European Commission

State of Health in the EU

Czechia

Country Health Profile 2021

OECD
BETTER POLICIES FOR BETTER LIVES

European Observatory on Health Systems and Policies
a partnership hosted by WHO

The Country Health Profile series

The State of Health in the EU's Country Health Profiles provide a concise and policy-relevant overview of health and health systems in the EU/European Economic Area. They emphasise the particular characteristics and challenges in each country against a backdrop of cross-country comparisons. The aim is to support policymakers and influencers with a means for mutual learning and voluntary exchange.

The profiles are the joint work of the OECD and the European Observatory on Health Systems and Policies, in cooperation with the European Commission. The team is grateful for the valuable comments and suggestions provided by the Health Systems and Policy Monitor network, the OECD Health Committee and the EU Expert Group on Health Systems Performance Assessment (HSPA).

Contents

1. HIGHLIGHTS 3
2. HEALTH IN CZECHIA 4
3. RISK FACTORS 6
4. THE HEALTH SYSTEM 8
5. PERFORMANCE OF THE HEALTH SYSTEM 12
   5.1 Effectiveness 12
   5.2 Accessibility 15
   5.3 Resilience 17
6. KEY FINDINGS 22

Data and information sources

The data and information in the Country Health Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated to ensure the highest standards of data comparability. The sources and methods underlying these data are available in the Eurostat database and the OECD health database. Some additional data also come from the Institute for Health Metrics and Evaluation (IHME), the European Centre for Disease Prevention and Control (ECDC), the Health Behaviour in School-Aged Children (HBSC) surveys and the World Health Organization (WHO), as well as other national sources.

The calculated EU averages are weighted averages of the 27 Member States unless otherwise noted. These EU averages do not include Iceland and Norway.

This profile was completed in September 2021, based on data available at the end of August 2021.

Demographic and socioeconomic context in Czechia, 2020

Demographic factors	Czechia	EU
Population size (mid-year estimates)	10 693 939	447 319 916
Share of population over age 65 (%)	19.9	20.6
Fertility rate[1] (2019)	1.7	1.5
Socioeconomic factors		
GDP per capita (EUR PPP[2])	28 089	29 801
Relative poverty rate[3] (%, 2019)	10.1	16.5
Unemployment rate (%)	2.6	7.1

1. Number of children born per woman aged 15-49. 2. Purchasing power parity (PPP) is defined as the rate of currency conversion that equalises the purchasing power of different currencies by eliminating the differences in price levels between countries. 3. Percentage of persons living with less than 60 % of median equivalised disposable income. Source: Eurostat database.

Disclaimer: The opinions expressed and arguments employed herein are solely those of the authors and do not necessarily reflect the official views of the OECD or of its member countries, or of the European Observatory on Health Systems and Policies or any of its Partners. The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

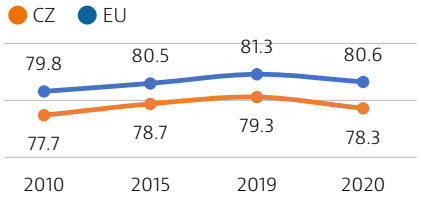
This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Additional disclaimers for WHO apply.

© OECD and World Health Organization (acting as the host organisation for, and secretariat of, the European Observatory on Health Systems and Policies) 2021

1 Highlights

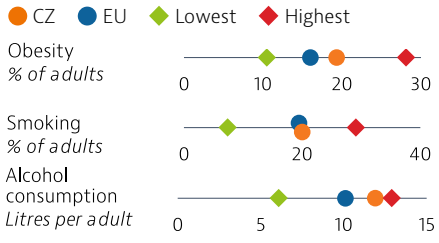
Although Czechia spends considerably less on health than most other EU countries, its health system provides a broad benefits package and reported unmet needs for medical care are low. In 2020, life expectancy in Czechia was more than two years below the EU average, after the COVID-19 pandemic led to a temporary reduction of one year compared to 2019. The pandemic response highlighted areas for improvement in crisis preparedness and workforce capacity, especially in some regions. The financing decisions made during 2020 alleviated the short-term financial pressure on the system.



Life expectancy at birth, years

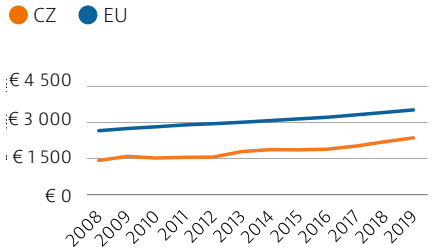
Health Status

Life expectancy in Czechia steadily improved over the last 10 years and in 2019 was two years below the EU average. However, the COVID-19 pandemic temporarily set the country back to 2013 levels – a larger impact than in many other EU countries.



Risk factors

Nearly half of all deaths in Czechia in 2019 could be attributed to behavioural risk factors – particularly poor diet, smoking and alcohol consumption. Obesity rates have steadily increased over the past 15 years and are now around 20 % for adults, contributing to high prevalence of diabetes and other diet-related diseases. Alcohol consumption is among the highest in the EU.



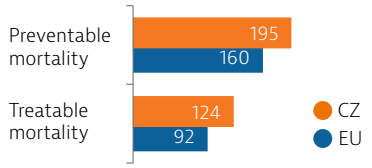
Per capita spending (EUR PPP)

Health system

Czechia's health expenditure in 2019 was 7.8 % of GDP and EUR 2 362 per capita – both substantially below the EU averages (9.9 % and EUR 3 521). Most health expenditure is financed from public sources, predominantly through the compulsory insurance system. Czechia significantly increased contributions from the state budget into the insurance system to cover almost all pandemic-related expenses.

Effectiveness

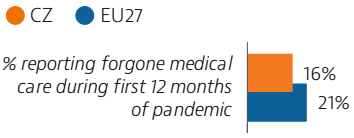
Despite steady decreases over the past decade, Czechia still had relatively high levels of preventable and treatable mortality before the pandemic. Additional investment in public health interventions and in incentivising healthier habits among the population could help achieve further progress. Cancer survival rates are now close to the EU average, but COVID-19 led to a temporary drop in activity such as screening, which could set back this advance.



Age-standardised mortality rate per 100 000 population, 2018

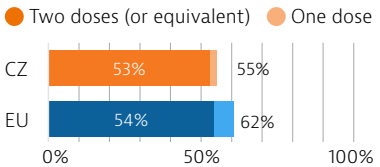
Accessibility

Prior to 2020, Czechia had one of the lowest levels of unmet needs for medical care in the EU, although some informational barriers to care existed. During the first wave of the pandemic, health services were less disrupted than in the EU overall (16 % of Czechs reported having forgone medical care).



Resilience

Czechia contained the first COVID-19 wave but struggled to slow down the second wave, partly due to limited planning capabilities and insufficient clarity in its public communication. By the end of August 2021, 16 % of the population had been diagnosed with COVID-19 (compared to 8 % across the EU), while over half of the population (53 %) had been vaccinated with two doses (or equivalent).



Share of total population vaccinated against COVID-19 up to the end of August 2021

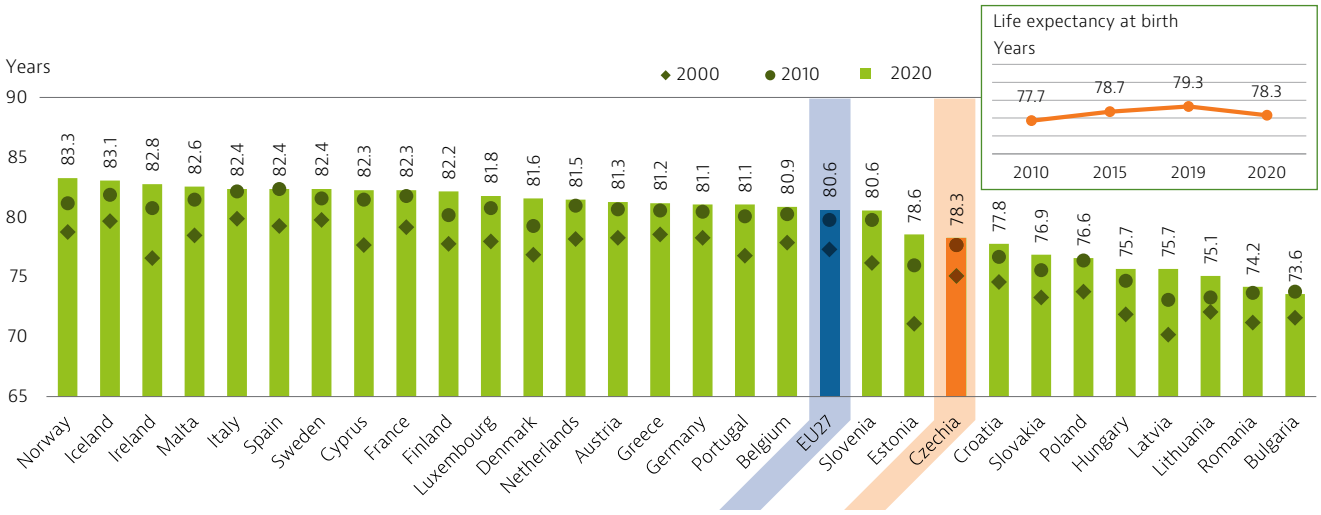
2 Health in Czechia

Life expectancy in Czechia has increased, but varies across regions

In 2020, life expectancy at birth in Czechia was 78.3 years, which is 2.3 years below the EU average, although it was among the highest in central and eastern European countries (Figure 1). It increased by more than three years between 2000 and 2020. The gender gap in life expectancy was six years, which is higher than the EU average (5.6 years).

In 2019, there was a substantial difference between the capital region of Prague and the rest of the country, and smaller variations across regions. For instance, life expectancy for men living in Prague was more than 4.0 years higher than for men living in the Ústecký region.

Figure 1. Life expectancy at birth in Czechia is more than two years below the EU level



Note: The EU average is weighted. Data for Ireland refer to 2019.
Source: Eurostat Database.

The pandemic temporarily set back life expectancy in Czechia to levels last seen in 2013

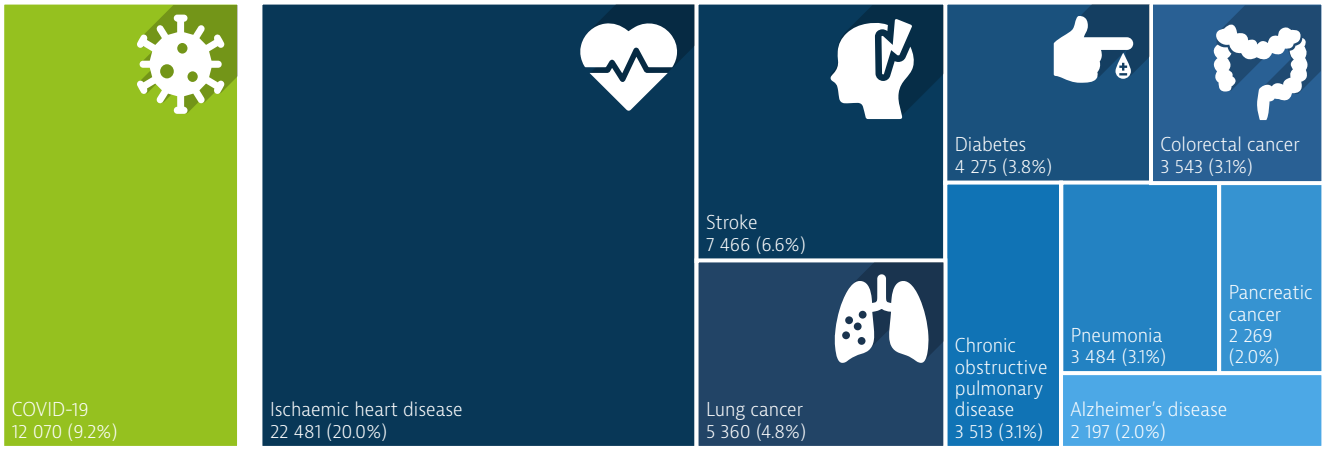
Preliminary data suggest that life expectancy in 2020 fell by 0.9 years for women and 1.1 years for men, temporarily setting the country back to 2013 levels (78.3 years). This was the biggest drop since the Second World War. Most deaths contributing to this fall took place in October and November 2020, when the COVID-19 death toll for 2020 peaked. Life expectancy is expected to be lower in 2021 as well: there were 28 % more deaths in the first seven months of the year than the five-year average for the equivalent period for 2015-19 (ČSÚ, 2021).

