State of Health in the EU
Cyprus
Country Health Profile 2023
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. For the first time since the series began, the 2023 edition of the Country Health Profiles introduces a special section dedicated to mental health.

The profiles are the joint work of the OECD and the European Observatory on Health Systems and Policies, in co-operation 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 CYPRUS 4
3. RISK FACTORS 7
4. THE HEALTH SYSTEM 9
5. PERFORMANCE OF THE HEALTH SYSTEM 11
   5.1 Effectiveness 11
   5.2 Accessibility 13
   5.3 Resilience 17
6. SPOTLIGHT ON MENTAL HEALTH 20
7. 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 finalised in September 2023, based on data that were accessible as of the first half of September 2023.

Demographic and socioeconomic context in Cyprus, 2022

<table>
<thead>
<tr>
<th>Demographic factors</th>
<th>Cyprus</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population size</td>
<td>904,705</td>
<td>4,467,352,911</td>
</tr>
<tr>
<td>Share of population over age 65 (%)</td>
<td>16.5</td>
<td>21.1</td>
</tr>
<tr>
<td>Fertility rate¹ (2021)</td>
<td>1.4</td>
<td>1.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Socioeconomic factors</th>
<th>Cyprus</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita (EUR PPP²)</td>
<td>32,349</td>
<td>35,219</td>
</tr>
<tr>
<td>Relative poverty rate³ (%)</td>
<td>13.9</td>
<td>16.5</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>6.8</td>
<td>6.2</td>
</tr>
</tbody>
</table>

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.

Disclaimers: This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Member countries of the OECD. The views and opinions expressed in European Observatory on Health Systems and Policies publications do not necessarily represent the official policy of the Participating Organizations.

This work was produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

The names and representation of countries and territories used in this joint publication follow the practice of WHO.

Territorial disclaimers applicable to the OECD: The 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 specific disclaimers are available here.

Territorial disclaimers applicable to the WHO: The designations employed and the presentation of this material do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

© OECD and World Health Organization (acting as the host organisation for, and secretariat of, the European Observatory on Health Systems and Policies) 2023.
1 Highlights

Health Status
At 81.7 years, life expectancy in Cyprus is relatively high, although overall life expectancy dropped by over half a year between 2019 and 2022 due to the COVID-19 pandemic. In 2022, 78 % of the Cypriot population reported being in good health, which is a higher proportion than the EU average (68 %), but inequalities by income level are high.

Risk Factors
The proportion of adults smoking daily remains higher in Cyprus than in most EU countries – particularly among men. However, alcohol consumption is below the EU average, and heavy drinking is reported by only 4 % of the population. Cyprus has a much lower proportion of deaths attributed to unhealthy diet compared to the EU as a whole.

Health System
Health expenditure in Cyprus was lower than the EU average in 2021, but the share of public expenditure has increased dramatically and is now the primary source of health financing. Out-of-pocket spending has more than halved, falling to 10.0 % of total health spending in 2021, which is well below the EU average of 15.0 %.

Effectiveness
Since the introduction of the General Healthcare System, unmet medical care needs have been extremely low, at less than 1 % for both low- and high-income households in 2022. Reforms increased capacity and reduced the waiting times that were the main barrier to access. There are greater unmet needs for dental care, which is still financed predominantly out of pocket.

Resilience
The COVID-19 pandemic tested the resilience of the Cypriot health system and restricted capacity for elective procedures. Before the pandemic, the volume of some elective surgical procedures was below the EU average, and volumes fell further in 2020. But in 2021 there was a surge in the volume of care provided to address the backlog and avoid increased waiting times.

Mental Health
The prevalence of mental health issues in Cyprus is on a par with the EU average, but more than one in six Cypriots are living with a mental health issue. The burden of mental health disorders is high. The indirect costs – such as greater unemployment rates for people with depression – are also high. Women in the lowest income quintile are most likely to report depression. As in other EU countries, many Cypriots reported unmet needs for mental healthcare during the pandemic.
**2 Health in Cyprus**

**Life expectancy in Cyprus is well above the EU average but fell in 2021 due to the pandemic**

In 2022, life expectancy at birth in Cyprus stood at 81.7 years, which is one year higher than the average for the EU as a whole (Figure 1). While life expectancy did not fall during the first year of the pandemic, it dropped by more than a year in 2021. Cypriot women lived on average almost four years longer (83.6 years) than men (79.9 years) in 2022. This gender gap (3.7 years) is smaller than in most other countries across the EU.

