burdens and the type of pollen. The highest burdens were recorded on the coast in March during the flowering of cypress, in Maribor in February with the flowering of hazel and alder and in April with the flowering of birch and hornbeam, while in Ljubljana, April was the most affected month. A special feature of the season in Ljubljana was the high grass burdens in the beginning of May, while on the Obala the olive pollen season developed in June.

In Europe, aerobiological measurements of pollen in individual countries have been carried out for decades. The European Pollen Pollution Map and links to national measurement networks are available at <https://www.polleninfo.org/en/links/europe.html>. For allergy sufferers with hay fever, the website [polleninfo.org](https://www.polleninfo.org) (<https://www.polleninfo.org/country-choose.html>) is available, which provides links to the websites of national measurement networks.

In Slovenia, we follow 60 types of pollen with allergenic potential.



4

# PREVENTIVE SERVICES



## VACCINATION COVERAGE



The vaccination rate of preschool children against diphtheria, tetanus, whooping cough, poliomyelitis, and haemophilus influenza type b (94.7%), measles, mumps and rubella (93.6%) was relatively high in Slovenia in 2019, and the downward trend has stopped. In Slovenia, the low vaccination rate of the population against seasonal influenza is still a big problem, but it has been increasing for three seasons in a row and was the highest for the last ten years in the last season.

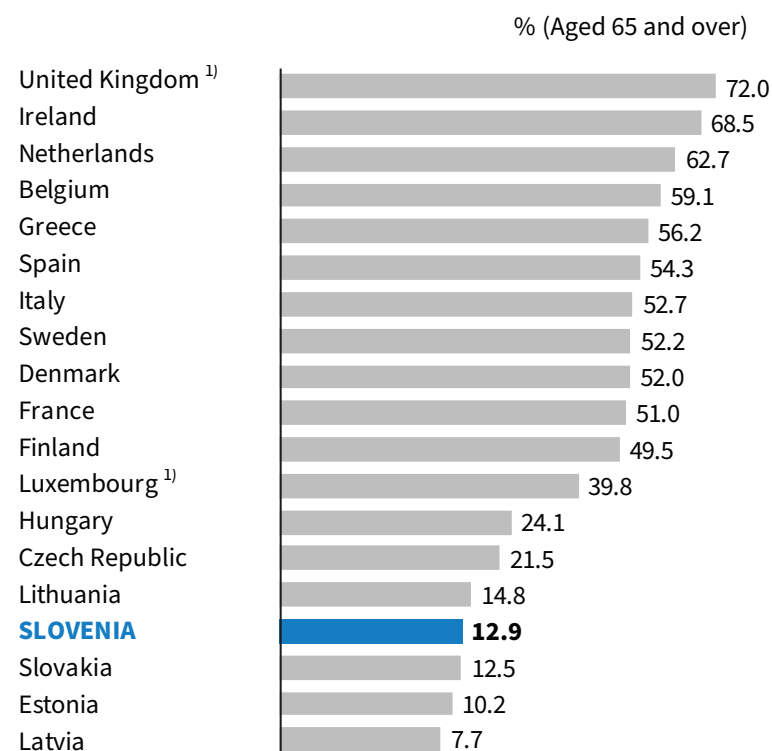
The vaccination rate of preschool, primary school and high school children (compulsory vaccinations), Slovenia, 2019 or 2019/20

The share of vaccinated (%)	
<b>Vaccination rate of preschool children</b>	Year 2019
Diphtheria, tetanus, whooping cough, haemophilus influenzae type b, polio	94.7
Measles, mumps, rubella	93.6
<b>Vaccination rate of school-aged children</b>	School year 2019/20
Hepatitis b (3 <sup>rd</sup> dose of vaccine)	79.9
Measles, mumps, rubella (2 <sup>nd</sup> dose of vaccine)	91.0
Diphtheria, tetanus, whooping cough (3 <sup>rd</sup> grade of primary school)	90.0

In the 2019/20 season, the number of people vaccinated against influenza increased slightly compared to previous seasons, and 6.8% of the population were vaccinated. A particular problem is the still low vaccination rate against influenza in people aged 65 years and over, who are often also chronic patients. The share of vaccinated persons in the age group 65 and over in Slovenia in the 2019/20 season was only 18.8%. We are thus far from the goal set by the World Health Organization, according to which the vaccination rate of the elderly against influenza should be at least 75%.

Vaccination against influenza of the population aged 65 and over was lower in Slovenia in 2018 than in most EU countries that provided data.

Vaccination rate against influenza, Slovenia and some EU countries, 2018



<sup>1)</sup> Temporary data.

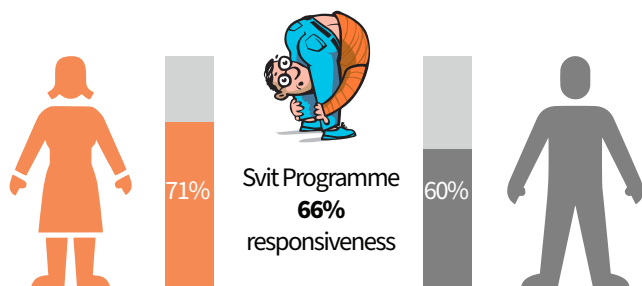
## COLORECTAL CANCER SCREENING PROGRAMME



In Slovenia, 308,155 people were invited to the national screening and early detection programme for colorectal cancer in 2019. The statement of participation was returned by 201,352 persons. This share represents 66% of those invited, which is almost nine percentage points more than at the beginning of the programme, but still around four percentage points less than the desired share (70%) of the respondents in the target population.

The Svit Programme is the national screening and early detection programme for colorectal cancer, which has been operating on a national level since 2009. In Slovenia, 66% of those invited participated in the Svit Programme in 2019. Since the beginning of the programme in 2009, we have been monitoring the growing trend of responsiveness of invited persons. In 2019, the responsiveness to the screening programme increased by one percentage point compared to 2018, when the responsiveness to invitations was almost nine percentage points higher than at the beginning of the programme (57%).

### The responsiveness of those invited to the Svit Programme, by gender, Slovenia, 2019

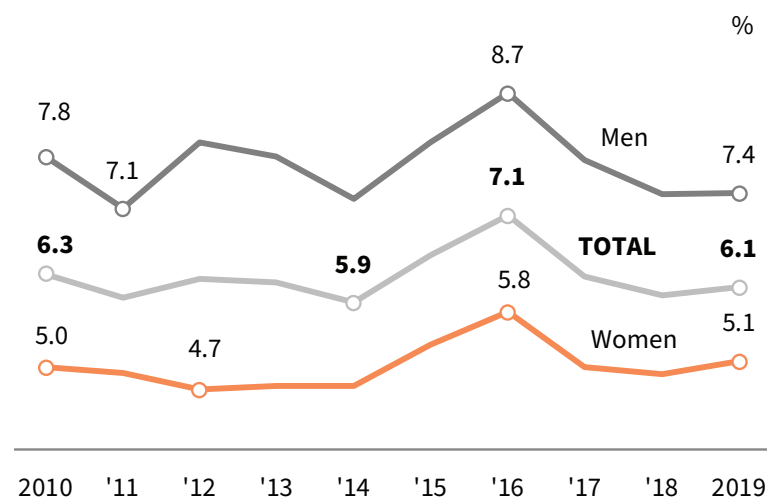


In 2019, more women (71%) than men (60%) returned the Statement of participation in the Svit Programme. A higher responsiveness of women by about 10 percentage points can be traced throughout the programme operation period.

Among those screened in 2019, a total of 168,949 (94%) persons tested negative and 10,950 (6%) tested positive for faecal occult blood. As usual, the share of persons with a positive faecal occult blood test is higher in men (7%) than women (5%). Men are more at risk of developing colorectal cancer, but are less likely to participate in the screening.

In Slovenia, colorectal cancer is among the five most common cancers in both genders combined, and at the same time it is one of the few cancers that can be prevented by screening.

### Positive screening tests in the Svit Programme, by gender, Slovenia, 2010-2019



In 2019, a total of 10,736 colonoscopies were performed in the screening programme. 172 cancers and 2,016 advanced adenomas, posing a higher risk of cancer, were identified.

## CERVICAL CANCER SCREENING PROGRAMME



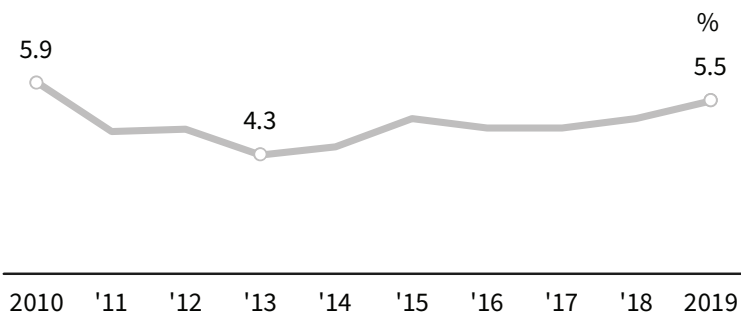
The screening of the female target group (20-64 years) in the ZORA programme in the last three-year period (1 July 2016 – 30 June 2019) exceeds the internationally recommended participation rate of 70%, and amounts to 72.4%. Of all 158,916 registered cervical smear results of the target population in 2019, 89.1% were defined as normal, while 5.2% had non-neoplastic changes. There were 5.5% of pathological findings dictating additional diagnostics.

The Slovenian cervical cancer screening programme and registry, ZORA, is a prevention programme for the detection of precancerous and early cancerous changes in the cervix. Screening in the ZORA programme has stabilized above the limit of the recommended screening rate, which ensures the effectiveness of the programme, and amounts to 72.4% (three-year screening cycle from 1 July 2016 to 30 June 2019).