Ischaemic heart disease, stroke and lung cancer remain the main causes of mortality

Previous increases in life expectancy between 2000 and 2019 in Czechia can be attributed mainly to reductions in mortality from leading causes of death. Notably, the standardised death rate from circulatory diseases decreased by almost 40 %, reflecting in part the concentration of highly specialised cardiology and stroke care into centres set up in 2011 (see Section 4). However, circulatory diseases still accounted for over 40 % of all deaths in Czechia in 2019, while cancer accounted for another 25 % (Figure 2). Lung cancer remained the most frequent cause of death by cancer. Diabetes is another notable cause of death in Czechia: its standardised death rate is the fourth highest across the EU.

In 2020, COVID-19 officially accounted for about 12 000 deaths in Czechia (9.2 % of all deaths), rising to 30 400 by the end of August 2021. By then, the COVID-19 mortality rate was almost 80 % higher than the EU average (2 843 per million compared with 1 591 in the EU). The broader indicator of excess mortality suggests that the direct and indirect death toll related to COVID-19 in 2020 might have been even higher (Box 1).

Figure 2. Ischaemic heart disease, stroke and lung cancer were the main causes of death, but COVID-19 accounted for a large share in 2020



Note: The number and share of COVID-19 deaths refer to 2020, while the number and share of other causes refer to 2019. The size of the COVID-19 box is proportional to the size of the other main causes of death in 2019.
Sources: Eurostat (for causes of death in 2019); ECDC (for COVID-19 deaths in 2020, up to week 53).

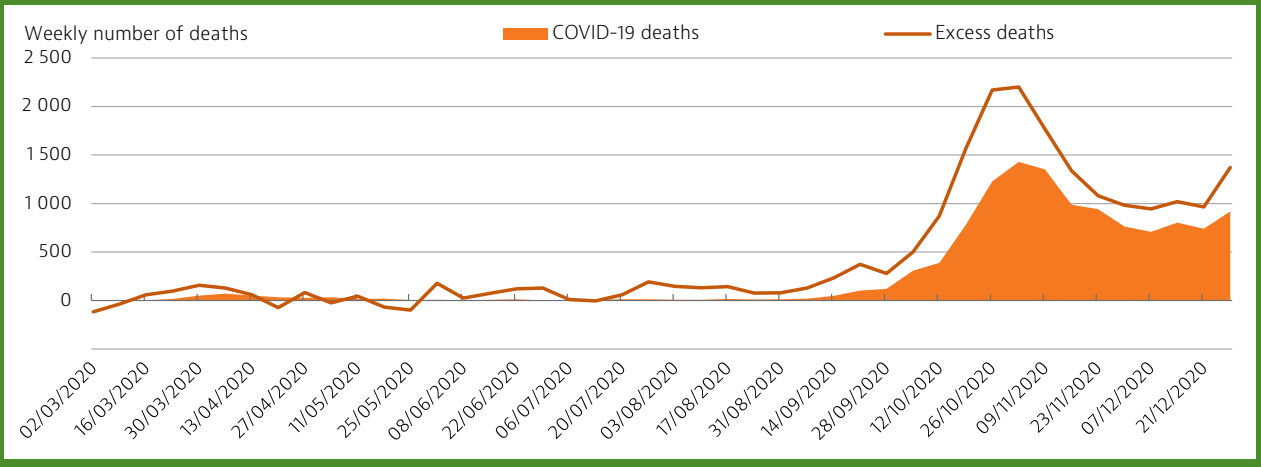
Box 1. Excess mortality was substantially higher than officially reported COVID-19 deaths in 2020

In Czechia, as in many other countries, the actual number of deaths from COVID-19 is likely to be higher than the number of reported deaths because of limited testing and issues related to attribution of causes of death. The daily reported death toll includes only deaths of people who had been previously laboratory-confirmed as COVID-19 positive.

The number of COVID-19 deaths also does not take into account other possible causes arising during or after the pandemic due to indirect deaths – for example, people postponing treatment out of fear of contagion or closure of services. The indicator of excess mortality (defined as the number of deaths from all causes over and above what would have been normally expected based on the baseline from the previous five years) can provide a broader measure of the direct and indirect deaths due to COVID-19 that is not affected by issues related to testing and cause-of-death registration.

From March until the end of 2020, overall excess mortality (18 000 deaths) was about 50 % greater than reported COVID-19 deaths (Figure 3). This difference was particularly pronounced during the peak of the second wave in October to December 2020. The excess deaths correlate in size, time and most affected age groups with reported COVID-19 deaths, indicating that these may be direct COVID-19 deaths attributed to other causes. Postponed care or other indirect causes would typically have a delayed effect over a longer time. Indeed, 5 300 deaths were later added as deaths of people identified as COVID-19 positive with a delay.

Figure 3. COVID-19 and excess deaths peaked in autumn 2020 in Czechia

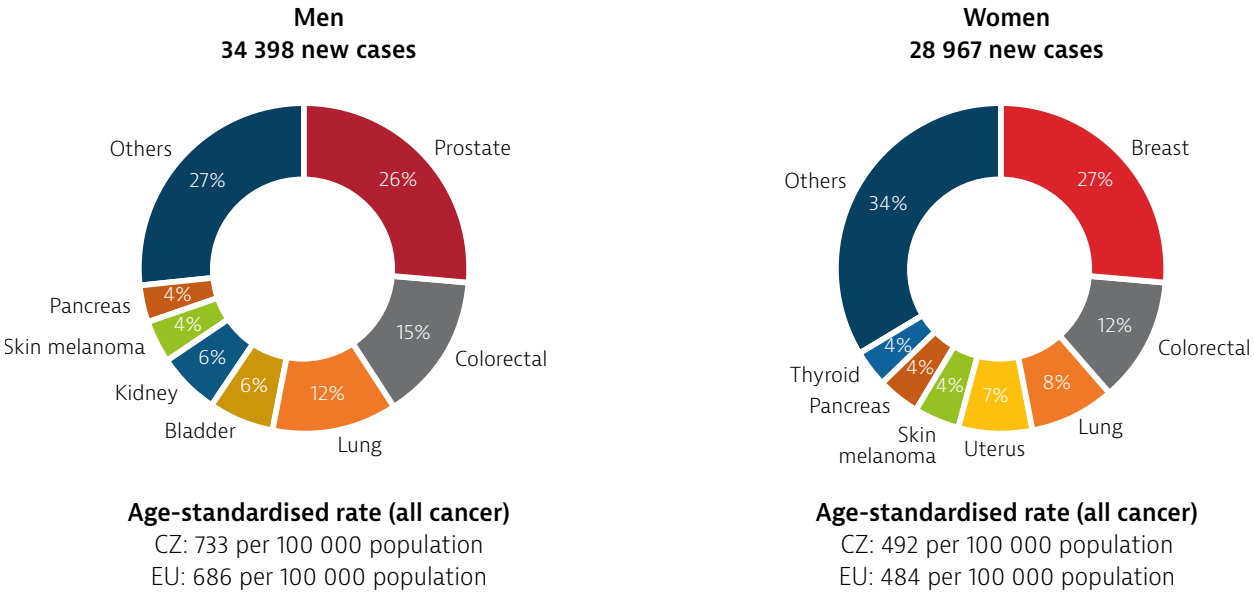


Note: Data on excess mortality extracted on 17/06/2021.
Sources: Eurostat Database for excess mortality; ECDC for COVID-19 deaths.

The burden of cancer in Czechia is higher than in most EU countries

According to the latest estimates from the Joint Research Centre based on incidence trends from previous years, over 60 000 new cases of cancers were expected in Czechia in 2020. The cancer incidence rate was expected to be above the EU average. The main cancer sites are prostate (26 %) and colorectal (15 %) cancer for men, and breast (27 %) and colorectal cancer (12 %) for women (Figure 4). Czechia has steadily improved cancer care over the past decade and had achieved relatively high screening participation rates compared to other EU countries before the COVID-19 pandemic (see Section 5.1).

Figure 4. Over 60 000 people in Czechia were expected to be newly diagnosed with cancer in 2020



Note: Non-melanoma skin cancer is excluded; uterus cancer does not include cancer of the cervix.
Source: ECIS – European Cancer Information System

3 Risk factors

Tobacco consumption and poor diet contribute significantly to mortality

Nearly half of all deaths in Czechia in 2019 can be attributed to behavioural risk factors, including dietary risks, tobacco smoking, alcohol consumption and low physical activity (Figure 5). Dietary risks were the most prevalent, contributing to more than one fifth of all deaths (23 %) – well above the EU average (17 %) – closely followed by tobacco consumption at 20 %.

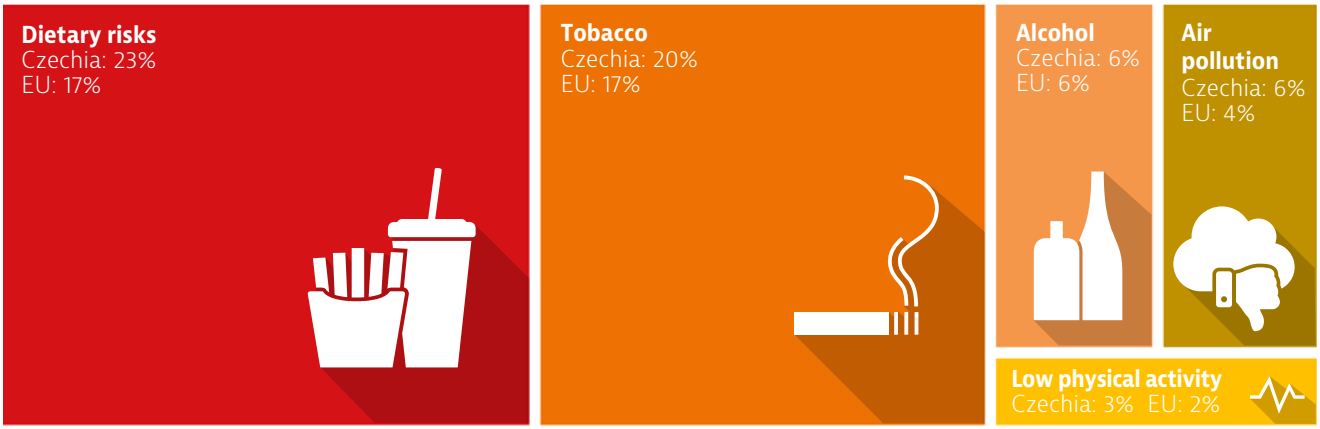
Obesity is a major public health challenge

The adult obesity rate in Czechia has increased greatly over the past 15 years and was among the highest in the EU in 2019, at 19 %. It is projected that, if the current trajectory continues, around 35 % of all Czech adults will be obese by 2030 (MZČR, 2019). Overweight and obesity levels are also rising among adolescents: 20 % of 15-year-olds were overweight or obese in 2018, up from 17.5 % in 2014. This is more prevalent among boys (26 %) than girls (14 %). Obesity is contributing to a growing epidemic of diabetes and other diet-related illnesses in the country.

Poor nutrition is the main determinant of obesity. More than half of all adults reported not eating fruit or at least one portion of vegetables daily in 2019 (Figure 6). Average salt consumption in Czechia was found to be three times over the WHO/United Nations Food and Agriculture Organization recommended daily limit. Further, about 40 % of adults reported not engaging in any weekly moderate physical activity in 2014.