**Figure 1. Life expectancy in Cyprus declined sharply in 2021, only partially improving in 2022**

Notes: The EU average is weighted. The 2022 data are provisional estimates from Eurostat that may be different from national data and may be subject to revision. Data for Ireland refer to 2021.
Source: Eurostat Database.

**Circulatory diseases and cancer remain the main causes of death**

In 2021, circulatory system diseases were the leading cause of death in Cyprus, accounting for 25 % of all deaths, followed by cancer (22 %). While mortality rates from circulatory diseases have decreased in the last decade, mortality rates from cancer have remained unchanged.

Looking at more specific diseases, COVID-19 was the leading cause of mortality in 2021 (accounting for 8.4 % of all deaths), followed by ischaemic heart disease (7.8 %), and diabetes (6.8 %). During the first year of the pandemic in 2020, only 2 % of deaths were attributed to COVID-19, but in 2021 this increased to 8.4 % (Figure 2).

The broader indicator of (all-cause) excess mortality (defined as deaths from all causes above what would be expected based on mortality from previous years) shows that excess deaths in Cyprus were higher in 2020 (by about 13 %), 2021 (by 23 %) and 2022 (by 25 %) than the average over the previous five years (2015-19) (Figure 3). This suggests that the death toll related to COVID-19 during these three years might have been higher than reported or that disruptions to health services during the pandemic, such as the suspension of outpatient care and cancellations of elective surgeries, may have resulted in increased mortality from other causes.
Most Cypriot people report good health, but sizeable disparities exist across income groups

In 2022, more than three quarters (78%) of the Cypriot population reported being in good health, which is a higher proportion than the EU average (68%). However, as in other EU countries, people on higher incomes are more likely to report good health than those on lower incomes: 87% in the highest income quintile reported being in good health compared to 61% in the lowest.

Women live a greater portion of their lives after age 65 with health issues and disabilities

The share of people aged 65 and over in Cyprus grew from 11% in 2000 to 16% in 2020 because of higher life expectancy and lower fertility rates. This share is projected to increase to 22% by 2050. Cypriot women at 65 could expect to live another 21.5 years, while men could expect to live another 19.1 years. However, the gender gap in healthy life years is smaller because women spend a greater portion of their remaining life years living with chronic conditions and disabilities (activity limitations) (Figure 4).

Some 44% of Cypriot women aged 65 and over reported multiple chronic conditions in 2020 compared to 30% of men. There is a similar gender gap in activity limitations: nearly one in four women aged 65 and over reported limitations in daily activities compared to one in seven men.
The incidence of cancer in Cyprus is higher than the average for the EU as a whole

According to estimates from the Cypriot Cancer Registry, based on incidence trends from previous years, over 4 000 new cases of cancer were expected in Cyprus in 2020 (an age-standardised rate of 399 per 100 000 men compared to the 686 EU average, and 339 per 100 000 women compared to the 484 EU average). Figure 5 shows that the leading cancers among men are prostate (28%), lung (15%) and colorectal (10%) cancer, while among women it is breast cancer (36%), followed by thyroid (13%) and colorectal (7%) cancer.

Figure 5. More than 4 000 cancer cases in Cyprus were expected to be diagnosed in 2020

Notes: Non-melanoma skin cancer is excluded; uterus cancer does not include cancer of the cervix.
3 Risk factors

Over a third of all deaths are attributable to behavioural risk factors in Cyprus

Around 35% of all deaths recorded in Cyprus in 2019 could be attributed to behavioural risk factors such as tobacco smoking, dietary risks, alcohol consumption and low physical activity, which is below the EU average of 39% in the same year. Environmental issues such as air pollution are also important causes of mortality in Cyprus (Figure 6).