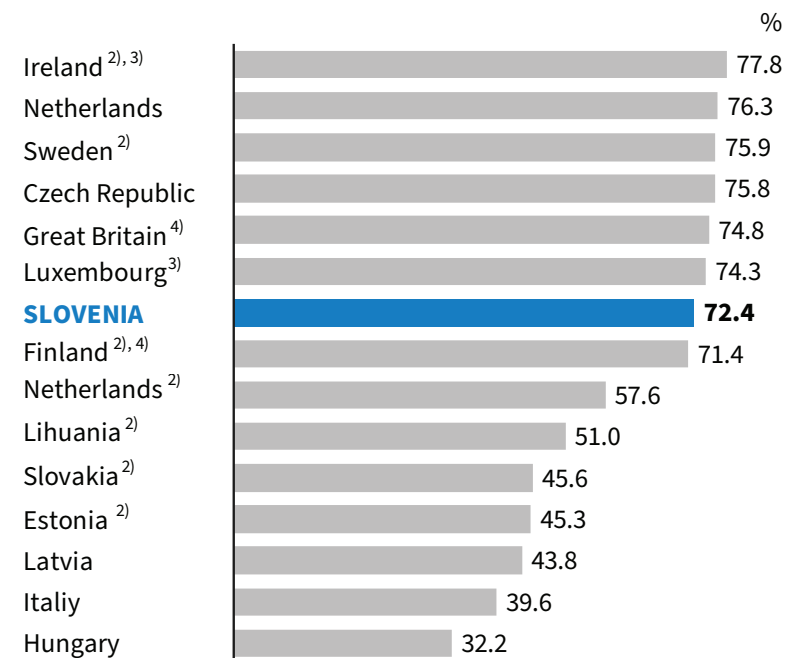
The highest percentage of screening is in the lower age groups up to 49 years. In other age groups (50-54, 55-59 and 60-64 years), a slow but steady increase in the screening is noticeable from the first to the last observed period.

The proportion of women who need additional testing after screening has been declining since the beginning of the ZORA programme. In 2010, the proportion of pathological swabs was 5.9%, then it decreased and then again increased slightly to 5.5% in 2019, which is 0.4% less than in 2010. The proportion of pathological swabs is largest in young women and decreases with age.

### Pathological screening swabs of the cervix, Slovenia, 2010-2019



### Screening rate<sup>1)</sup> of the female target group, Slovenia and some European countries, 2018



<sup>1)</sup> The implementation of the cervical cancer screening programme varies between countries, the data shown do not take into account the specifics of each country's programme.

<sup>2)</sup> The difference in the methodology.

<sup>3)</sup> Temporary value.

<sup>4)</sup> Estimated value.

The proportion of women who need additional testing after screening has been declining since the beginning of the ZORA programme.

## BREAST CANCER SCREENING PROGRAMME



DORA is an organized population screening programme for early detection of breast cancer for women aged 50 to 69 years. Within the programme, female target groups are invited every two years for screening mammography, which aims to detect early, atypical cancer changes.

The organizer of the programme is the Institute of Oncology Ljubljana. The DORA screening programme has been established throughout Slovenia since December 2017.

The DORA programme is a national breast cancer screening programme, which is the most common cancer in women in addition to non-melanoma skin cancer. The programme is aimed at early detection and thus reduction of breast cancer mortality. The screening method is x-ray imaging – mammography, to which all suitable women in Slovenia aged 50 to 69 are invited. Although the beginning of the DORA screening programme dates back to 2008, the territorial coverage or involvement in the programme has developed gradually and has been available in all Slovenian regions since 2017. Women of relevant age are actively invited to mammography imaging at one of 22 mammography units in Slovenia. The number of imaged women or mammograms performed in the screening programme has gradually increased since the beginning of the programme, with the expansion of the screening programme to all regions of Slovenia.

In 2019, as many as 107,887 screening mammograms were performed in the DORA programme.

### The participation rate in the DORA programme, Slovenia, 2019

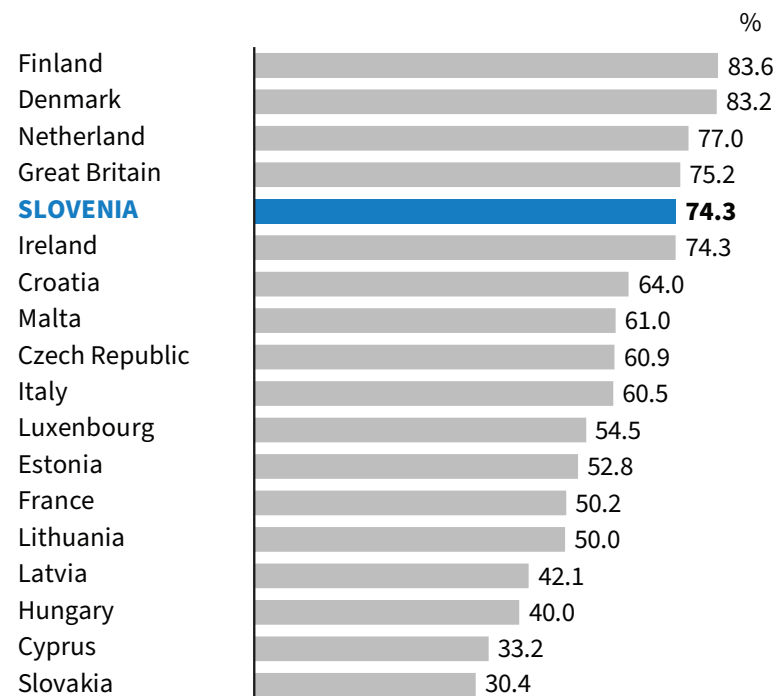


**Dora**  
SLOVENIAN BREAST CANCER  
SCREENING PROGRAMME

Slovenia

**78.2%**

### The participation rate of women in breast cancer screening programmes<sup>1)</sup>, Slovenia and some EU countries, 2018



<sup>1)</sup> The implementation of the breast cancer screening programme varies between countries, the data shown do not take into account the specifics of each country's programme.

Screening programmes in different countries of the EU are not exactly the same, so the data cannot be compared directly. A rough comparison of countries with officially published data shows that the participation of women in the screening programme in Slovenia is among the highest in the EU.

**The participation of women in the DORA screening programme in Slovenia is among the highest in the EU.**

## HEALTH EDUCATION



In 2019, 29,559 different health education activities and 62,737 activities in the field of dental education for children, adolescents, parents and pedagogical workers were carried out. Preparations for childbirth and parenthood were attended by 10,095 pregnant women and 7,143 partners.

Through various health education programmes, we enable the individual to acquire knowledge, and to form attitudes and behaviours for a healthy lifestyle.

Health education is provided in health care centres, educational institutions or local communities. Activities for children and adolescents also take into account activities for parents and professionals in kindergartens and schools.

Data for 2019 show that most activities are carried out for the primary school population. With the basic health education programme for primary school children, providers cover most primary schools and most departments (95%).

In Slovenia, Preparation for Childbirth and Parenthood takes place within primary health care (in most health care centres) and in maternity hospitals. Preparation for Childbirth and Parenthood consists of several meetings, with one meeting lasting two hours. In 2019, there were a total of 17,238 participants.

### Health education activities for children and adolescents, by content and age, Slovenia, 2019

		Implementation by content	Number	%	
Preschool period		Healthy lifestyle	711	11.0	
		Safety and injury prevention	298	4.6	
		Prevention of infectious diseases and personal hygiene	1,128	17.5	
		Other contents in kindergartens for children	3,720	57.7	
		Lectures for educators of preschool children	330	5.1	
		Lectures for parents of preschool children	260	4.0	
		<b>TOTAL</b>	<b>6,447</b>	<b>100.0</b>	
Primary school period		Basic health education programme	8,990	50.4	
		Other contents for primary school children	7,443	41.7	
		Lectures for primary school professionals	226	1.3	
		Lectures for parents of primary school children	613	3.4	
		Basic resuscitation procedures for primary school children	583	3.3	
		<b>TOTAL</b>	<b>17,855</b>	<b>100.0</b>	
Secondary school period		Cancer	180	3.4	
		Personal hygiene and attitude towards the body	222	4.2	
		Interpersonal relations and self-image	193	3.7	
		The impact of substances on the body	179	3.4	
		Basic resuscitation procedures for secondary school students	365	6.9	
		Other contents for secondary school students	4,028	76.6	
		Lectures for secondary school professionals	70	1.3	
		Lectures for parents of secondary school students	20	0.4	
	<b>TOTAL</b>	<b>5,257</b>	<b>100.0</b>		



5

PRIMARY HEALTH CARE

## HEALTH CARE OF ALL POPULATION GROUPS



In 2019, a total of 9,383,936 visits were recorded in primary health care. Preventive check-ups were mostly performed on children up to the age of 5, while curative check-ups were most often used by inhabitants aged 65 and over.

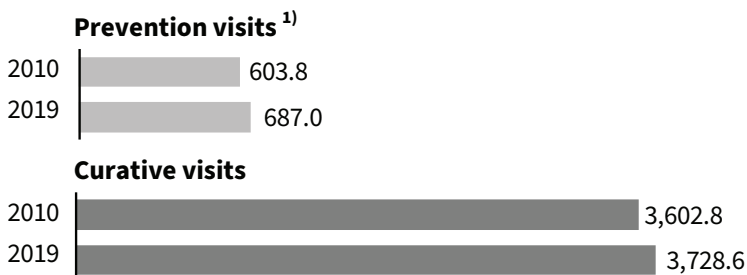
In 2019, as many as 1,435,374 preventive and 7,790,297 curative visits were performed in the primary health care among the entire population, which means 687 preventive visits and 3,729 curative visits per 1,000 inhabitants.

In this chapter, we present primary level health services (health care of preschool and school children and adolescents, women's reproductive health care, general or family medicine and occupational medicine, on-call emergency service and emergency medical care).

The total number of visits in the last ten years was declining in the initial period, but in recent years we have seen an increase again. The decrease was due to curative visits, as the frequency of preventive visits increased in all age groups throughout the period, especially in the group over 65 years of age due to changes in the organization of the health system. Preventive examinations to identify risk factors and risks due to chronic non-communicable diseases are carried out within the Programme of Integrated Prevention of Chronic Non-Communicable Diseases in Adults. This includes men and women aged 30 years and over.