The COVID-19 pandemic has given the issue greater media attention, as obesity significantly increases the risk of complications and death from COVID-19. Tackling obesity was part of the previous government strategy (Health 2020), including research support, increased focus on prevention and improving health literacy, as well as improving obesity-related health services. This focus is reiterated in the new Health 2030 strategy (see Section 5.1).

Figure 5. Dietary risks and tobacco are major risk factors in Czechia



Note: The overall number of deaths related to these risk factors is lower than the sum of each one taken individually, because the same death can be attributed to more than one risk factor. Dietary risks include 14 components such as low fruit and vegetable intake, and high sugar-sweetened beverages consumption. Air pollution refers to exposure to fine particulate matter ($PM_{2.5}$) and ozone.
Sources: IHME (2020), Global Health Data Exchange (estimates refer to 2019).

Nearly one fifth of both adults and adolescents smoke regularly

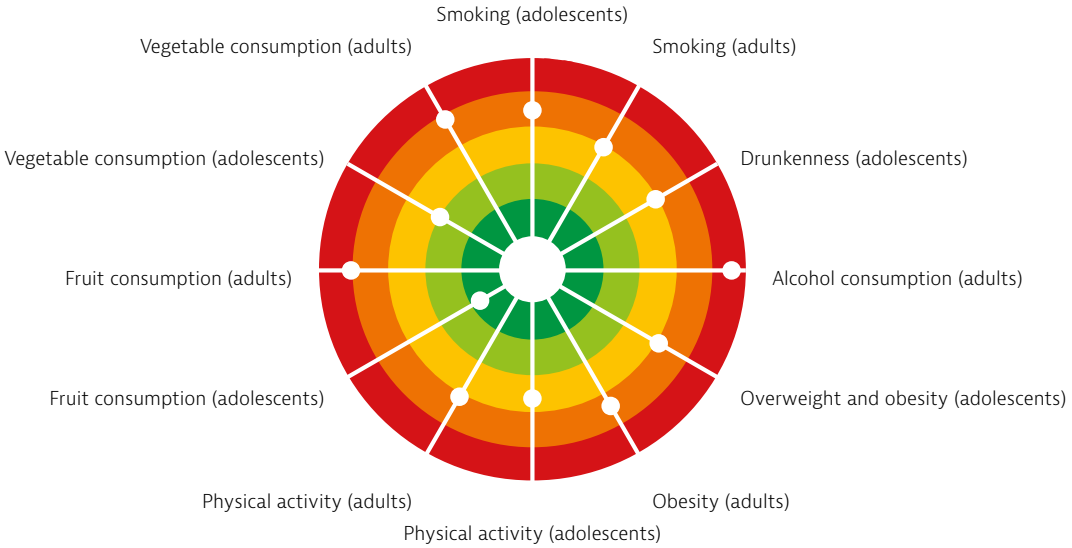
Although tobacco consumption has decreased slightly over the past decade, one fifth of adults smoked daily in 2019 (24 % of men and 16 % of women)[1]. Tobacco consumption among adolescents is just as high: nearly one fifth of 15-year-olds reported that they had smoked during the past month in 2018 – a higher rate than in most other EU countries. The introduction of comprehensive tobacco control legislation (including a ban on smoking in public places) in 2017 will take time to have an impact on smoking rates (see Section 5.1). A survey by the National Institute of Public Health showed that in 2020, 20 % of people continued to be subjected to second-hand smoking at their workplace, despite the ban, and almost 67 % of people continued smoking at the same rate as before the ban came into effect (Csémy et al., 2021).

Alcohol consumption remains high among adults and adolescents

Overall alcohol consumption among adults, at 11.9 litres of pure alcohol consumption per capita in 2019, was among the highest in the EU. A contributing factor is the excise duty on alcohol, which is lower than the EU average, although excise duty on spirits was increased in January 2020. Attempts to impose restrictions on alcohol advertisement have so far not been politically successful. Reported alcohol consumption among 16-year-olds declined between 2011 and 2019 but remains one of the highest rates in the EU (ESPAD, 2020). Stricter regulations on underage drinking and purchases were introduced in 2017.

1. *Recently released data for 2020 show a further decrease, although one sixth of adults still smoked daily (21 % of men and 12 % of women) (Csémy et al., 2021).*

Figure 6. Czechia scores poorly on many risk factors, such as obesity and alcohol consumption



Note: The closer the dot is to the centre, the better the country performs compared to other EU countries. No country is in the white "target area" as there is room for progress in all countries in all areas.
Sources: OECD calculations based on HBSC survey 2017-18 for adolescents indicators; OECD Health Statistics, EHIS 2014 and EHIS 2019 for adults indicators.

4 The health system

The Ministry of Health has a policy-setting and regulatory role in the Czech health system

Since the early 1990s, Czechia has had a system of social health insurance (SHI), heavily regulated by the government. Seven public health insurance funds currently act as payers and purchasers of care. However, the market is concentrated: the largest health insurance fund (VZP) insures 56 % of the population. Competition between funds is limited. Health insurance is compulsory, and health care access virtually universal. All Czechs enjoy a broad benefits package, but the health insurance funds may differ in additional services offered to those insured (such as payment contributions for non-mandatory immunisations).

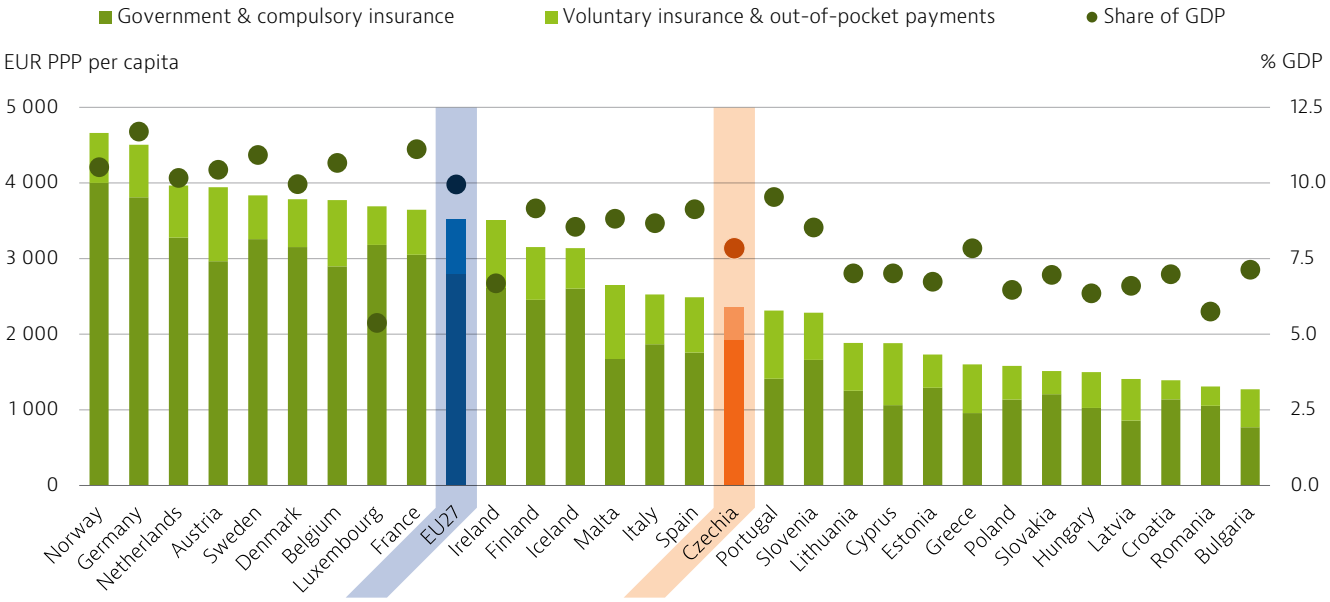
The Ministry of Health is the key regulatory body in charge of setting health care policy, supervising the system and running several health care providers; it was also the leading authority during the COVID-19 crisis (Box 2). It oversees and works closely with its subsidiary bodies: the National Institute of Public Health, the Institute of Health Information and Statistics, the State Institute for Drug Control and the regional public health authorities – all of which gained in importance during the pandemic.

Many providers are owned by the state (including most teaching hospitals and specialised centres), the regions or municipalities.

Czechia spends less on health than the EU average, but the share of public funding is high

In 2019, Czechia spent EUR 2 362 per capita (adjusted for differences in purchasing power) on health – substantially lower than the EU weighted average. As a share of GDP, health spending reached 7.8 %, which is also below the EU average of 9.9 % (Figure 7). However, the share of public financing of health has historically been high in Czechia: at 82 % in 2019, it was above the EU average of 79.7 %. The main source of health expenditure is SHI contributions (consisting of wage-based contributions for employees from employers, income-related contributions from self-employed people and state contributions for specific groups of economically inactive people), supplemented by funding from state and territorial budgets, EU funds and private expenditure. Out-of-pocket expenditure consists of cost-sharing, such as co-payments for prescribed pharmaceuticals. Since health insurance is compulsory, all the population is covered.

Figure 7. Spending per capita and as a proportion of GDP are lower than the EU average



Note: The EU average is weighted.
Source: OECD Health Statistics 2021 (data refer to 2019, except for Malta 2018).

Box 2. The central government was the main authority in the national response to the pandemic

After declaring a state of emergency in March 2020, the government initially led the national response to the COVID-19 pandemic via the Ministry of Health, with support from the COVID-19 Central Management Team (an advisory group in charge of implementing the COVID-19 response) and the Central Crisis Staff (a crisis management body chaired by the Minister of the Interior during the crisis).

Many changes took place in the pandemic governance arrangements from March 2020: various groups and teams were paused and reinstated later. There were also numerous changes in leadership positions, including four ministers of health resigning or being dismissed and two chief public health officers being dismissed.

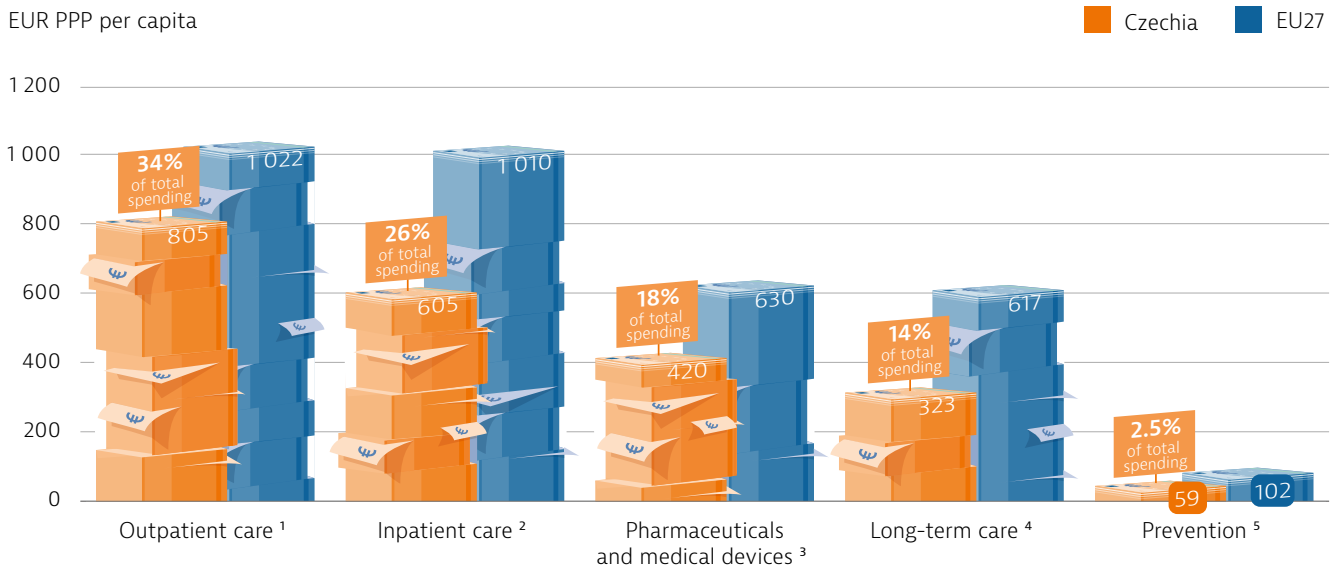
The regional public health authorities were able to set regional containment measures, and were responsible for local running of the tracing programme. Although subordinates of the Ministry of Health, they received limited centrally issued guidance, resulting in challenges in scaling up tracing services quickly and in collecting and analysing public health data consistently across regions (see Section 5.3).