Almost one fifth (19%) of all deaths in 2019 could be attributed to tobacco consumption (including direct and second-hand smoking), a share slightly higher than the EU average. Dietary risks (including low fruit and vegetable intake, and high sugar and salt consumption) were estimated to account for about 14% of all deaths in Cyprus in 2019 – a proportion lower than the average in the EU as a whole (17%). About 4% of all deaths can be attributed to alcohol consumption, while about 2% of deaths are related to low physical activity. Air pollution in the form of fine particulate matter (PM2.5) and ozone exposure alone accounted for about 5% of all deaths (IHME, 2020).

Figure 6. Tobacco and dietary risks are major contributors to mortality

Notes: 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 PM2.5 and ozone.
Sources: IHME (2020), Global Health Data Exchange (estimates refer to 2019).

Smoking remains a major public health issue, especially for men

Tobacco consumption remains a major public health concern in Cyprus (Figure 7). The proportion of adults reporting that they smoked every day in 2019 was 23%, which is among the highest across the EU. This is mainly due to high smoking rates among men, with 32% reporting that they smoked daily compared to only 13% of women. Data based on a 2019 general population survey puts the smoking rates even higher, with 38% of the general population smoking in the last 30 days, 35% smoking daily, and 9% smoking more than 20 cigarettes a day in the last 30 days. While many tobacco control policies are in place, they are relatively weak and poorly enforced (see Section 5.1).

Tobacco consumption patterns are changing: the proportion of 15-16-year-olds reporting smoking cigarettes (14%) was lower in Cyprus than in most EU countries in 2019. However, e-cigarettes have become more popular, and one in ten 15-16-year-olds in Cyprus reported smoking e-cigarettes in the last 30 days in 2019.
Obesity among children is a public health concern

One in seven Cypriot adults (15 %) were obese in 2019 – a share similar to the EU average. However, in 2018-20, 62 % of children aged 6-9 were overweight, which is the highest rate among EU countries (WHO Regional Office for Europe, 2022).

Poor nutrition is a key factor contributing to overweight and obesity. Only 8 % of Cypriot adults reported eating five portions of fruit and vegetables per day in 2019 – a proportion that is below the EU average (12 %).

Physical activity is also an important contributor to population health. In 2019, only about 22 % of adults in Cyprus reported meeting the WHO recommendation of at least 150 minutes of moderate physical activity per week, which is a much lower share than the EU average (33 %). This proportion decreased slightly between 2014 and 2019 among both men and women in Cyprus, while the EU averages increased slightly.

Heavy drinking is potentially a less significant problem in Cyprus than in other EU countries

In 2019, average alcohol consumption in Cyprus was 9.6 litres per adult, which is relatively low for European countries. Additionally, only 3.5 % of Cypriot adults reported regular heavy drinking in 2019, which is the lowest share among all EU countries. However, the proportion of 15-16-year-olds who reported heavy drinking in the past month was much higher, at 37 % in 2019 – a higher rate than in many other EU countries. Moreover, data from a Cypriot general population survey show that in 2019, 7.9 % of the population reported heavy drinking almost every month and 4.7 % almost every week.

Socioeconomic inequalities such as education and income level have an impact on health risks

Most behavioural risk factors in Cyprus are more common among people with lower education or income levels. In 2019, nearly one in four adults (24 %) in the lowest income quintile smoked daily compared to one in five (19 %) in the highest income quintile. People with lower income (or education) levels were also less likely to eat at least five portions of fruit and vegetables per day, and more likely to be obese, with about one in six adults in the lowest income quintile reportedly obese compared to less than one in seven in the highest income quintile.

Notes: 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 ESPAD for smoking and binge drinking, and COSI for obesity for adolescents indicators, and EHIS 2019 for adults indicators.

1 Heavy drinking is defined as consuming six or more alcoholic drinks on a single occasion for adults.
4 The health system

The General Healthcare System in Cyprus provides universal coverage through a mix of public and private provision

Since 2019, the Cypriot health system has been financed by state revenues and contributions levied through wages, incomes and pensions. It is a blended system, incorporating both national health service and social health insurance elements, with universal population coverage based on legal residency. Before 2019, the old system covered only about three quarters of the population (see Section 5.2). Under the new General Healthcare System, the Health Insurance Organisation serves as the single purchaser of services from both public and private providers. The State Healthcare Services Organisation is responsible for the development, management, control and supervision of providers in the public sector.