### Preventive and curative visits to outpatient primary level health care, Slovenia, 2010 and 2019

Per 1,000 inhabitants



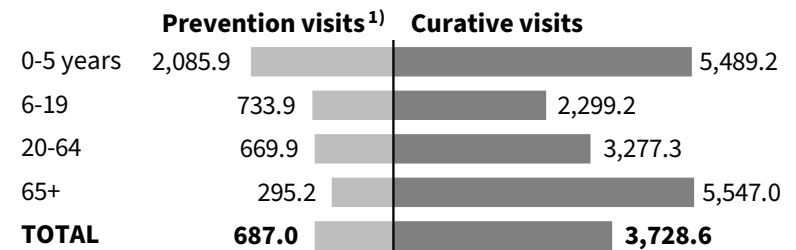
<sup>1)</sup> Group treatments, consultations and other preventive activities are not included.

Preventive visits in 2019 were dominated by visits of preschool children aged 0 to 5 (2,086 visits per 1,000 children of that age).

The highest number of curative visits was achieved by the population aged 65 and over (5,547 per 1,000 inhabitants of this age group), and slightly lower by children aged 0 to 5 (5,489 per 1,000 children of this age group).

### Preventive and curative visits to outpatient primary level health care, by age groups, Slovenia, 2019

Per 1,000 inhabitants of the age group



<sup>1)</sup> Group treatments, consultations and other preventive activities are not included.

In 2019, respiratory diseases were the most commonly diagnosed diseases and health conditions in children and adolescents at primary level. In the population aged 20 to 64, diseases of the musculoskeletal system and connective tissue were in the first place, followed by respiratory diseases. Visits due to diseases of circulatory and musculoskeletal systems and diseases of connective tissue predominated in persons aged 65 and over.

In 2018, Slovenia was in the middle of the EU countries with 6.6 consultations with medical doctors per capita.

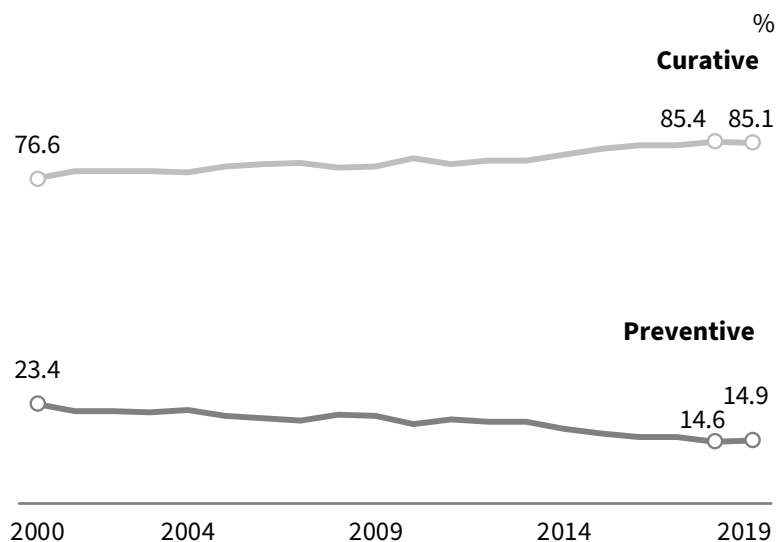
## COMMUNITY NURSING AND HOME CARE



In 2019, community nurses made a total of 1,212,633 home visits, of which 1,032,100 (85.1%) were curative and 180,533 (14.9%) were preventive. Over a ten-year period, the number of all community visits per 1,000 population has not changed significantly. The ratio between the number of preventive and curative visits has changed markedly in favour of the latter.

According to professional guidelines, preventive activity in community nursing should represent at least 40% of total services, which has not been realized in practice for many years. In the last decade alone (2010-2019), 4.5% more curative visits were made, while the volume of preventive visits decreased by 19.9%, but compared to 2018 the number of preventive visits in 2019 increased by 3.7%.

### Preventive and curative visits in community nursing, Slovenia, 2000-2019



Preventive treatments in community nursing are largely (76%) intended for newborns, neonatal mothers, infants and pregnant women. Compared to previous year, the number of visits to school-aged children decreased the most in 2019 (72%), and the number of preventive treatments of TB patients increased the most (162%), but in both cases the number of treatments is very small.

### Preventive visits in the service of community nursing, by patients, Slovenia, 2019

Patients by groups	Number	%	Deviation from 2018 (%)
Newborns	79,218	43.9	-4.0
Puerpera	33,923	18.8	-0.6
Chronic disease and others	27,816	15.4	+33.1
Infants	19,387	10.7	+16.3
Pregnant women	4,820	2.7	+11.1
Children 1-6 years	4,633	2.6	-4.8
Elderly	3,069	1.7	
Oncologic patients	2,057	1.1	+0.5
Other patients	1,619	0.9	+7.7
Diabetics	1,467	0.8	+10.6
Disabled people	1,425	0.8	-14.5
Mental patients	822	0.5	+0.7
Oxygen therapy	219	0.1	+35.2
TBC patients	34	0.0	+161.5
Schoolchildren	24	0.0	-72.4
<b>TOTAL</b>	<b>180,533</b>	<b>100.0</b>	

Among the treated patients, there is an increase in the proportion of the elderly, burdened with polymorbidity. Nursing care for the elderly is specific and, above all, long-lasting.

For many years, diseases of the circulatory system, skin and subcutaneous diseases, and diseases of the musculoskeletal system and connective tissue have been the most common reasons for the visit of a community nurse to a patient's home.

The primary mission of community nursing and home care is preventive activity and care for particularly vulnerable groups of the population. The accessibility of the population to community nursing services in Slovenia is improving from year to year.



## DENTAL SERVICES



In 2019, a total of 3,102,865 visits were recorded in the dental care service. Of these, 69% of visits were within the framework of services for adults, where we recorded 1,275 visits per 1,000 population aged 20 and over. In dental care service for children and adolescents, 2,351 visits per 1,000 children and adolescents up to 19 years of age were recorded. A total of 4,279,950 dental services were provided. There was 23% of repair services.

In the dental care of children and adolescents, services include the detection and treatment of dental and oral diseases in children and adolescents up to 19 years of age, and regular preventive dental examinations in preschool, primary and high school children and students.

The services of adult dental care include the detection and treatment of dental and oral diseases, as well as dental prosthetic and aesthetic rehabilitation for people aged 20 and over.

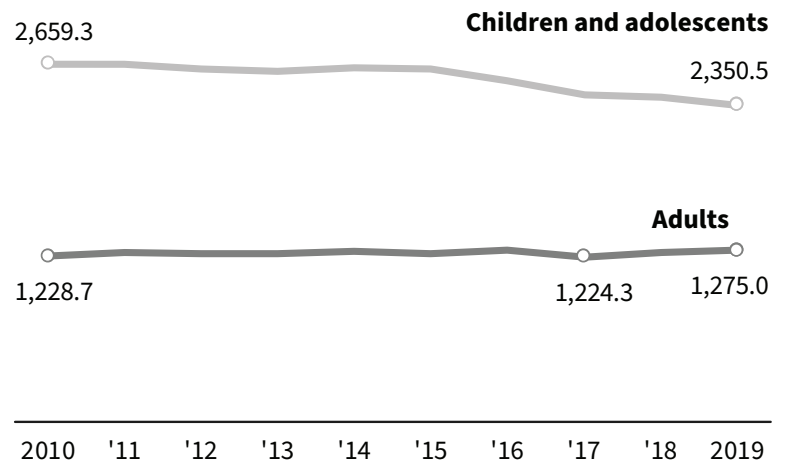
When reviewing the data for the ten-year period (2010-2019) on the number of all visits to the dental care service for children and adolescents, we have seen a decrease in the number of visits per 1,000 population aged 0-19 since 2015, which is largely due to decrease in the number of curative visits.

A comparison to the number of all visits recorded in adult dental care service shows that they have remained at the same level for many years.

Comparison of Slovenian data with data from other European countries is not possible due to large differences in dental care systems.

### Visits to dental care service, Slovenia, 2010-2019

Per 1,000 inhabitants



In Slovenia, only seven out of ten adults aged 18-74 brush their teeth regularly (at least twice a day), of which eight out of ten women and six out of ten men.



6

## SECONDARY AND TERTIARY HEALTH CARE

## SPECIALIST OUTPATIENT SERVICE



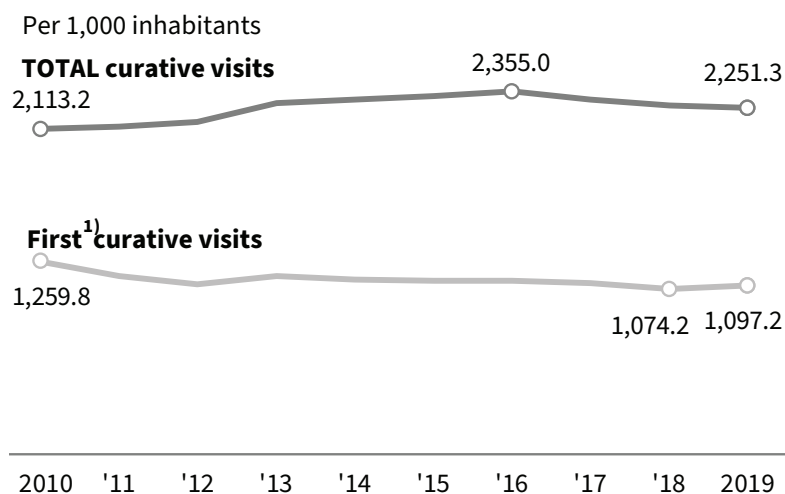
In 2019, a total of 4,723,916 visits were made in the specialist outpatient service, most of them curative. Preventive services in triage visits account for less than one percent of all visits in the service. 2,251 curative visits were made to specialist dispensaries per 1,000 inhabitants. Most of them were performed in internal medicine (24%) surgical (14%) and ophthalmology clinics (11%), while the most frequently identified diseases and conditions were injuries and poisonings (12%), eye and adnexa diseases (11%) and musculoskeletal system and connective tissue (9%) diseases.