Despite the predominantly central coordination, regional governments were responsible for implementing strategies such as management of intensive care unit (ICU) bed capacities and fulfilling the overall vaccination strategy.

Most spending goes on outpatient and inpatient care

As a proportion of the total, most spending covers outpatient and inpatient care (Figure 8). The share of spending allocated to long-term care (14 %) is lower than the EU average (16 %), but much higher than in neighbouring countries such as Poland and Slovakia. However, this is partly due to a change of methodology in 2011, when Czechia designated expenditure in long-term social care institutions as health spending. About 2.5 % of Czechia's health spending goes on prevention – a share close to the EU average. Emergency changes to health care financing were made in the light of the COVID-19 pandemic (Box 3).

Figure 8. Czechia spends less per capita across all areas of care compared to the EU



Note: The costs of health system administration are not included. 1. Includes home care and ancillary services (e.g. patient transportation); 2. Includes curative-rehabilitative care in hospital and other settings; 3. Includes only the outpatient market; 4. Includes only the health component; 5. Includes only spending for organised prevention programmes. The EU average is weighted.
Sources: OECD Health Statistics 2021; Eurostat Database (data refer to 2019).

Box 3. The government made emergency changes to health sector financing during the pandemic

Due to COVID-19, Czechia adopted several measures to alleviate financial pressure on the Czech population and health providers, allowing them to focus on handling the pandemic. For example, self-employed individuals were allowed to pause SHI system contributions for six months in 2020. Health insurance funds were required to pay out on compensation schemes for providers for their losses and new costs from the COVID-19 pandemic, to fund part of the bonuses for employees in health care and to cover all vaccination and most testing expenses.

These measures amplified costs for the insurance funds. In response, the government significantly increased state contributions to the SHI system.

Source: COVID-19 Health Systems Response Monitor.

However, large deficits are forecast for the insurance funds in 2021. Should this trend continue, it would threaten the sustainability of Czech health care financing in the medium term, despite the approved increase in state contributions (see Section 5.3).

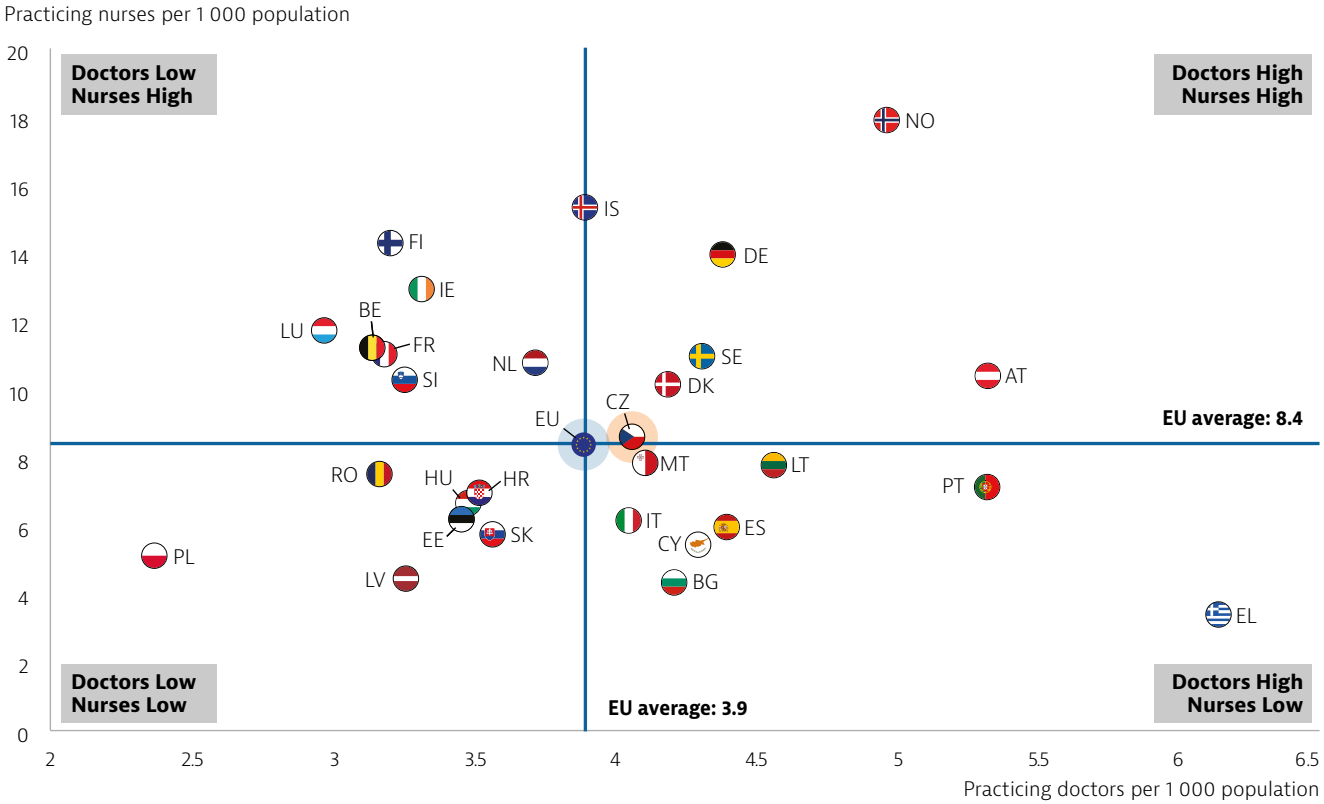
In addition, Ministry of Health expenditure in 2020 was almost three times the planned budget for that year. The unexpected costs included purchasing of personal protective equipment, COVID-19 medicine and vaccines, and paying overtime for public health and other state employees. Some of these costs were at times also partly covered by other ministries and agencies.

Czechia has a scarcity of nurses

The density of physicians in Czechia in 2019 (4.1 per 1 000 population) was slightly above the EU average (3.9), while the density of nurses was close to the EU average (8.6 per 1 000 population compared to 8.4) (Figure 9). However, availability of nurses – especially in the inpatient sector – has been a challenge long before the COVID-19 pandemic. Growing nursing vacancies across Czech hospitals are increasingly threatening to limit their operational capabilities. The scarcity of practising nurses has been driven by a mix of factors, with relatively low wages and limited career progression opportunities being the key drivers. Some nurses reportedly left their clinical roles after new educational requirements were imposed in 2004, which made them attain additional degrees that in turn created opportunities to leave the profession.

A variety of measures have been taken to address the shortage of nurses – most importantly a law in 2017 that updated the requirements on nursing qualifications (see Section 5.2) and an increase in salaries across all health care professions. Nursing wages remain low compared to other European countries but are now above the Czech average wage.

Figure 9. The density of physicians is slightly above the EU average



Note: The EU average is unweighted. In Portugal and Greece, data refer to all doctors licensed to practise, resulting in a large overestimation of the number of practising doctors (e.g. of around 30 % in Portugal). In Greece, the number of nurses is underestimated as it only includes those working in hospitals.
Source: Eurostat Database (data refer to 2019 or the nearest year).

Czechia has a higher number of hospital beds per capita than most EU countries

Primary care doctors do not have a gatekeeping role in Czechia. Patients may consult specialists directly and generally face few barriers (for example, no user fees are payable in outpatient settings), which may be one reason for a high number of doctor consultations – 8.2 per capita per year compared to an EU average of 6.7 in 2019. A primary care reform is in preparation to extend the competencies of primary care doctors and enable them to adopt a stronger gatekeeping role in the future (see Section 5.1).

Czechia has a dense network of hospitals, resulting in one of the highest bed-to-population ratios in the EU (6.6 beds per 1 000 population compared to an EU average of 5.3 in 2019). Some of these beds were temporarily repurposed throughout 2020 and 2021 to meet the needs of COVID-19 patients (see Section 5.3). The hospital sector is diverse, with many specialised facilities spread across the country, including designated centres for highly specialised care (such as stroke and oncological centres) set up in a reform process between 2008 and 2011. As part of its 2021 Recovery and Resilience Plans, Czechia aims to invest in improving rehabilitation care.

5 Performance of the health system

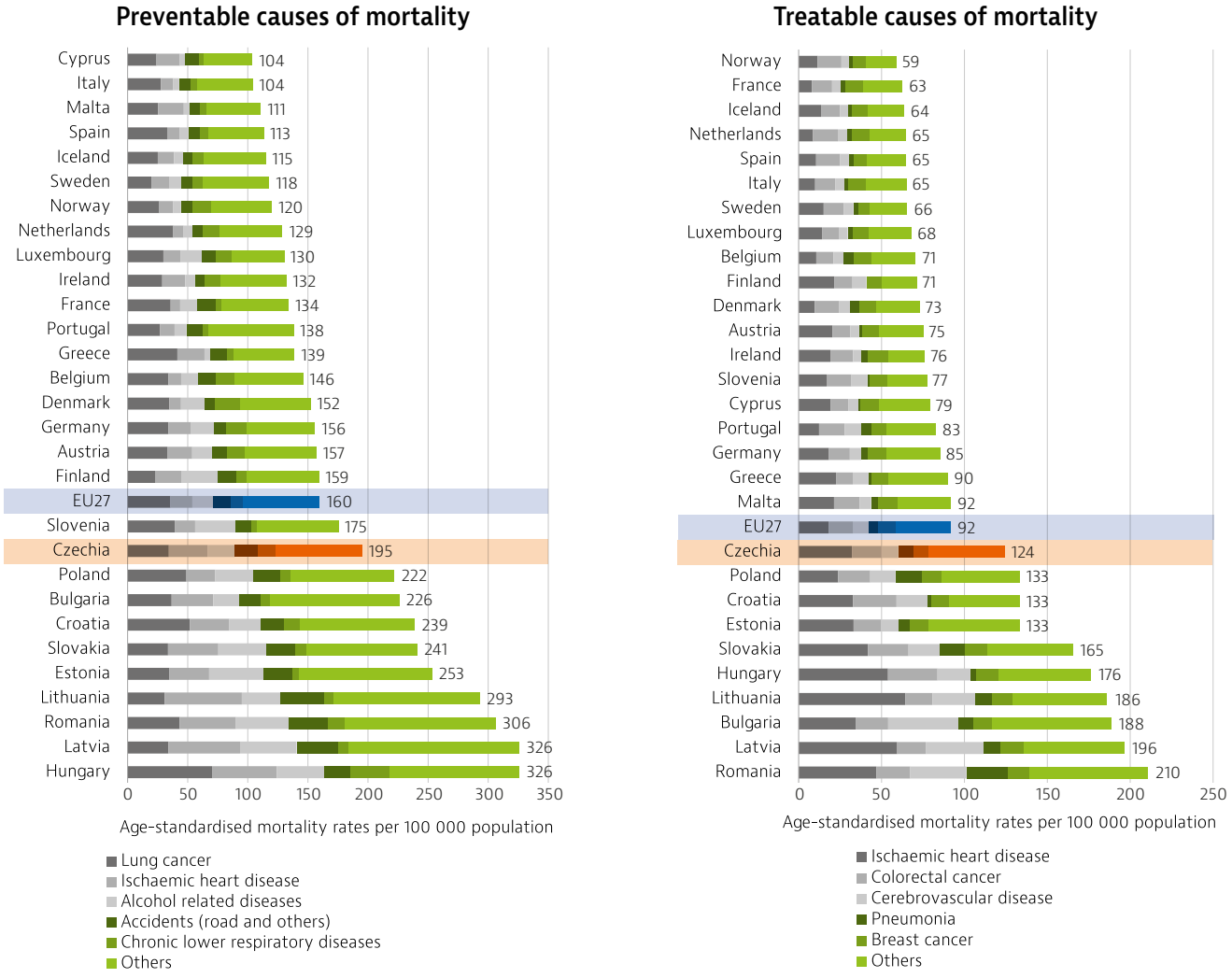
5.1 Effectiveness

Mortality from preventable and treatable causes remains relatively high

Czechia has seen a declining trend in the number of deaths considered preventable or treatable since 2011: mortality rates have fallen by 14 % for preventable and by 16 % for treatable mortality. This trend was driven by a range of factors including medical advances (such as the range of treatments available), progress in care organisation and quality, and improvements in socioeconomic conditions favourable for lifestyle changes. More substantial investment in public health interventions and in incentivising individuals to adopt healthier habits is required for further progress, however. Both preventable and treatable mortality rates are lower in Czechia than in most other central and eastern European countries, yet they remain above the EU averages in 2018 (Figure 10).