The General Healthcare System has reduced fragmentation and brought together the public and private sectors under a single agency system, creating a new and competitive health environment. Physical resources are split between hospitals and healthcare centres in the public sector, and hospitals, clinics, diagnostic centres, laboratories and pharmacies in the private sector. Gatekeeping in primary care is also a key feature of the way the system has been designed. Primary care is provided mostly by privately contracted personal doctors (a doctor trained in paediatrics for children or usually general practice for adults) in solo practice and some doctors working in public healthcare centres (see Section 5.3).

There has been a dramatic shift from private to public spending as a share of total current health expenditure

Despite a steady increase in recent years, Cyprus still spends less on health in total than other EU countries – both as current expenditure per capita and as a share of GDP (Figure 8). Current health expenditure in Cyprus was 9.4 % of GDP in 2021, or EUR 2 686 per capita, compared to 11.0 % of GDP and EUR 4 028 per capita on average across the EU. The increase in health expenditure coincided with the COVID-19 pandemic, however, and it is difficult to disentangle the impact of increased demand due to COVID-19 infections and the health system treating more patients who were previously unable to access services (see Section 5.2). The public share of health spending has increased substantially since the introduction of the General Healthcare System in 2019: from 42 % in 2018 to 85.3 % in 2021. Some of this is due to a fall in out-of-pocket spending, as coverage was extended to the whole population, but spending on supplementary voluntary health insurance (VHI) has also decreased as trust in the new healthcare system has grown.

As total spending per capita in Cyprus is comparatively low, the relative spend by activity is also below the EU average in almost all areas (Figure 9). The higher spending on inpatient care is a reflection of increased spending for COVID-19 care. Spending on prevention is among the lowest in the EU, at just EUR 59 per capita in 2020 (or 2.2 % of health spending). Similarly, spending on long-term care is very low.

Figure 8. Current health expenditure as a share of GDP in Cyprus is lower than the EU average

![Graph showing current health expenditure as a share of GDP in Cyprus is lower than the EU average](Image)

Note: The EU average is weighted.
Source: OECD Health Statistics 2023 (data refer to 2021, except Malta (2020)).
Figure 9. Health spending on all activities is low, but spending is higher on outpatient than on inpatient care

Notes: 1. Includes curative-rehabilitative care in hospital and other settings; 2. Includes home care and ancillary services (e.g. patient transportation); 3. Includes only the outpatient market; 4. Includes only the health component; 5. Includes only spending for organised prevention programmes; 6. Includes health system governance and administration and other spending. The EU average is weighted.

Source: OECD Health Statistics 2023 (data refer to 2021, except Malta (2020)).

There is an imbalance in the health workforce between the number of doctors and nurses working in the system

In Cyprus, the density of doctors is 5 per 1,000 population, which is slightly above the EU average, while the density of nurses is also around 5 per 1,000 population, which is well below the EU average (Figure 10). The number of doctors practising in Cyprus has more than doubled since 2000, while the number of nurses working in the system has not expanded at the same rate. Broader health workforce shortages in inpatient care are now the key capacity constraint (see Sections 5.2 and 5.3). Moreover, there are serious workforce imbalances between the public and private sectors, as doctors primarily work in the private sector and nurses in the public sector. Prior to the implementation of the General Healthcare System, many doctors in the public system switched to work in the private sector. In response, new doctors and other health professionals had to be recruited from elsewhere in the public system to respond to the demand pressures arising from the COVID-19 pandemic.

Capital investment has been a major feature of national recovery plans to upgrade and modernise the public hospitals and make them better places to work as part of efforts to recruit and retain health workers (see Section 5.3). The total number of acute and non-acute beds in both public and private hospitals in 2021 was 3.1 per 1,000 population. Although this is lower than the EU average (4.8 per 1,000) it is considered sufficient to cover the population’s hospitalisation needs in Cyprus.
5 Performance of the health system

5.1 Effectiveness

The preventable mortality rate in Cyprus is among the lowest in the EU

In 2020, the preventable mortality rate was 112 per 100,000 population in Cyprus, while the EU average was 180 per 100,000 (Figure 11), despite health spending on prevention and health promotion in Cyprus being among the lowest in the EU (see Section 4). The main cause of preventable mortality is lung cancer, which is consistent with high smoking rates, particularly among Cypriot men (see Section 3). This means that there is scope for preventable mortality to be reduced even further with full implementation of all recommendations in the United Nations Framework Convention on Tobacco Control. Indoor smoking bans have been in place since 2017, but enforcement of this legislation remains quite weak. Moreover, cigarettes in Cyprus remain relatively cheap and therefore accessible (WHO, 2020).