In the last ten years, the number of visits increased until 2016. In 2016 (compared to 2010), this increase was 11%, mainly due to an increase in the number of recurrent curative visits, where a 45% increase was recorded. In 2017 and 2018, we recorded a slight decline in all curative visits.

In 2019, compared to the previous year, we recorded a smaller increase in visits to specialist outpatient services. 1,097 first and 2,251 total curative visits were made per 1,000 inhabitants.

Injuries and poisonings are among the most common reasons for visiting specialist clinics in all age groups up to the age of 64.

### Curative visits to specialist outpatient services, Slovenia, 2010-2019



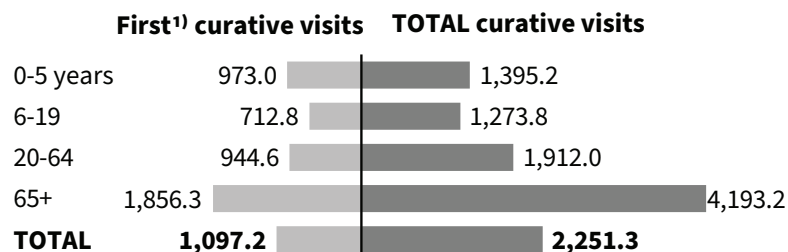
<sup>1)</sup> The first curative visits include the first curative visits and first curative visits for chronic disease control.

The rate of curative visits in the last decade has been higher for women than for men. In 2019, we recorded 2,443 visits per 1,000 women, which is 19% more than the rate of curative visits for men (2,060 visits per 1,000 men). In 2019, the highest number of curative visits was recorded in the population aged 65 and over, namely 4,193 visits per 1,000 inhabitants or 4.2 visits per capita in this age group.

The ratio of first and recurring visits shows a marked increase in recurring visits with age. In 2019, the ratio between the first and recurring curative visits in the youngest age group was 10 to 4 in favour of the first visits, and in the highest age group 10 to 13 in favour of recurring visits.

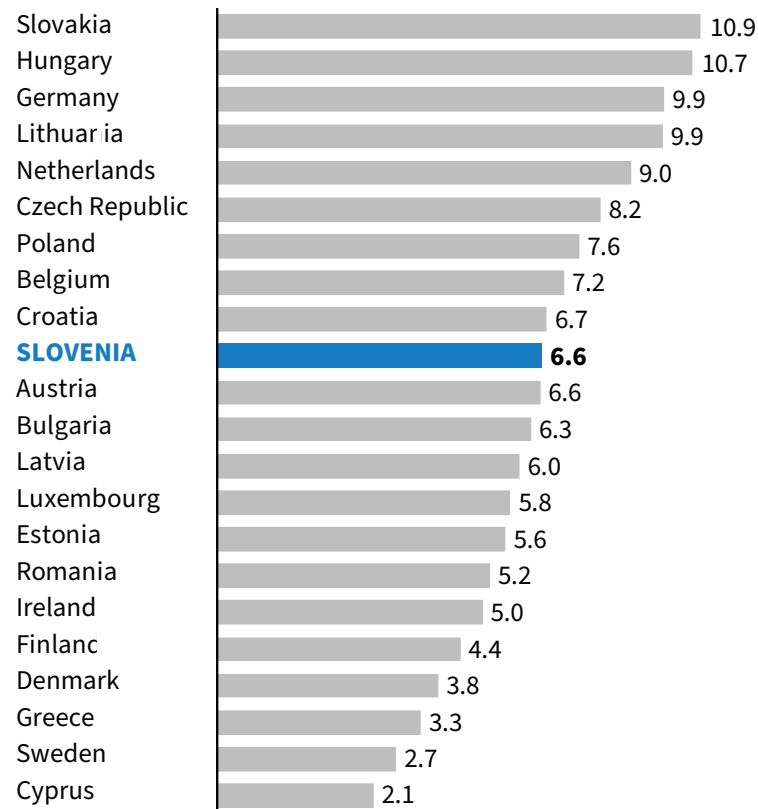
### Curative visits to specialist outpatient services, by age groups, Slovenia, 2019

Per 1,000 inhabitants of the age group



<sup>1)</sup> The first curative visits include the first curative visits and first curative visits for chronic disease control.

### Consultations with medical doctors<sup>1)</sup> per capita, Slovenia and some EU countries, 2018



<sup>1)</sup> All visits to health care at primary and secondary level and visits at patient's home.

There are large differences in the number of consultations with medical doctors per capita between European countries. In Slovakia, this number is the highest at 11 visits, which is five times higher than in Cyprus (two visits per capita). In 2018, Slovenia was included in the middle part of the scale of EU Member States.

## HOSPITAL DISCHARGES



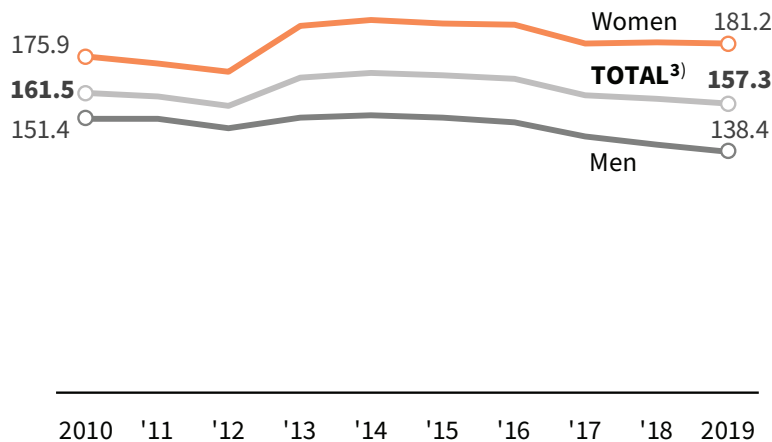
The data show that in 2019 there were 421,259 hospital discharges of all types and all causes in all Slovenian hospitals (due to illness, injuries, poisonings, childbirths, fetal deaths and treatments of newborns), which is 6.6% more than in 2010 (395,056). There were 361,323 hospitalizations, 55,700 day treatments and 4,236 long-term day treatments. The average length of stay in hospitals for all reasons was 6.9 days, which is comparable to some EU countries.

The age-standardized hospitalization rate decreased by 3% from 2010 to 2019; it decreased by 9% in men, while it increased by 3% in women.

On average, Slovenians were hospitalized longer due to illness (7.7 days) than due to injuries and poisonings (6.9 days).

### The age-standardized hospitalization rate<sup>1)</sup>, all causes<sup>2)</sup>, by gender and total, Slovenia, 2010-2019

Age-standardized hospitalization rate per 1,000 inhabitants



<sup>1)</sup> Without foreigners.

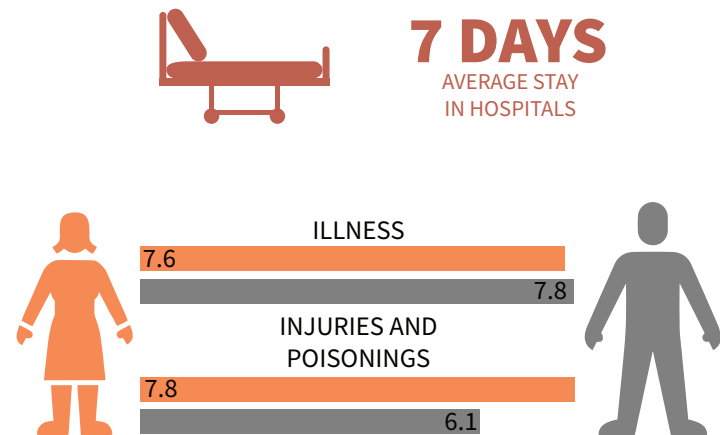
<sup>2)</sup> Illness, injuries, poisonings, childbirths, fetal deaths, treatments of newborns, escort, sterilization and organ donation.

<sup>3)</sup> Including cases where gender is undefinable or unknown.

From 2010 to 2019, the age-standardized hospitalization rate in Slovenia decreased for most reasons, and increased only due to mental and behavioural disorders, diseases of the musculoskeletal system, pregnancy and childbirth, congenital malformations, conditions originating in the perinatal period, and factors affecting health status.

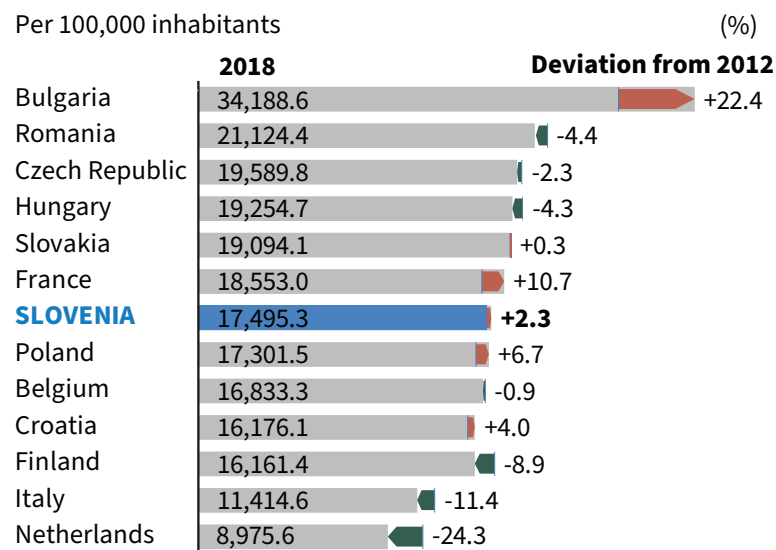
The average length of stay in hospitals due to illness in 2019 was 7.7 days, and due to injuries and poisonings 6.9 days. Mortality (per 100 hospitalizations) was 3.5 / 100 in illness and 1.9 / 100 in injuries and poisonings.