Lung cancer is a leading cause of preventable mortality. Comprehensive tobacco control legislation was introduced in 2017, but it will take time to change behaviours and for the results to show in mortality data (see Section 3). The Ministry of Health included smoking as a priority area of its Health 2030 strategy (Box 4) and proposed a plan for further increases in tobacco tax.

Figure 10. Mortality from preventable and treatable causes are higher in Czechia than the EU averages



Note: Preventable mortality is defined as death that can be mainly avoided through public health and primary prevention interventions. Treatable mortality is defined as death that can be mainly avoided through health care interventions, including screening and treatment. Half of all deaths for some diseases (e.g. ischaemic heart disease and cerebrovascular disease) are attributed to preventable mortality; the other half are attributed to treatable causes. Both indicators refer to premature mortality (under age 75). The data are based on the revised OECD/Eurostat lists.
Source: Eurostat Database (data refer to 2018, except for France).

Box 4. The government has approved the Health 2030 strategy

The Strategic Framework for Developing Healthcare in Czechia to 2030 (Health 2030) was approved in 2019 and revised in 2020 because of COVID-19. The Ministry of Health and its subsidiary bodies are responsible for its delivery until the end of 2030.

The framework builds on and includes previous strategies, with relevant action plans, the National e-health Strategy, Primary Care Reform and Psychiatric Care Reform. Implementation of the previous Health 2020 strategy is yet to be reviewed, but a 2017 audit led by the Ministry of Health noted that limited progress had been made, mainly due to insufficient funding.

Health 2030 focuses on three strategic goals, which are broken down into seven specific objectives (Figure 11).

Figure 11. Health 2030 goals cover population health, health system performance and science and research

Source: MZČR (2019).

There is a recognised need to strengthen public health

Although levels of expenditure on prevention are close to the EU average, prevention and public health in general have been neglected areas in Czech health policy. Czechs have been found to have a low level of health literacy compared to other EU countries (Kučera et al., 2016). Furthermore, a 2015 survey by VZP showed that fewer than 40 % of people regularly attended preventive appointments with their general practitioners (GPs).

To address this, the Health 2030 strategy identifies improving prevention as one of its seven key objectives. It aims to address the relatively low level of health literacy and high prevalence of common risk behaviours in Czechia. The government also pledged to increase the prevention budget to 4.5 % of the overall health budget by 2030, which covers both traditional prevention and COVID-19-related prevention expenditure, such as testing and vaccines.

Influenza vaccination rates had been low, but COVID-19 caused a spike in demand in 2020

In Czechia, seasonal influenza vaccination is recommended and free for those at increased risk (such as people aged over 65 and patients with chronic conditions). Nevertheless, immunisation rates are very low. In 2019, only 23 % of people aged over 65 were vaccinated against influenza (compared with an EU average of 42 %).

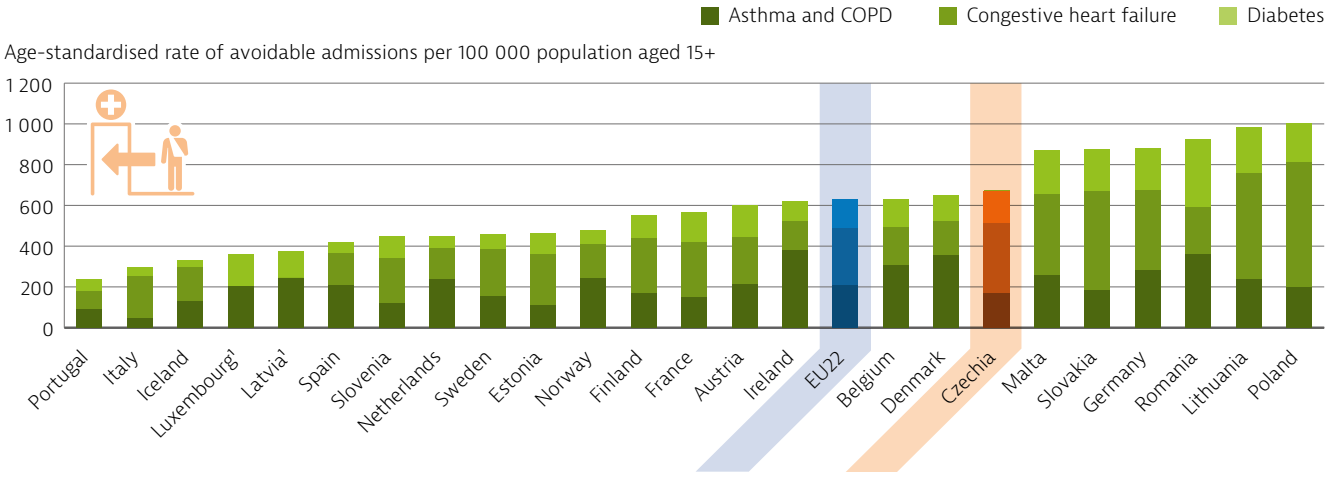
This is due to a range of factors: influenza is not perceived as a serious illness by the public, and awareness and take-up of adult vaccinations (apart from tetanus) are limited.

Due to increased public awareness of the flu vaccination during the COVID-19 crisis, a 2-3-fold increase in interest was reported. Around 20 % more doses were procured than in the previous year (850 000 doses in total), yet many GPs reported that this was insufficient to cover the demand.

Better care management and coordination across providers could reduce avoidable hospital admissions

While hospital admissions for asthma and chronic obstructive pulmonary disease (COPD) were lower in Czechia than the EU average, admission rates for diabetes and congestive heart failure were higher than the EU average in 2019 (Figure 12). Hospital admissions for these chronic conditions could be avoided through effective disease management in outpatient settings.

Figure 12. Czechia had more avoidable hospital admissions in 2019 than most other EU countries



Note: 1. Data for congestive heart failure are not available in Latvia and Luxembourg.
Source: OECD Health Statistics 2021 (data refer to 2019 or nearest year).

Besides reflecting the higher prevalence of these conditions compared to many other EU countries, Czechia's relatively high rate of avoidable admissions also highlights the generally low effectiveness of disease management programmes for most chronic conditions. There is significant room for expanding systematic approaches to disease management and deterioration prevention across all chronic health conditions. Development of integrated care models, better coordination across health and social care and reform of primary care are among the objectives of the Health 2030 strategy.

The reduction in cancer screening during COVID-19 will set back progress in cancer care

Cancer survival rates have steadily improved since 2000, and reached levels close to the EU averages for patients diagnosed between 2010 and 2014 (Figure 13). Part of this improvement can be attributed to the establishment of specialised oncological care centres, which was partly financed by EU Structural Funds.

Figure 13. Czechia was close to the EU average in five-year cancer survival rates

Prostate cancer
Czechia: 85 %
EU23: 87 %

Childhood leukaemia
Czechia: 85 %
EU23: 85 %

Breast cancer
Czechia: 81 %
EU23: 82 %

Cervical cancer
Czechia: 61 %
EU23: 63 %

Colon cancer
Czechia: 56 %
EU23: 60 %

Lung cancer
Czechia: 11 %
EU23: 15 %

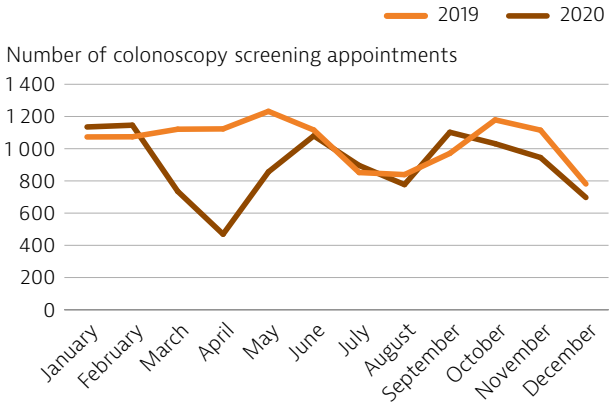
Note: Data refer to people diagnosed between 2010 and 2014. Childhood leukaemia refers to acute lymphoblastic cancer.
Source: CONCORD Programme, London School of Hygiene and Tropical Medicine.

Czechia also fared well in screening participation rates for certain cancers: 61 % of women aged 50-69 had been screened for breast cancer over the past two years in 2019, and 76 % of women aged 20-69 had been screened for cervical cancer – both above the EU averages. The SHI system covers screening programmes for at-risk age groups for cervical, breast and colorectal cancers.

The COVID-19 pandemic led to an overall decrease in cancer screening tests and access to cancer treatments. Restrictions imposed to release capacity for COVID-19 patients and providers pausing service provision led to a drop in available appointments. Short-term demand also fell as patients avoided using health care services from fear of contagion and to avoid putting further pressure on the system.

For example, colonoscopy screening activity dropped by 58 % in April 2020 compared to April 2019 (Figure 14). Activity picked up over the summer – although not sufficiently to cover the backlog – and dropped again from October 2020. This affected access to cancer treatments: for instance, there were 10 % fewer hospital stays for breast cancer treatment in 2020 than 2019 (ÚZIS, 2021).

Figure 14. Colonoscopy screening appointments dropped substantially during the first wave



Source: ÚZIS (2021).

Reduced screening and early treatment are likely to affect patient outcomes and cause an increase in cancers diagnosed at a later stage. This could mean that advanced or more substantive treatments will be required, and the number of avoidable deaths will increase in future years. In line with the Europe's Beating Cancer Plan (European Commission, 2021), the Czech prime minister announced a new national Beating Cancer Plan in June 2020. Czechia also aims to invest further in cancer care and prevention through its 2021 Recovery and Resilience Plan, including development of a new specialised oncological centre in Prague. This plan faces some opposition, however, and has not been endorsed by the Czech Oncological Society.