Relatively low COVID-19 infection rates early in the pandemic mean that preventable mortality did not increase as much in 2020 as it did elsewhere in Europe. However, the high levels of mortality attributed to COVID-19 in 2021 in Cyprus are likely to increase preventable mortality rates in that year.

Mortality from treatable causes in Cyprus is also low

Other Mediterranean countries also have low preventable mortality rates, but in addition Cyprus has a relatively low rate of mortality from treatable causes, so the country has overall avoidable mortality rates similar to those of Nordic countries – notably Iceland, Norway and Sweden (see Figure 11). In Cyprus, the main causes of treatable mortality include ischaemic heart disease, breast and colorectal cancer, diabetes and stroke. The mortality rate from treatable causes has fluctuated around the same level since 2011, without sustained improvement. In 2020 it was 70 per 100,000 population compared to 92 per 100,000 in the EU as a whole.
While routine childhood immunisation coverage rates are high, uptake of vaccinations in older age groups is lower

In 2019, just before the COVID-19 pandemic, the influenza vaccination rate for adults aged over 65 was only 26 %, which is well below the EU average of 42 % and even further from the WHO target of 75 %. By 2021, coverage had only increased to 43 % in Cyprus, while the EU average had increased to 46 %. This is echoed in the relatively low uptake of COVID-19 booster vaccinations (see Section 5.3).

However, routine childhood immunisation rates are generally higher than the EU averages, except for measles. Vaccination is provided free of charge to all children in health centres or public hospitals, but it is not compulsory in Cyprus. At the beginning of each school year, health visitors check whether pupils are up to date with their vaccinations. In 2021, vaccination rates among children for diphtheria, tetanus and pertussis (96 %) and for Haemophilus influenzae type B (96 %) compared well to EU levels, but vaccination coverage for measles, mumps and rubella in 2021 was 86 % for the first dose (down from 90 % in 2018), and remained steady at 88 % for the second dose (WHO, 2023).

Cyprus introduced the human papillomavirus (HPV) vaccine into the National Immunisation Programme in 2016. By 2019, 64 % of girls aged 15 had been vaccinated against HPV, which is higher than the EU average of 60 % for that year, but lower than coverage in Malta (81 %) and Spain (79 %), for example. Coverage remained at 64 % in both 2021 and 2022.
Screening coverage for cervical cancer and breast cancer is good, but it is very low for colon cancer

Participation rates in cancer screening are close to the EU averages for breast and cervical cancer based on survey data. However, the rate is very low for colorectal cancer, at just 3.3%, although colorectal cancer is a leading cause of cancer death (see Section 2). Cancer screening rates in Cyprus have not improved in recent years, but the limited data available might not provide a complete picture – particularly considering the impact of broadening financial access to services under the new General Healthcare System and the impact of the COVID-19 pandemic limiting physical access to services.

Cancer mortality in Cyprus is among the lowest in the EU (OECD, 2023).

Breast cancer is the only cancer with a national population-based screening programme. The programme targets women aged 50-69; it is free of charge and is offered every other year, with a screening centre operating in each of the major cities. In 2019, surveys found that 65.8% of women aged 50-69 accessed breast cancer screening in the previous two years, which is similar to the EU average of 65.9% in the same year. However, substantial income inequalities in access are apparent. In 2019, only 53% of women in the lowest income quintile reported having been screened, which is much lower than the rate in the highest income quintile (79%) (Figure 12).

More data are needed to assess the quality of care

While data on mortality from treatable causes suggest that Cyprus provides healthcare of good overall quality compared to the EU average, the performance of specific parts of the system cannot be evaluated, as data on quality of care are not systematically collected by either the public or private sectors. Indicators such as avoidable hospital admissions for people with chronic conditions – including chronic obstructive pulmonary disease (COPD), asthma, congestive heart failure and diabetes – can act as a marker of weaknesses in primary care. Similarly, 30-day in-hospital case-fatality rates for potentially fatal conditions such as stroke or acute myocardial infarction (heart attack) are often used as a marker of the quality of acute care. The lack of data for Cyprus makes it difficult to assess the quality and effectiveness of the health system in greater detail, stifling efforts to strengthen service delivery. However, following the introduction of the General Healthcare System, data on quality should now be recorded by the integrated information system, and the information can be used to assess and improve the quality of services provided.