### The average length of stay in hospitals, Slovenia, 2019



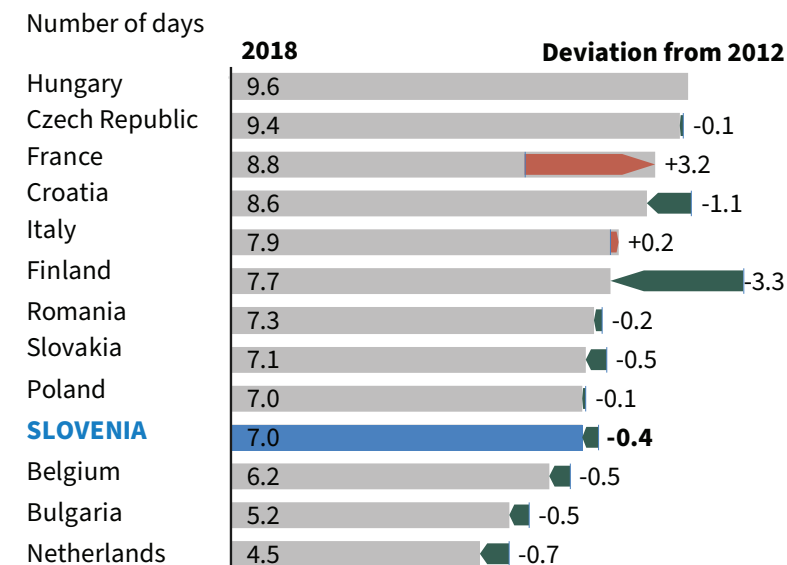
In 2019, 29,080 hospitalizations were recorded due to injuries and poisonings, mainly due to falls (61%), transport accidents (9%) and intentional injuries (self-injury, assault; 2%). Men have a higher age-standardized hospitalization rate (14.6 / 1,000 population) than women (9.1 / 1,000). In the period 2010-2019, the number of hospitalizations due to injuries and poisonings did not show significant changes, while the age-standardized hospitalization rate saw a statistically significant decrease.

### Hospital discharges, all causes, Slovenia and some EU countries, 2018 and deviation from 2012



The hospitalization rate due to all causes was lower in 2018 than in 2012 in more than half of the countries for which both data are known (i.e., in seven countries out of 13).

### In-patient average length of stay (days), all causes, Slovenia and some EU countries, 2018 and deviation from 2012



The average length of stay in all hospitals due to all causes in 2018 was shorter in most countries than in 2012 (including Slovenia), but longer in only two countries among those for which both data are known.

## REHABILITATION SERVICES



In 2019, there were 34,746 rehabilitation services of all types and due to all causes (due to illness, injuries, etc.) at Slovenian health resorts and at the University Rehabilitation Institute of the Republic of Slovenia (URI Soča), which is 15% more than in 2010 (30,107). The average duration of hospitalizations in rehabilitation was 15.1 days, which is one day less than in 2010.

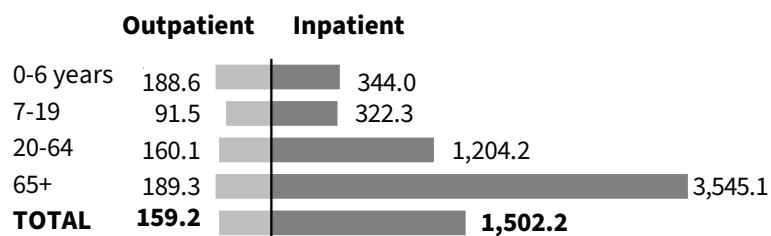
Most rehabilitation services are inpatient, but the share of outpatient services increased in the observed period 2010-2018; however, it decreased in 2019 due to a change in recording (they started reporting on completed outpatient treatments, no longer on individual treatments).

There were 31,415 inpatient services (which is 57% more than in 2010) and 3,331 outpatient services (which is three times less than in 2010 – due to another change in the reporting system in 2019).

In Slovenia, rehabilitation services are performed at the University Rehabilitation Institute of the Republic of Slovenia – Soča and at 18 health resorts.

### Rehabilitation services, by type of treatment and by age groups, Slovenia, 2019

Per 100,000 inhabitants<sup>1)</sup>



<sup>1)</sup> Without foreigners.

As many as 6% more women than men were treated in rehabilitation. The highest rate of rehabilitation services was at the age of 65 and over (3,545 per 100,000 inpatients and 189 per 100,000 outpatients).

### The number of hospitalizations, sick days and average duration of hospitalizations in rehabilitation – inpatient treatments<sup>1)</sup>, Slovenia, 2019

	Number of hospitalizations <sup>2)</sup>	Sick days	Average duration (days)
0-6 years	406	5,315	13.1
7-19	788	11,691	14.8
20-64	14,793	226,031	15.3
65+	14,651	221,075	15.1
<b>TOTAL</b>	<b>30,638</b>	<b>464,112</b>	<b>15.1</b>

<sup>1)</sup> Excluding day and long-term day treatments.

<sup>2)</sup> Including foreigners.

The average age of patients in rehabilitation in 2019 was 58.7 years (56.2 years for men and 61.1 years for women), while in 2010 it was 56 years (53.5 years for men and 58.1 years for women).

In 2019, the most rehabilitation services were performed due to diseases of the musculoskeletal system (40%), followed by injuries (22%) and diseases of the circulatory system (14%), in 4<sup>th</sup> place were the diseases of the nervous system (10%) and in 5<sup>th</sup> place neoplasms (7%).



7

# AMBULATORY PRESCRIBED MEDICINES



## AMBULATORY PRESCRIBED MEDICINES

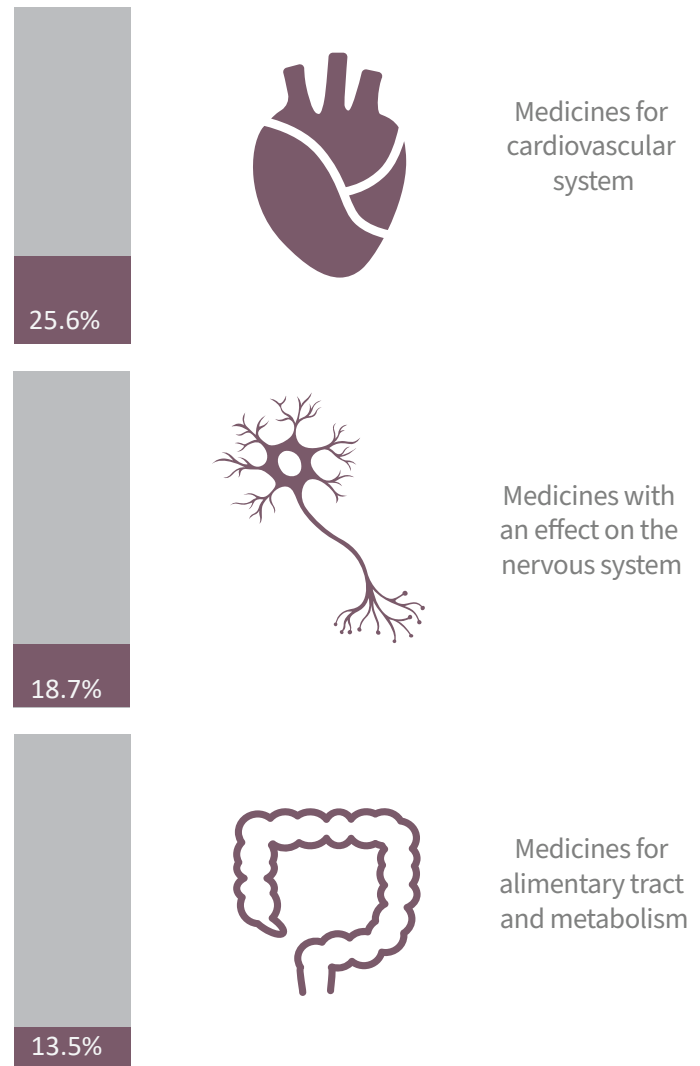


In 2019, a total of 18.5 million prescriptions were issued for originator and generic medicines and main preparations worth 542 million euros. Each inhabitant of Slovenia received an average of 8.8 prescriptions with prescribed medicines worth 259 euros. Most prescriptions (25.6%) were issued for medicines with an effect on the cardiovascular system (ATC group C), followed by prescriptions for medicines with an effect on the nervous system (ATC group N) with 18.7%, and prescriptions for medicines to treat alimentary tract and metabolism (ATC group A) with 13.5%.

On average, in 2019, each woman received 10.1 prescriptions worth EUR 260, and each man received 7.6 prescriptions worth EUR 259.

Data on medicine consumption are presented by 14 main groups of the anatomical-therapeutic-chemical (WHO ATC / DDD) classification of medicinal products, which is an international universal medicinal products classification system. The frequency of prescribing is shown in the number of prescriptions per 1,000 population and increases with the age of the recipients. It rises noticeably after the age of 60, and after the age of 70 it begins to rise sharply. The highest prescribing of medicines is among those over 85 years of age.