5.2 Accessibility

Self-reported unmet needs for medical care before the pandemic were low

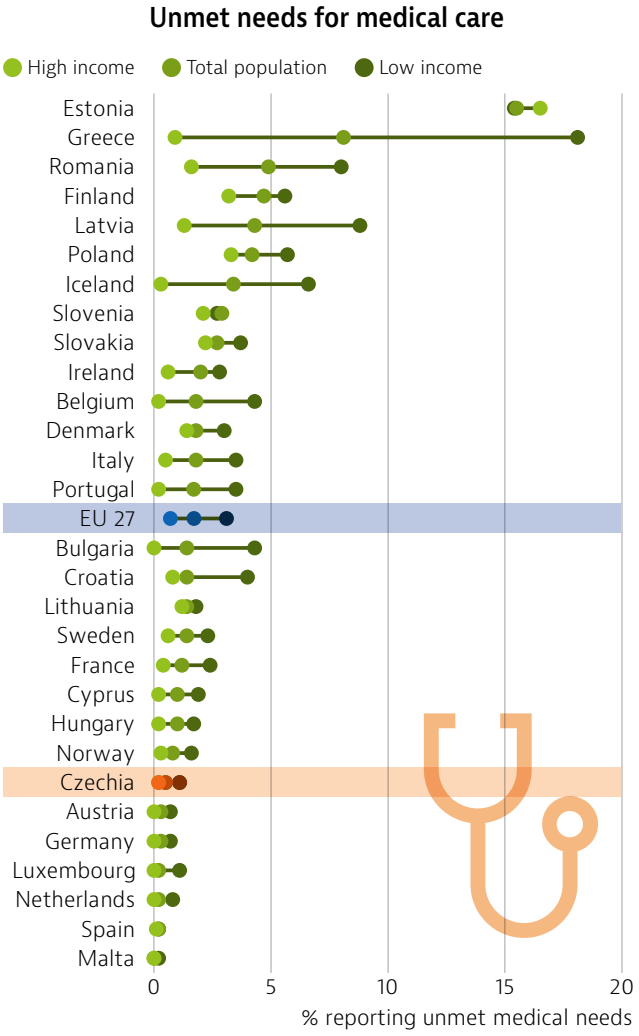
Prior to the COVID-19 pandemic, Czechia had among the lowest levels of unmet needs for medical care due to financial reasons, distance or waiting times in the EU. Only 0.5 % of Czechs reported having forgone care in 2019 (Figure 15). The proportion was slightly greater among people in the lowest income group (1.1 %) than among those in the highest (0.2 %), but the gap was smaller than in most EU countries.

The main reason for unmet needs for medical care was excessive waiting times, indicating informational barriers to care (such as information on which specialist is likely to have availability) or differences in perceived quality across providers. The health insurance funds are legally required to provide local and timely health care (defined in minutes of commute required to reach the nearest physician of a given specialty), and providers are required to meet maximum waiting time thresholds for several specific interventions. However, a 2019 audit by the Ministry of Health revealed that information on accessibility was not being collected systematically. A new programme was launched to address this, aiming to ensure that health insurance funds monitor data on waiting times and capacity for new patients across their providers, and use it to expand their networks where needed. There have been no updates on the programme's progress since 2019, however, indicating that it has been postponed due to COVID-19.

The COVID-19 crisis caused disruptions to health service provision and access. Survey data show that 16 % of the Czech population reported that they had not received a needed medical examination or treatment during the first 12 months of the pandemic, which was slightly better than the EU average of 21 % (Eurofound, 2021)[2]. Preliminary data show that the drop in appointments was substantial at the peak of the first wave – for example, preventive appointments for adults were down by 70 % in April 2020 compared to April 2019 (ÚZIS, 2021). Unmet medical needs due to COVID-19 are likely to have increased substantially from autumn 2020, as the country struggled to slow the pandemic and keep services open (see Section 5.3). The situation is also likely to differ across regions: some regional capacities were exhausted earlier than others, while Prague, for instance, was able to keep non-urgent interventions running for longer. This is likely to exacerbate geographical health inequalities within Czechia.

2. *The data from the Eurofound survey are not comparable to those from the EU-SILC survey because of differences in methodologies.*

Figure 15. Before COVID-19, Czechia had low levels of unmet medical care needs



Note: Data refer to unmet needs for a medical examination or treatment due to costs, distance to travel or waiting times. Caution is required in comparing the data across countries as there are some variations in the survey instrument used.
Source: Eurostat Database, based on EU-SILC (data refer to 2019, except Iceland 2018).

The comprehensive benefits package makes health care in Czechia affordable

As noted in Section 4, Czechia has a lower share of out-of-pocket payments in total health spending than the EU (Figure 16); these are thus less likely to pose barriers to accessing health care. Almost half of these payments are on outpatient pharmaceuticals. Annual co-payment maximums are set for prescribed medicines.

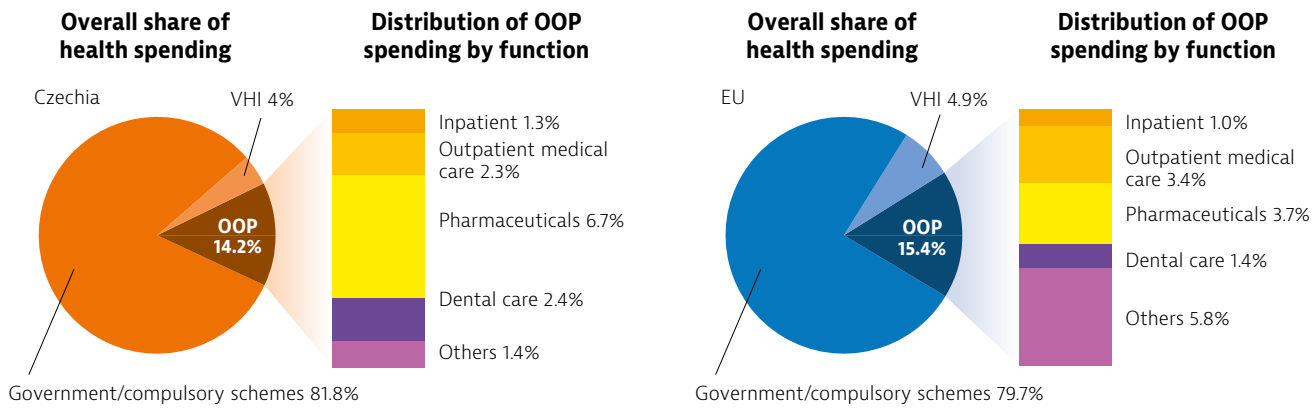
The Czech system applies almost no cost-sharing for health care. Small user fees were introduced in 2008 (with an annual ceiling for payments and exemptions from the requirement for some groups), but these proved politically divisive and were abandoned in 2015, with a few exceptions such as fees for out-of-hours outpatient care. A limited range of non-standard services is available for purchase. For this reason, voluntary health insurance plays a marginal role and is mainly used to cover health care abroad rather than being complementary insurance for Czech-based services.

All necessary health care costs related to COVID-19 are also covered in full for those insured. This includes the costs of a COVID-19 PCR test if an individual is referred by an eligible authority, or a limited number of rapid antigen tests (from December 2020) and PCR tests (from June 2021) without a referral.

Service availability varies significantly across regions due to physician and nurse capacity

As noted in Section 4, Czechia has densities of physicians and nurses slightly above the EU average, but their distribution across the country's 14 regions varies (Figure 17). In recent years, the Ministry of Health and health insurance funds put in place targeted programmes to financially motivate dental surgeons, GPs and pharmacists to work in underserved areas.

Figure 16. Out-of-pocket spending is below the EU average and mostly on pharmaceuticals

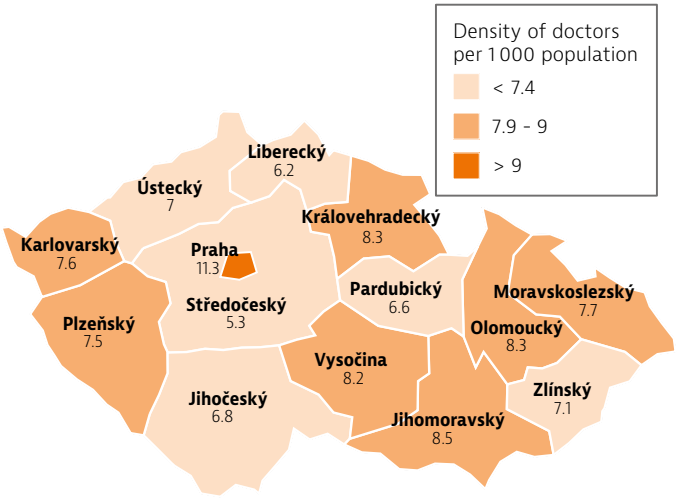


Note: The EU average is weighted. OOP = out-of-pocket expenditure. VHI = voluntary health insurance, which also includes other voluntary prepayment schemes
Sources: OECD Health Statistics 2021; Eurostat Database (data refer to 2019).

Future availability of health professionals is also a concern, as the median age for some physician groups is high, especially in regions such as Karlovarský and Ústecký.

In 2017, the Ministry of Health revised requirements on nursing qualifications, which were considered one of the reasons for limited availability of nurses (see Section 4). In 2018 and 2019, the Ministry took action to increase capacity in medical university courses by 15 % and to increase the prestige and attractiveness of the nursing profession. It will take time for the full impact of these reforms to take effect, but further improvements in availability of nurses may require a more substantial change to entry requirements for the profession, and rescoping of a career pathway and competencies across each stage.

Figure 17. There are significant regional differences in availability of nurses



Source: ÚZIS (2021).
Note: Some providers based in Prague serve people who work in the capital but live in the Středočeský region.

COVID-19 caused significant disruption to health care across the country

Planned and non-urgent treatments were affected in the first wave of the pandemic, and were cancelled or postponed again from mid-October 2020 until the end of February 2021 (with a break between the end of November and mid-December 2020), to release hospital capacity for COVID-19 patients.

As in many other EU countries, regulations and payment rules were adapted quickly to facilitate remote consultations. Prior to March 2020, the health insurance funds did not routinely reimburse consultations via phone or video.

During the first wave, health insurers widened reimbursement options for providers to cover remote consultations for most outpatient appointments, yet most were withdrawn by the end of June 2020. In September 2020, health insurers introduced a new code for GP phone consultations that could be triggered during "crises" as a temporary measure, and immediately activated it.

The health system relied heavily on existing tools that allow physicians to process administrative requests without seeing their patients face to face, including electronic prescriptions and sick notes. An electronic registration system for COVID-19 tests was also launched in March 2020. As of June 2020, broader functionality in the e-prescription system let physicians and pharmacists view patient drug records and control for duplicate prescriptions or contraindicated medicines. Many Czechs reported having received a prescription (67 %) or a medical consultation (47 %) online or by telephone in the Eurofound survey (Eurofound, 2021).

5.3 Resilience

This section on resilience focuses mainly on the impacts of and responses to the COVID-19 pandemic[3]. The COVID-19 pandemic had a major impact on population health and mortality in Czechia: the official death toll (deaths of people who had been laboratory-confirmed as COVID-19 positive) rose to 30 400 by the end of August 2021. The measures taken to contain the pandemic also led to a major contraction of the economy – Czech GDP fell by almost 6 % in 2020, compared to an EU average fall of 6.2 %.

Czechia contained the first COVID-19 wave but struggled to slow the pandemic later in the year

Czechia declared a state of emergency and entered the first national lockdown[4] in mid-March 2020, putting in place strict measures soon after confirming the first cases of COVID-19 (Figure 18). The initial spread was well managed, and the government announced a gradual plan of exiting the lockdown and relaxing containment measures in mid-April 2020.

Cases gradually increased over summer 2020, but Czechia's response was not as clear and speedy as in the spring. The government first adopted a "traffic light system" across regions to contain the pandemic via more limited and regionally targeted measures.