5.2 Accessibility

Unmet needs for medical care have fallen since the introduction of the General Healthcare System

According to the annual EU-SILC survey, unmet needs for medical care in Cyprus are very low (Figure 13). Representative survey data reported in 2022 show that only 0.1% of respondents reported...
that they could not access medical services due to costs, distance to travel or waiting times, while in 2019 – before implementation of the General Healthcare System – the rate was 1.0%. The main reported driver of unmet medical needs was the long waiting times in the old public system. Unmet needs for dental care are also low, although the socioeconomic inequalities are wider, and financial barriers were reported as the main issue (Figure 13).

The data from two waves of Eurofound surveys show that access to services was maintained through the COVID-19 pandemic, and unmet needs remained relatively low in both 2021 and 2022 (10-11%). The higher levels reported for Cyprus under this survey instrument may indicate that some patients delayed seeking care earlier in the pandemic, and the system may yet need to cope with a delayed backlog of unmet needs (see Section 5.3).

Population coverage in Cyprus is now universal and all legal residents are entitled to healthcare
Since 1 July 2020, the General Healthcare System has offered universal coverage to over 99% of the resident population. Legal residents include Cypriot citizens; EU citizens; third country nationals with permanent residence status and their dependents, regardless of income or payment of contributions; and refugees. Asylum seekers are covered for care accessed in public providers, as they were under the previous system, but they are not covered

**Figure 13.** Unmet needs for medical care are very low, but they are higher for dental care

![Diagram showing unmet needs for medical and dental care across different income levels and countries.](https://example.com/diagram)

Notes: Data refer to unmet needs for a medical or dental 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 2022, except Slovakia and Norway (2020), and Iceland (2018)).

---

2 The data from the Eurofound survey are not comparable to those from the EU-SILC survey because of differences in methodologies.
under the General Healthcare System scheme, which makes it hard to access primary care services and much elective care. Undocumented migrants and non-EU students are entitled to healthcare for the treatment and prevention of infectious diseases. Prior to the introduction of universal health coverage, entitlements were linked to citizenship, income or contributions, and only around 83% of the population were technically considered to be covered free of charge.

The General Healthcare System provides a comprehensive benefits package covering primary, specialist outpatient and inpatient care. Under the previous system, public spending on all types of health services was much lower than the average for the EU as a whole, whereas now it is higher for outpatient medical care, pharmaceuticals, and inpatient care (Figure 14). To ensure financial access to medicines, under the General Healthcare System beneficiaries pay a flat copayment of only EUR 1 for the cheapest generic equivalent of a prescribed medicine. If patients wish to obtain the brand-name medicine, they need to pay the price difference between the generic and the branded product.

From 1 December 2020, some preventive dental care services were included in the benefits package, but dental treatments such as fillings or extractions are still excluded. Consequently, public spending on dental care is low, and out-of-pocket spending on dental care accounts for almost a third of all out-of-pocket expenditure. Another important gap in financial coverage is spending on therapeutic appliances such as mobility aids, spectacles and hearing aids.

Affordability is not a major barrier to accessing healthcare in Cyprus. Out-of-pocket spending has fallen considerably with the extension of coverage and increased availability of health providers under the new General Healthcare System. In 2019, out-of-pocket spending was 34%—more than double the 15% EU average. By 2020, it had fallen to 18%, and by 2021 it was much lower at 10% (Figure 15).