### Most frequently prescribed medicines, by main ATC classification groups, Slovenia, 2019

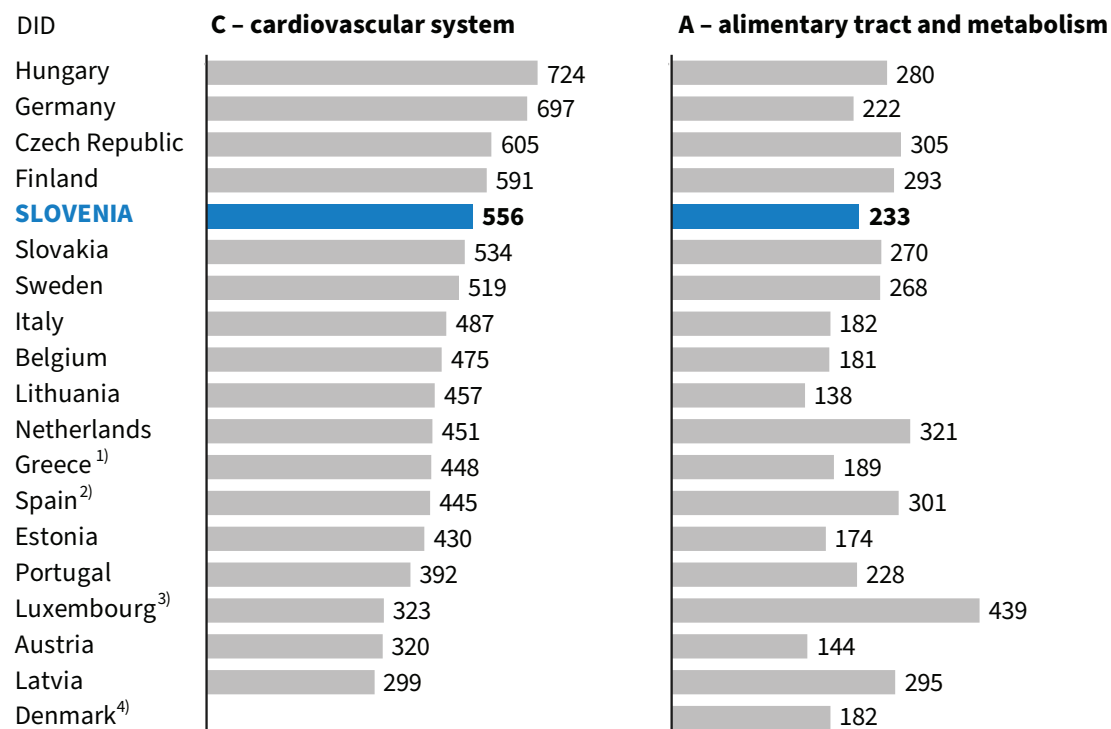


Medicines of all ATC groups, except ATC group V (various medicines), were more often prescribed to women.

The total value of ambulatory prescriptions issued in 2019 was EUR 542 million.

Most funds were spent to treat neoplasms and for antineoplastic and immunomodulating agents (ATC group L), followed by medicines for the cardiovascular system (ATC group C) and medicines for the alimentary tract and metabolism (ATC group A).

### Consumption of medicines in defined daily doses per 1,000 inhabitants per day (DID) by the two main ATC classification groups, Slovenia and some EU countries, 2018



<sup>1)</sup> Deviation from the definition.

<sup>2)</sup> Time series break.

<sup>3)</sup> Estimated value.

<sup>4)</sup> No data.



8

# HEALTH CARE RESOURCES

## HEALTH CARE RESOURCES



At the end of 2019, there were 6,812 medical doctors, 1,514 dentists, 7,996 nurses and 13,468 nurses and midwives employed in health care. In the last ten years, the number of medical doctors has increased by 37%, dentists by 20%, nurses by 84% and nursing technicians by 8%.

Organizational, human and other resources in health care make an important contribution to the capacity of the health system.

In the period 2010-2019, the number of all medical doctors in health care increased by 37%, and the number of general practitioners and family doctors by 40%.

The average annual increase was 4%, and the number of nurses grew with an average annual rate of 7%.

### Personnel in health care, Slovenia, 2019



**326**  
DOCTORS



**72**  
DENTISTS



**1,027**  
NURSES AND  
MIDWIVES

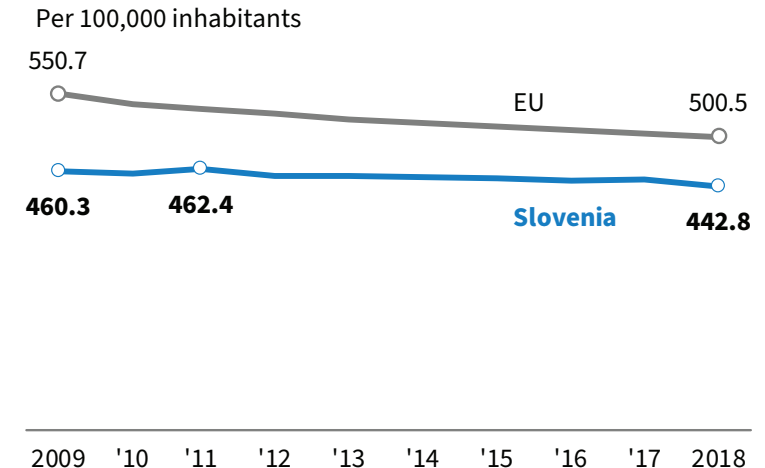
Per 100,000 inhabitants

The number of public health care centres (63), hospital (27) and pharmacies (24) has not changed in the last ten years.

There are few private hospital providers, which together perform less than 3% of all hospital treatments. On the other hand, the number of private individual providers in outpatient care is still growing. Private outpatient services in general and family medicine include a quarter of all medical doctors in this service, and more than a half in dental care.

The number of hospital beds has been declining since 1980, when there were 695 hospital beds per 100,000 population. In 2019, we had 443 hospital beds per 100,000 population. In terms of the number of hospital beds per capita, Slovenia is slightly below the average of the EU Member States.

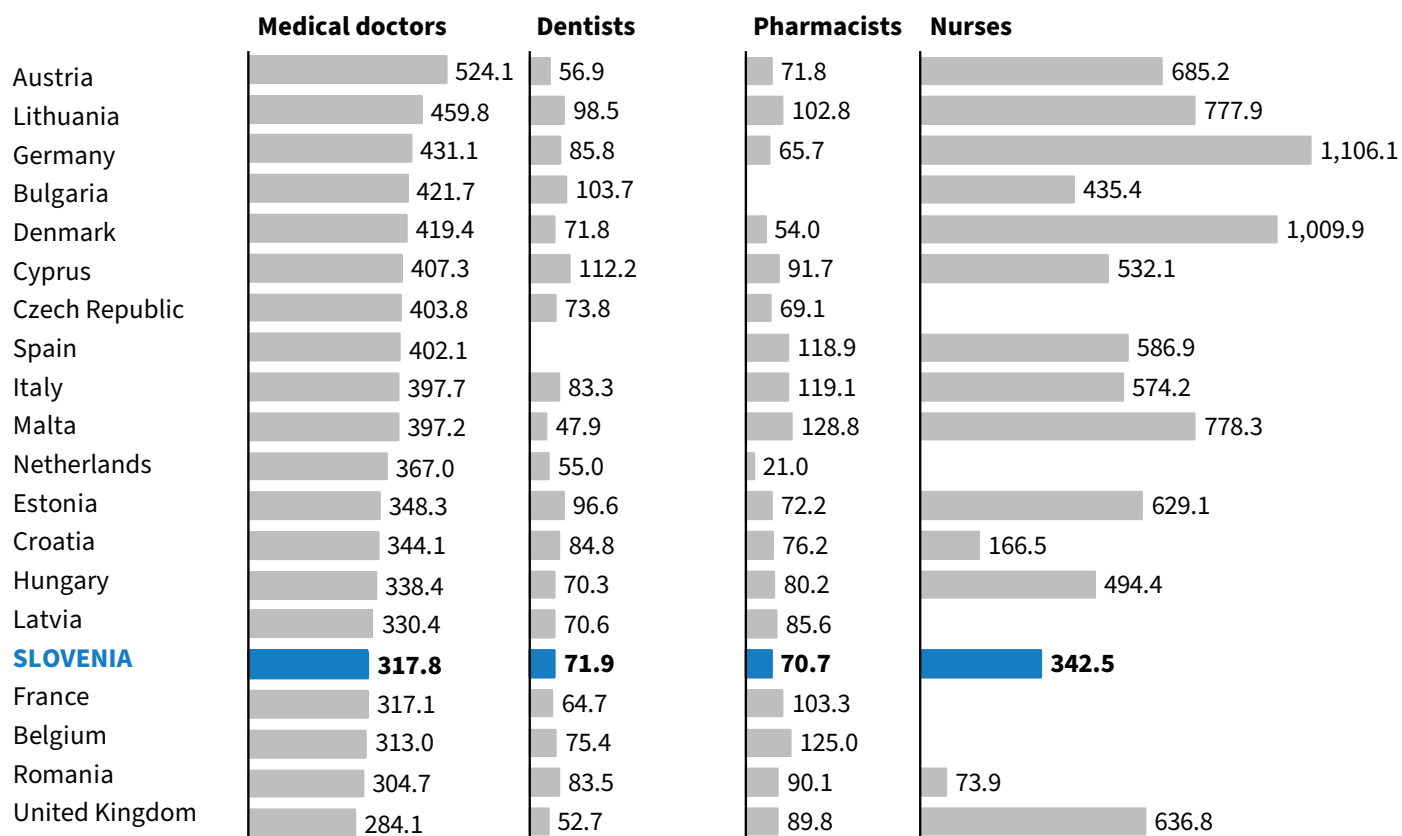
### Hospital beds, Slovenia and the EU, 2009-2018



The number of medical doctors per 100,000 inhabitants in Slovenia, despite the growth in the last 20 years, is below the average of the EU Member States.