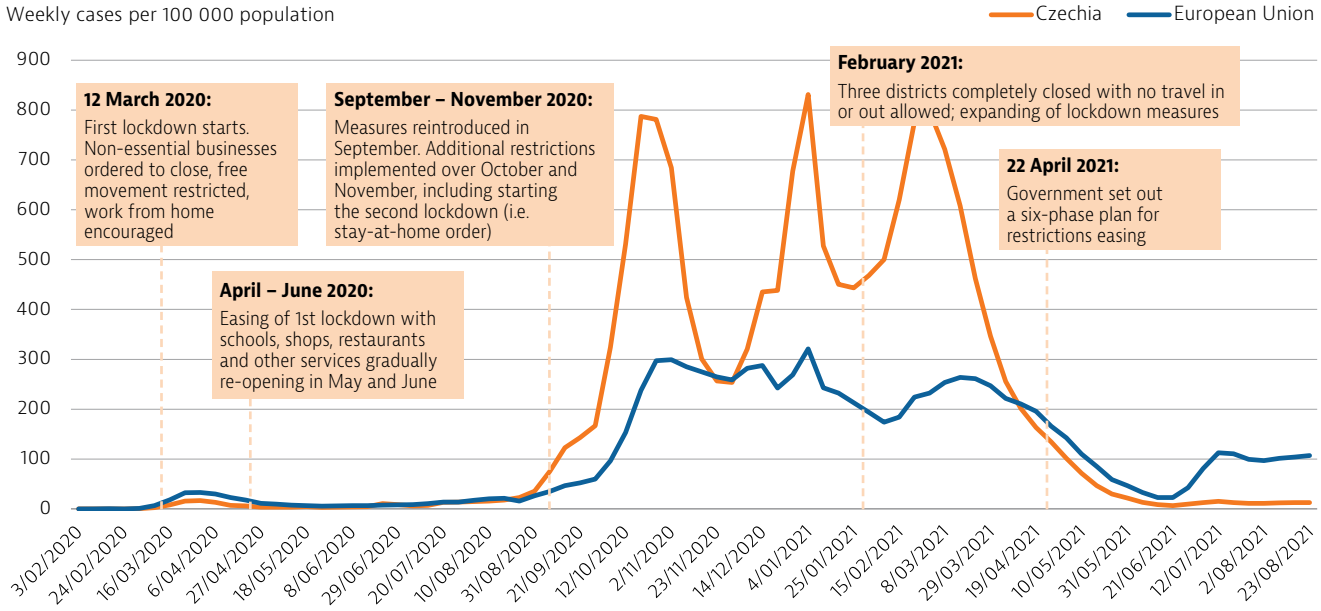
3. In this context, health system resilience has been defined as the ability to prepare for, manage (absorb, adapt and transform) and learn from shocks (EU Expert Group on Health Systems Performance Assessment, 2020)
4. The term "lockdown" is applied if a country restricted the free movement of people via a "stay-at-home" measure. The strictness of lockdowns across the EU differed, and Czechia enforced its measures less strictly than other EU countries up to the end of February 2021.

As cases kept increasing, a state of emergency was declared again in October 2020, and free movement of people was increasingly restricted, leading to another lockdown at the end of the month. In response to calls for more transparency and predictability, the government launched a pandemic evaluation system in November, designed to calculate a daily risk score that would determine required changes to containment measures. However, its application became less consistent over time.

With new COVID-19 variants entering the country in early 2021, cases started to increase rapidly again. Following vigorous political debate, the government announced additional restrictions from 27 February 2021. Testing of all employees, including self-employed people, was gradually introduced. New cases eventually peaked at the beginning of March and started decreasing. In April 2021, the government announced a phased approach to remove restrictions.

By the end of August 2021, 1.7 million people (approximately 16 % of the population) had been diagnosed with COVID-19 by a laboratory test, which is considerably more than the average for the EU (approximately 8 % of the population).

Figure 18. Czechia implemented a range of regional and national measures to contain transmission



Note: The EU average is unweighted (the number of countries used for the average varies depending on the week).
Sources: ECDC for COVID-19 data and authors for containment measures.

Before the pandemic, Czechia scored poorly on crisis preparedness across several dimensions

In the 2019 International Health Regulations (IHR) assessment[5], Czechia had above-average scores for laboratory capacity, human resources and health service provision. However, it scored poorly in several key areas, including legislation and financing of public health emergencies, surveillance, planning for emergency response and risk communications.

During the COVID-19 pandemic Czechia struggled with risk communication and public engagement. The political opposition and experts criticised the government for not formulating adequate policy responses to a public health emergency throughout the pandemic, as the general population became more critical of new restrictions.

The government employed an ad hoc approach to changing COVID-19-related measures. This is likely to have fuelled wide public distrust in official communication and non-compliance with rules, especially when changes happened at short notice. Moreover, attempts to tackle misinformation were limited. A 2021 WHO study found that the Czech government was one of the least trusted sources of information, and that understanding of official communication regarding COVID-19 restrictions and recommendations was poor (WHO Regional Office for Europe, 2021). The lack of planning capability was reflected in the delayed start and slow rollout of vaccines (especially to most vulnerable groups) and in the operation of the test and trace strategy.

5. *Since 2005, the IHR have provided an overarching legal framework that defines countries' rights and obligations in handling public health events and emergencies. Under the IHR, all member states are required to develop public health capacities to prevent, detect, assess, notify and respond to public health risks. The monitoring process of IHR implementation involves a self-assessment of up to 13 core capacities.*

Capacity for sample collection and sequencing was insufficient

Czechia's laboratory capacity for testing increased gradually throughout the year, as more laboratories were included in the testing network. The bottleneck in the strategy was collection capacity, making tests temporarily inaccessible across the country at times. Moreover, despite the vital role of sample sequencing in tracking the progression of variants, Czechia had sequenced only 0.03 % of collected samples by January 2021. Plans for a new sequencing network were announced in June 2021.

The contact tracing system was one of the key shortcomings of the containment strategy

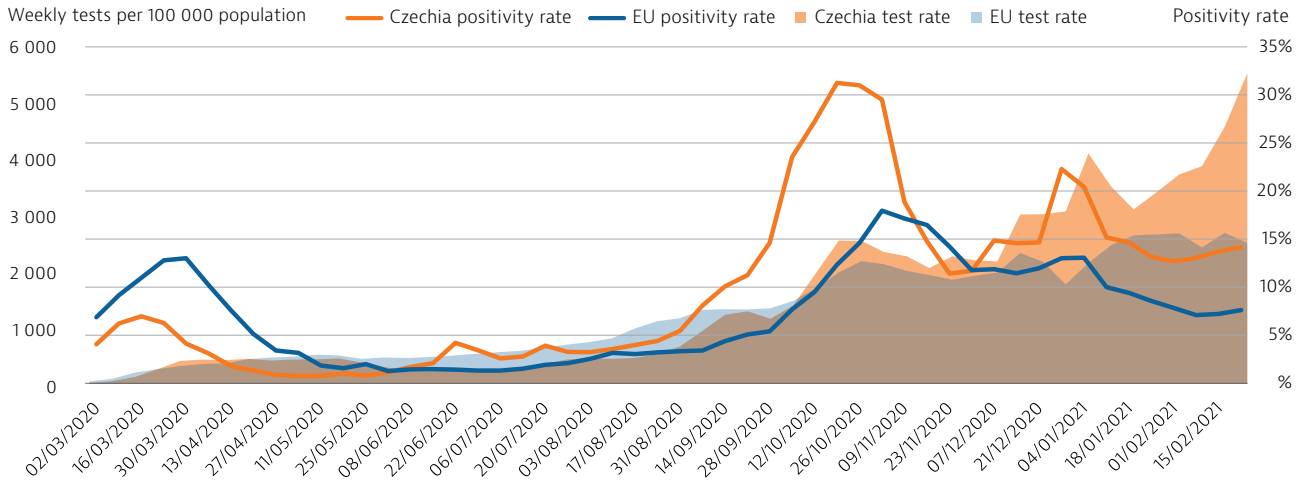
In addition to the traditional method of regional public health teams, several systems were created to help tracing efforts, but these had limited take-up among the public and public health teams. They included "eRouška" – a contact tracing app using Bluetooth launched in April 2020. The public health teams did not have direct access to the eRouška data[6], but were able to share codes with those using the app who were confirmed as positive cases, which would allow users to inform all close contacts of the risk. The level of coverage of eRouška, however, remained too low to be effective: only 14 % of the population had downloaded it by January 2021.

Tracking capacities reached their limits several times in 2020 due to a lack of staff availability. Capacity was increased by employing more staff and commercial call centre teams, and attempts were made to roll out "self-tracking" forms from October 2020, but these met with limited success.

Public compliance with testing and tracing policies appears low

For most of September 2020 to March 2021, Czechia reported positive rates among COVID-19 tests higher than the EU average (Figure 19). Experts repeatedly expressed concern about this, and hypothesised that the reasons were likely to be people not wanting either to get tested or to report their contacts (to avoid mandatory quarantine and a potential loss of income) and Czechia's insufficient contact tracing capacities. According to the "Life during the pandemic" survey, from autumn 2020 until the end of February 2021 more than half of people with symptoms or who had been in direct contact with a COVID-19 positive case admitted that they had not been tested (PAQ Research & IDEA AntiCovid Initiative, 2021). By early 2021, one contact on average was being reported and reached by the tracing teams, even though survey-based estimates suggest that Czechs were in close contact with on average five to six people a week. Quarantine and self-isolation were not widely adhered to and were not monitored as closely by authorities as in other EU countries.

Figure 19. Positivity rates across all COVID-19 tests increased from September 2020



Note: The EU average is weighted (the number of countries included in the average varies depending on the week).
Source: ECDC.

6. Between April and September 2020, the app would automatically share details of potential close contacts of any user who tested positive.

The pandemic put dangerous levels of pressure on hospitals and staff, which is likely to continue

Pre-pandemic hospital acute care and ICU capacities in Czechia were among the highest in the EU. To alleviate financial pressure on health care providers, the Ministry of Health set up a generous compensation scheme, aiming to cover the extra costs of COVID-19 patients and compensate for the drop in elective care. As hospitalisations rose across the country in autumn 2020, providers started to repurpose their wards for COVID-19 patients and to cancel and/or postpone elective or non-urgent cases. In autumn 2020, two temporary hospitals were built, adding potential capacity of 500 beds in Prague and 300 beds in Brno. However, neither was used, as the capacity constraints were caused by staffing rather than bed shortages. The Prague site closed in February 2021 and the Brno site was turned into a large-scale vaccination centre.

In autumn 2020, and especially in early 2021, hospitals started to reach dangerous levels of occupancy and staff availability. The pressures varied across regions: big agglomerations such as Prague or Brno had more available space than remote areas such as the Karlovarský region[7]. Central coordination was used to monitor and control bed capacity at a national level, facilitating transfers to other regions.

There were no COVID-19-related staff shortages in the first wave, but this changed in autumn 2020 – especially for nurses – exacerbated by the pre-existing workforce situation (see Section 4). Several key measures were deployed to scale up workforce capacity: requesting medical, nursing and social services students to work at local hospitals, mobilising volunteer health workers from abroad and transferring health care staff to hospitals in greater need. Hospitals redeployed staff across wards after cancelling elective and non-urgent treatment, and significantly increased overtime worked by nurses and physicians on COVID-19 wards, leading to concerns over the mental health of staff. Significant financial bonuses were agreed for inpatient health care and social care workers.

Even after the current wave of the pandemic is over, the Czech health care system will face a significant challenge in catching up on delayed care (see Section 5.1) and developing new patient pathways for patients with long COVID. Current research suggests that more than 10 % of infected people developed longer-term symptoms – a proportion that seems to increase further with age. This indicates that hundreds of thousands of people in Czechia may be suffering with a new chronic condition. Specialised long COVID centres were starting to be set up in early 2021.