## Health personnel employed in hospital, Slovenia and some EU countries, 2018

Per 100,000 inhabitants





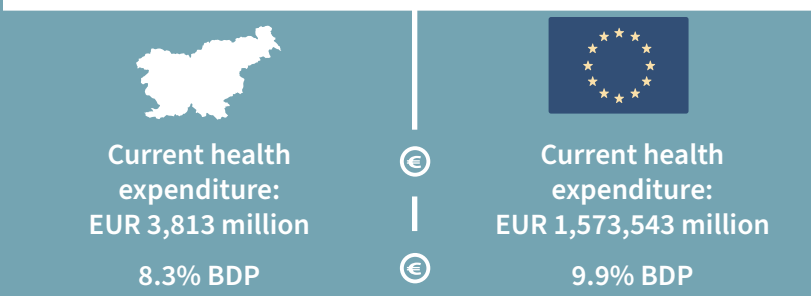
9

# HEALTH EXPENDITURE AND SOURCES OF FUNDING

## HEALTH EXPENDITURE AND SOURCES OF FUNDING

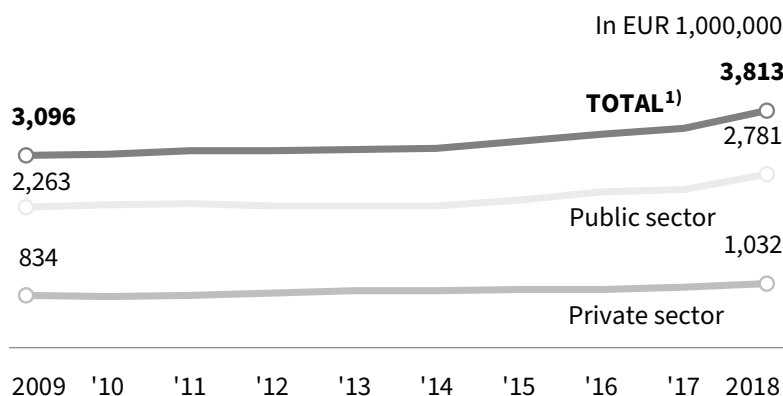


In 2018, current expenditure on health care amounted to EUR 3,813 million, which was 8.3% more in nominal terms than in 2017. Slightly less than a third of current expenditures on health care was financed from private sources. Most funds, i.e. just over three-quarters, were spent on services for curative care and on medical goods. Expenditures on curative treatment services in 2018 increased by 9.1% compared to 2017, while expenditures on medicines and other medical goods also increased by 5.8%.



Current health expenditures have been steadily increasing in the period 2009-2018, except for 2012, when they were several million euros lower than in the previous year. Slightly less than a third of all health care funding is allocated annually from private funds. The structure of health care funding in 2018 was 73% from public sources and 27% from private sources.

### Current health expenditure<sup>1)</sup>, by sources of funding, Slovenia, 2009-2018<sup>2)</sup>



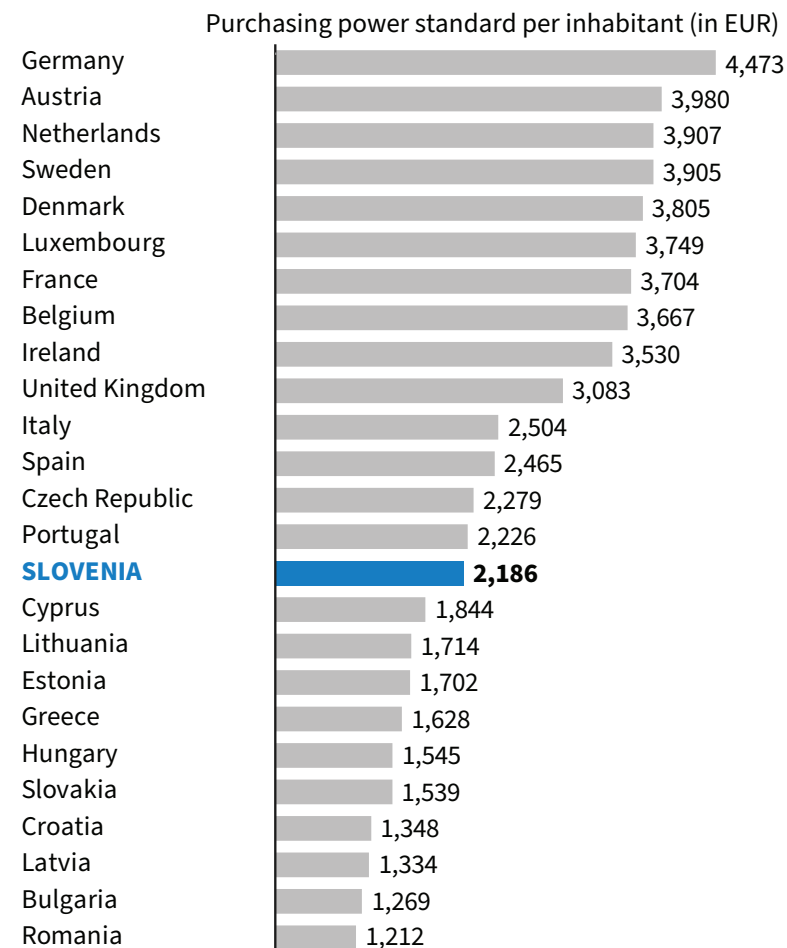
<sup>1)</sup> Excluding capital formation.

<sup>2)</sup> Since 2014, the methodology of the health accounts system has been slightly revised, the so-called SHA 2011 methodology (previously, SHA 1.0 version was in force).

For a better comparison between countries, an indicator is used that excludes the effect of differences in the level of prices between countries – health care expenditures in so-

called purchasing power parity (PPP) per capita (in EUR). The calculated value of this indicator for 2018 ranks Slovenia 15<sup>th</sup> among 25 EU countries that prepare data according to the same methodology.

### Current health expenditure per capita (in EUR), Slovenia and some EU countries<sup>1)</sup>, 2018



<sup>1)</sup> Those EU Member States that have data prepared in accordance with the internationally comparable methodology of the health accounts system are shown (SHA 2011).



10

COVID-19 EPIDEMIC  
IN SLOVENIA



## COVID-19 EPIDEMIC IN SLOVENIA



In Slovenia, the first case of COVID-19 was confirmed on 4 March 2020 in a person who arrived from Morocco. The Government of the Republic of Slovenia declared an epidemic on 12 March 2020, along with a comprehensive set of measures to limit the spread of the virus.

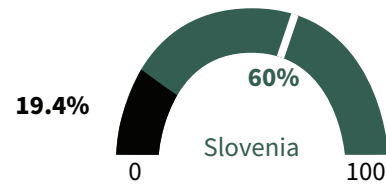
By 31 May 2020, when the first wave of the epidemic was formally ended, a total of 1,473 cases of SARS-CoV-2 infection had been confirmed, with the highest daily number of confirmed cases, 61, coming two weeks after the outbreak. In the period from 1 June 2020 to 18 October 2020, the number of confirmed cases was 12,213. The highest number of daily confirmed cases was 898, on 16 October 2020. Three days later, an epidemic was declared once more. In the period from 19 October 2020 to 31 May 2021, the number of confirmed cases was 240,359, with the highest daily number of confirmed cases, 3,428, coming at the beginning of January 2021. From the first confirmed case up to and including 31 May 2021, a total of 254,045 cases of SARS-CoV-2 infection were confirmed in Slovenia, and 4,694 deaths recorded within 28 days of confirmation of the infection.

Number of vaccinated persons

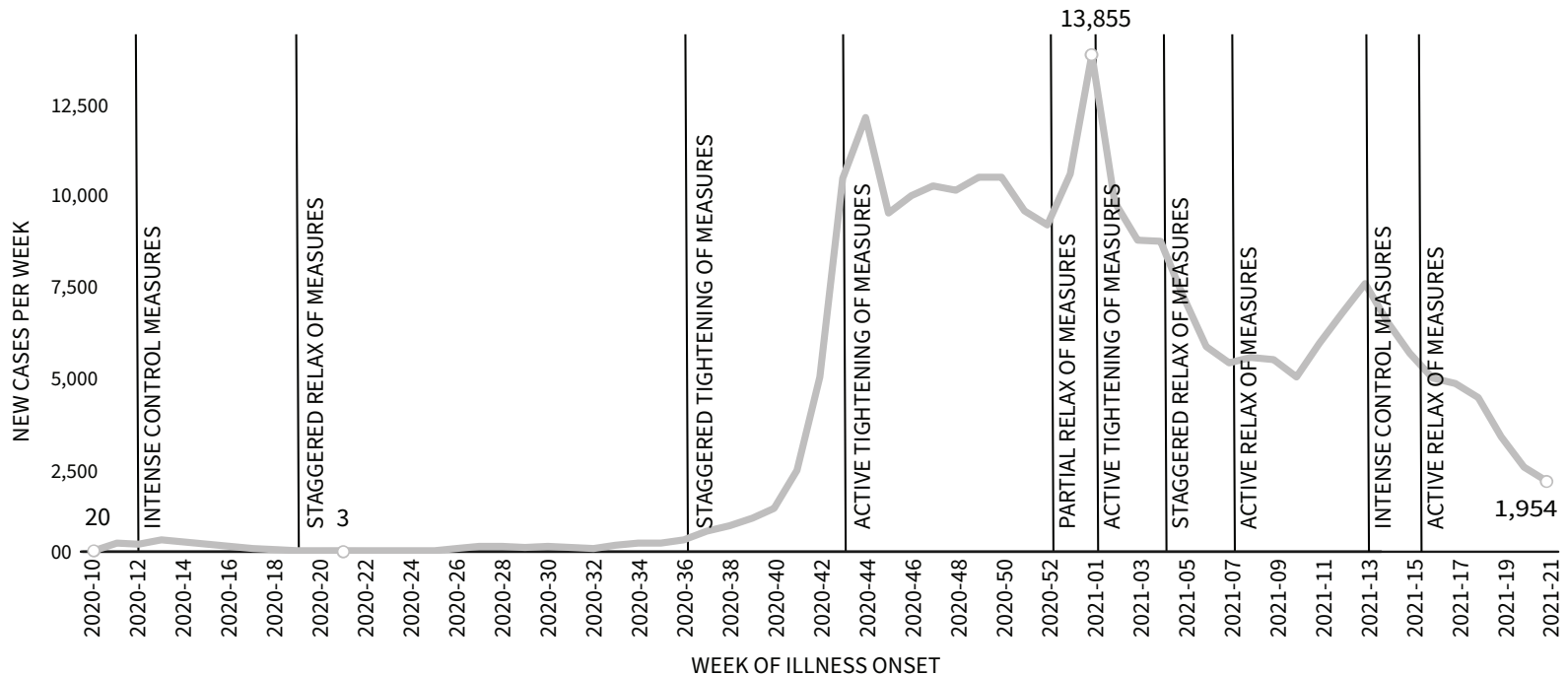
**664,217**  
With 1 dose

**407,275**  
Fully vaccinated

Percent fully vaccinated

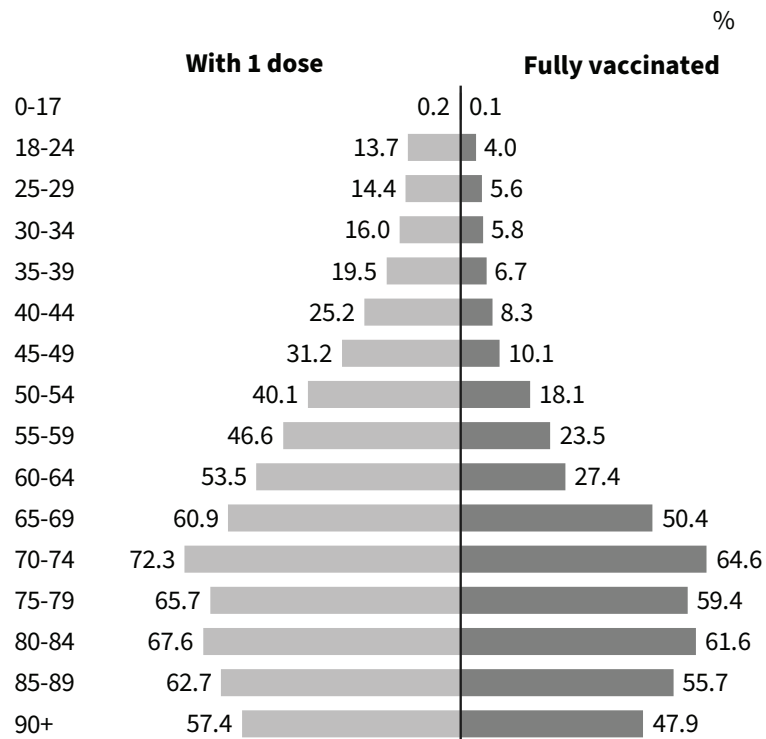


Weekly number of confirmed SARS-CoV-2 cases with a timeline of measures, Slovenia, from 10<sup>th</sup> week in year 2020 to 21<sup>th</sup> week in year 2021

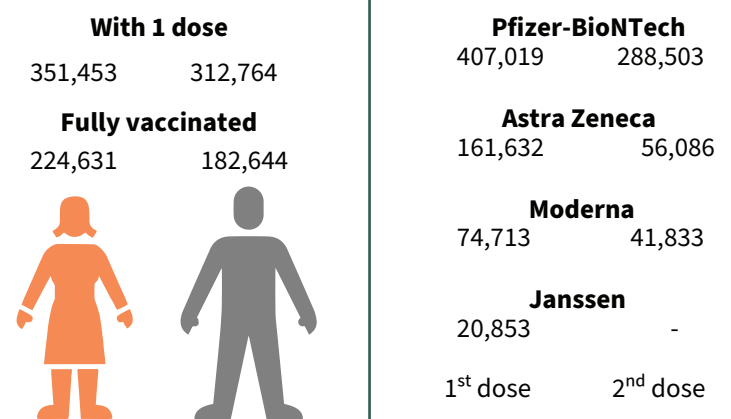
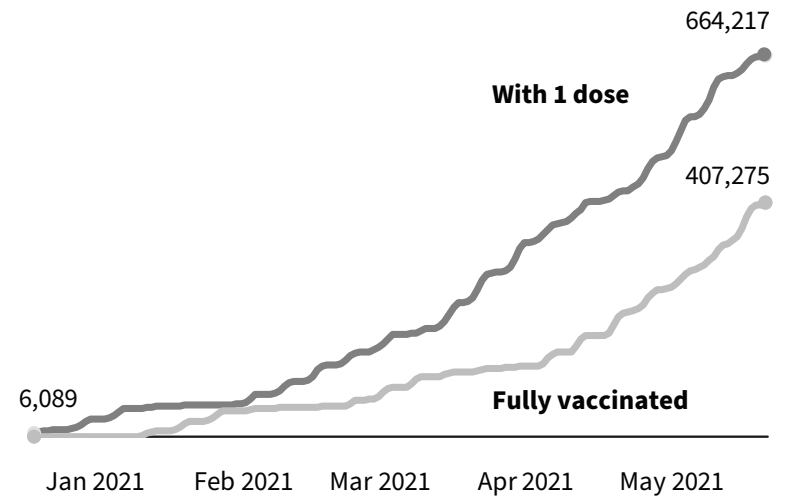


When interpreting the epidemiological curve, it is necessary to take into account a number of factors that affect the epidemiological situation in the country, such as the commitment of the population to follow the measures, the method of testing, laboratory capacity, etc.

**Vaccination against COVID-19, by age groups, Slovenia, from 27 December 2020 to 31 May 2021**

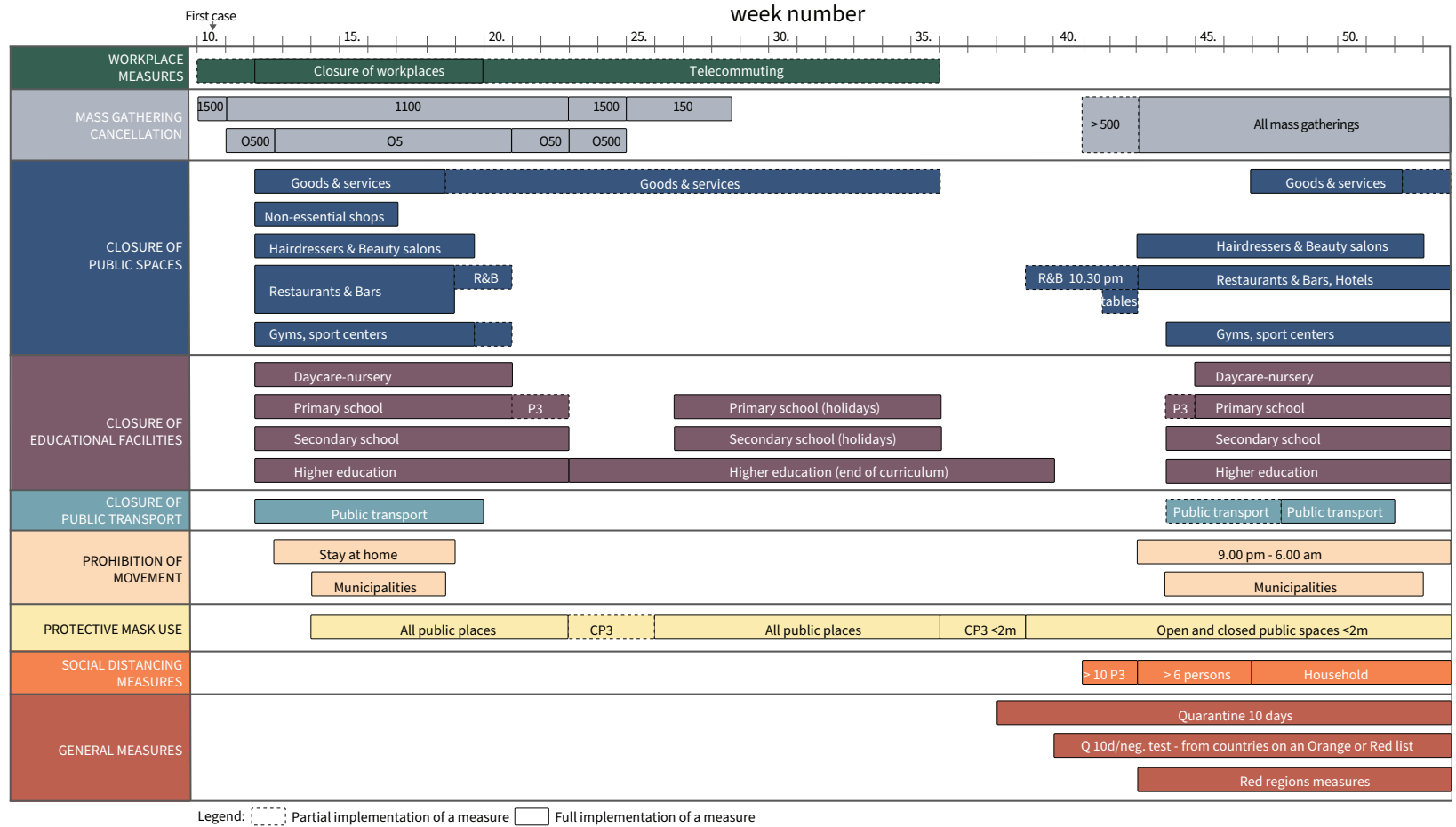


**Vaccination against COVID-19, by doses, gender and type of vaccine, Slovenia, from 27 December 2020 to 31 May 2021**



Up-to-date data on vaccination coverage are available at: <https://tinyurl.com/nfdutrft>.

### Measures to contain the spread of SARS-CoV-2 infections in Slovenia as declared by the Slovenian government in 2020



At the time of writing, the epidemiological picture is far from resolved. Due to the deteriorating epidemiological situation, in early April 2021 Slovenia is facing the reintroduction of stricter restrictive measures to gain time to achieve higher vaccination coverage, and thus maintain the smooth functioning of the health system, which is threatened by an increase in infections.

At the end of December 2020, Slovenia started vaccinating the population against COVID-19. Vaccination is one of the possible exit strategies from the COVID-19 epidemic. From the start of vaccination on 27 December 2020 to 31 May 2021, the fully vaccinated population stood at 19.4% of the total.