Delayed planning slowed down the rollout of Czechia's vaccination campaign

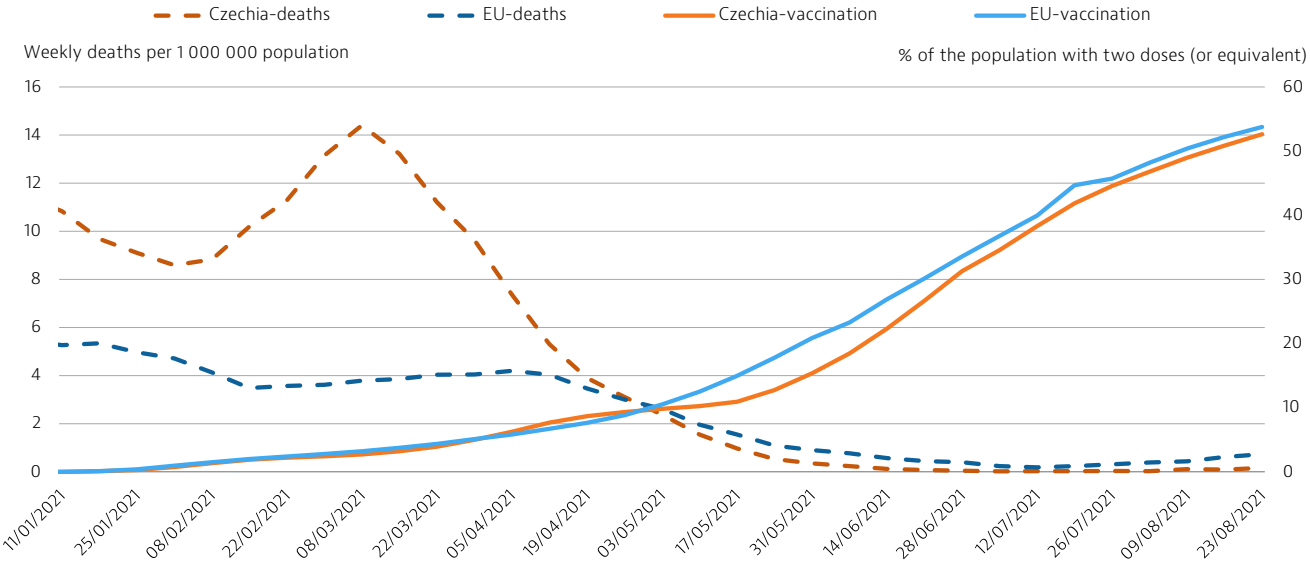
Czechia's vaccination campaign followed a priority list of multiple groups determined by age, profession and health condition. However, the prioritisation changed several times from December 2020, including significant changes such as the addition of teachers. The top priority group includes long-term care residents, priority health and social care workers and people aged 80 and over (approximately 7.5 % of the population). The campaign began in December 2020, mostly in health care settings, and continued more broadly in mid-January 2021 with the launch of an electronic registration system. Regional teams were later made responsible for implementing the vaccine strategy.

As of the end of August 2021, the vaccine rollout had faced several barriers. The delays and changes to negotiated EU supplies undoubtedly posed challenges to initial planning. However, a delay in planning the vaccination rollout also played a role. GPs and civil society organisations were involved late and only to a limited extent. Active outreach to senior populations and other hard-to-reach groups would also have accelerated coverage among more vulnerable sections of the population. In order not to waste vaccines, the government rapidly opened up vaccine registration to the wider population, but vaccine hesitancy emerged as an issue. In February 2021, 32 % of Czechs did not want to get vaccinated. This only slowly decreased (to 19 %) by the end of August 2021 (PAQ Research & IDEA AntiCovid Initiative, 2021).

By the end of August 2021, the government had received approximately 12 million doses of European Medicines Agency-approved vaccines, of which 11.5 million had been administered. Around 78 % of the population aged 80 and over had been vaccinated with two doses (or equivalent), compared to 53 % of the general population (Figure 20).

7. The Karlovarský region also saw the greatest increase in excess deaths in January and February 2021, at more than twice the five-year average (ČSÚ, 2021).

Figure 20. More than half of Czechia's population has received two doses of vaccine (or equivalent)



Note: The EU average is unweighted (the number of countries used for the average varies depending on the week).
Source: ECDC for COVID-19 cases and Our World In Data for vaccination rates.

The pandemic showed the importance of real-time data and data-based decision making

Czechia's decentralised health care system is characterised by information systems with limited interconnection, through which large amounts of data are collected centrally. Prior to the pandemic, limited data were shared more widely, and this was typically done in an aggregated form, often with year-long or longer time delays to allow for collection and validation. Moreover, digitalisation of health care has been slow in Czechia. In 2019, only 9 % of physicians had all their patient records in electronic form (with 20 % keeping them solely on paper) (ČSÚ, 2020).

The pandemic has started to change this. In 2020, national ICU capacity and COVID-19 laboratory capacity monitoring systems were launched. In response to public and expert pressure, in autumn 2020 the Ministry of Health started to publish a broad set of COVID-19 data daily. At the same time, the pandemic registry was developed without taking advantage of existing electronic systems or providing necessary linkage to other registries, thus causing preventable operational issues later on. A new law on health care digitalisation, which sets out high-level rules and architecture for Czech health care information systems and could provide a good stepping-stone to further progress in this area, was passed in August 2021. Czechia also named digitalisation of health care as one of its seven key objectives in the Health 2030 strategy (see Box 4). However, there is still significant scope for development of digitalisation, publicly available data and use of data within the health care system.

Czechia made limited long-term investment, but COVID-19 put significant pressure on insurance funds

As noted in Section 4, many investments made in response to the pandemic addressed short-term financing issues. Although planning for the Health 2030 strategy was updated to take into account the pandemic and its repercussions, implementation of many reforms has been delayed. COVID-19 also emphasised long-term issues with financing and management of social care in Czechia.

Emergency changes to increase state contributions to the SHI system, now permanently agreed to continue at a higher rate in 2022 and beyond (see Box 3), alleviated significant short-term financial pressure on the health insurance funds. In April 2021, the overall deficit for 2021 was forecast to be CZK 55 billion (EUR 2.2 billion). This figure is likely to increase as the government continues to add new components of COVID-19 expenditure.

The government has also set out to invest CZK 20 billion (EUR 0.8 billion) in the health sector as part of its National Recovery and Resilience Plan. Plans include funding the improvement of rehabilitation services, strengthening cancer prevention and care, and supporting health care digitalisation, virtual medicine and academic research.

6 Key findings

- Life expectancy in Czechia was 2.3 years below the EU average in 2020, having temporarily fallen by one year between 2019 and 2020. By the end of August 2021, there had been more than 30 000 COVID-19 deaths (a mortality rate 80 % higher than the average across the EU), while the broader indicator of excess mortality suggests that the COVID-19 death toll may be even higher.

- Behavioural risk factors are a major public health challenge in Czechia – nearly half of all deaths in 2019 could be attributed to dietary risks, tobacco use and alcohol consumption. The adult obesity rate in Czechia was among the highest in the EU in 2019, and is projected to grow further in the coming years. Strengthening public health and prevention is a key goal of the health strategy for 2021-30, but will require robust implementation planning and monitoring.

- There is a relatively high physician density ratio, albeit with an increasing age profile, but availability of nurses is a long-standing challenge. This shortfall was made more evident in 2020 and 2021 when availability of nursing staff became an important constraint in COVID-19 wards. Policy makers have implemented a variety of measures to address this issue, including increased remuneration and a campaign to improve the attractiveness of nursing. However, substantial issues such as nurse competencies and career pathways have not yet been addressed.

- Czechia contained the first COVID-19 wave well, but struggled to repeat its success later in the year. The government faced challenges in formulating adequate policy responses quickly, when both managing the second wave and planning the vaccination strategy and its rollout. It also lacked clarity and transparency in communication and engagement with the public, fuelling wider public distrust and contributing to poor compliance with containment measures and testing and tracing efforts.

- Important advances in digitalisation and data sharing were made during the pandemic. Several tools proved useful, such as electronic prescriptions, remote video/phone consultations and daily data reporting. Digitalisation of the health system is a key strategic goal for 2021-30, but will require substantial investment and political focus to enable Czechia to catch up with other EU countries.

- Czechia is looking to bolster the resilience of its health system, with a focus on its workforce, financing and governance, even though many planned reforms or new laws were delayed because of the pandemic.

Key sources

Alexa J et al. (2015), *Czech Republic: health system review, Health Systems in Transition*, 17(1):1-165.

OECD/EU (2020), *Health at a Glance: Europe 2020 – State of Health in the EU Cycle.* Paris, https://doi.org/10.1787/82129230-en.

WHO Regional Office for Europe, European Commission, *European Observatory on Health Systems and Policies (2021)*, COVID-19 Health Systems Response Monitor – Czech Republic.

References

Csémy et al. (2021), *Užívání tabáku a alkoholu v České republice 2020*, Prague, National Institute of Public Health.

ČSÚ (2020), *Informační technologie ve zdravotnictví v České republice v datech* [Data on information technologies in the health sector in the Czech Republic], Prague.

ČSÚ (2021), *Počet zemřelých – časové řady* [Number of deaths – timelines], Prague.

ESPAD Group (2020), *ESPAD Report 2019,* Luxembourg, Publications Office of the European Union.

EU Expert Group on Health Systems Performance Assessment (HSPA) (2020), *Assessing the resilience of health systems in Europe: an overview of the theory, current practice and strategies for improvement.* Luxembourg, Publications Office of the EU.

Eurofound (2021), *Living, working and COVID-19 survey.* Dublin, https://www.eurofound.europa.eu/data/covid-19/quality-of-public-services.

European Commission (2021), *Europe's Beating Cancer Plan*, Brussels.

Kučera Z et al. (2016), *Zdravotní gramotnost obyvatel ČR – výsledky komparativního reprezentativního šetření* [Health literacy of Czech population – a comparative study results], Časopis Lékařů Českých, 155:233-241.

MZČR (2019), *Strategický rámec rozvoje péče o zdraví v České republice do roku 2030*, Zdraví 2030 [Strategic Framework for Health Care Development in the Czech Republic by 2030], Prague.

PAQ Research, IDEA AntiCovid Initiative (2021), *Život během pandemie* [Life during the pandemic], Prague, https://zivotbehempandemie.cz/.

ÚZIS (2021), *Datasets on number of nursing FTEs, preventative appointments, cancer screening appointments and gyneco-oncology hospital stays.* Data request by author.

WHO Regional Office for Europe (2021), *Behavioural insights on COVID-19 in the Czech Republic: monitoring knowledge, risk perceptions, preventive behaviours and trust to inform pandemic outbreak response – round 3 of data collection*, Prague, United Nations Information Centre.

Country abbreviations

Austria	AT	Denmark	DK	Hungary	HU	Luxembourg	LU	Romania	RO
Belgium	BE	Estonia	EE	Iceland	IS	Malta	MT	Slovakia	SK
Bulgaria	BG	Finland	FI	Ireland	IE	Netherlands	NL	Slovenia	SI
Croatia	HR	France	FR	Italy	IT	Norway	NO	Spain	ES
Cyprus	CY	Germany	DE	Latvia	LV	Poland	PL	Sweden	SE
Czechia	CZ	Greece	EL	Lithuania	LT	Portugal	PT		

European Commission

State of Health in the EU
Country Health Profile 2021

The Country Health Profiles are an important step in the European Commission's ongoing *State of Health in the EU* cycle of knowledge brokering, produced with the financial assistance of the European Union. The profiles are the result of joint work between the Organisation for Economic Co-operation and Development (OECD) and the European Observatory on Health Systems and Policies, in cooperation with the European Commission.

The concise, policy-relevant profiles are based on a transparent, consistent methodology, using both quantitative and qualitative data, yet flexibly adapted to the context of each EU/EEA country. The aim is to create a means for mutual learning and voluntary exchange that can be used by policymakers and policy influencers alike.

Each country profile provides a short synthesis of:

- health status in the country
- the determinants of health, focussing on behavioural risk factors
- the organisation of the health system
- the effectiveness, accessibility and resilience of the health system

The Commission is complementing the key findings of these country profiles with a Companion Report.

For more information see: ec.europa.eu/health/state

Please cite this publication as: OECD/European Observatory on Health Systems and Policies (2021), *Czechia: Country Health Profile 2021, State of Health in the EU*, OECD Publishing, Paris/European Observatory on Health Systems and Policies, Brussels.

ISBN 9789264958289 (PDF)
Series: State of Health in the EU
SSN 25227041 (online)

OECD
BETTER POLICIES FOR BETTER LIVES

European Observatory on Health Systems and Policies
a partnership hosted by WHO