**Figure 14. Public funding for outpatient medical services and pharmaceuticals in Cyprus is relatively high**

<table>
<thead>
<tr>
<th></th>
<th>Inpatient care</th>
<th>Outpatient medical care</th>
<th>Dental care</th>
<th>Pharmaceuticals</th>
<th>Therapeutic Appliances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus</td>
<td>93%</td>
<td>85%</td>
<td>17%</td>
<td>59%</td>
<td>15%</td>
</tr>
<tr>
<td>EU</td>
<td>91%</td>
<td>78%</td>
<td>34%</td>
<td>59%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Notes: Outpatient medical services mainly refer to services provided by generalists and specialists in the outpatient sector. Pharmaceuticals include prescribed and over-the-counter medicines and medical non-durables. Therapeutic appliances refer to vision products, hearing aids, wheelchairs and other medical devices.


**Figure 15. Out-of-pocket spending in Cyprus is well below the EU average**

<table>
<thead>
<tr>
<th>Overall share of health spending</th>
<th>Distribution of OOP spending by function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus</td>
<td>Inpatient 10% Outpatient medical care 29% Pharmaceuticals 13% Dental care 33% Others 15%</td>
</tr>
<tr>
<td>VHI 5 %</td>
<td>OOP 10%</td>
</tr>
<tr>
<td>Government/compulsory schemes 85%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall share of health spending</th>
<th>Distribution of OOP spending by function</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>Inpatient 6% Outpatient medical care 20% Pharmaceuticals 24% Dental care 10% Long-term care 24% Others 15%</td>
</tr>
<tr>
<td>VHI 4 %</td>
<td>OOP 15%</td>
</tr>
<tr>
<td>Government/compulsory schemes 81%</td>
<td></td>
</tr>
</tbody>
</table>

Notes: VHI also includes other voluntary prepayment schemes. The EU average is weighted.

Sources: OECD Health Statistics 2023; Eurostat Database (data refer to 2021).
As noted above, coverage of all medical services and goods has been expanded – particularly for pharmaceuticals and inpatient care. The change in coverage now means that the main driver of out-of-pocket spending is dental care. The impact of high out-of-pocket spending on catastrophic spending for households was one impetus for reform, and levels are expected to have decreased, although data since 2015 are lacking.\(^3\)

**The overall availability of services in the health system has improved, particularly through a reduction in waiting times**

Although the benefits package is quite comprehensive, for some services a lack of availability of providers or facilities prevents beneficiaries from accessing their full coverage entitlements. This is especially the case for long-term care, palliative care and rehabilitation services, which have been partially covered under the General Healthcare System since 2020, as well as physiotherapy, speech therapy and homecare – particularly for patients with chronic conditions. The introduction of the General Healthcare System enabled the Health Insurance Organisation to contract with private providers, thereby relieving some of the capacity constraints in inpatient care and the backlog of patients on waiting lists (see Section 5.3).

Moreover, although many elective surgery procedures were cancelled during the pandemic, access to regular emergency care could continue with contracted private providers, while emergency capacity in public hospitals was used to care for COVID-19 patients. As was the case across Europe, telehealth services were expanded rapidly, initially for the remote care of COVID-19 patients but later also for other patients. Eurofound survey data show that the share of adults in Cyprus reporting that they had a remote medical consultation since the beginning of the pandemic – either online or by telephone – increased from 33% in June/July 2020 to 48% in 2021 (Figure 16).

### Figure 16. Use of remote consultations continued to increase throughout the pandemic

![Graph showing increase in remote consultations](image)

*Notes: The EU average is weighted. Low reliability for 2021 data from Cyprus, Latvia and Malta, and for 2021 and 2020 data from Luxembourg because of low sample sizes.*

*Source: Eurofound (2021).*

**Organisational barriers to access are limited but health workforce shortages are a problem**

The current key capacity constraint is health workforce shortages, particularly for nurses in the public hospitals (see Section 5.3). Additionally, the limited availability of some specialists means that some have waiting lists both for consultations and for elective surgery. Until July 2022, the lack of availability of personal doctors on weekends and holidays was an organisational barrier to access, but changes to the contract with the Health Insurance Organisation mean that personal doctors now provide out-of-hours emergency access through rotas to cover shifts at these times. Access to emergency departments is also improving as more private providers are contracting with the General Healthcare System. The distribution of health workers and facilities, and cultural or language barriers are not considered major accessibility problems under the General Healthcare System; nor are other barriers to accessing health services associated with distance, working hours and choice a feature of the system in Cyprus.

---

\(^3\) Catastrophic expenditure is defined as household out-of-pocket spending exceeding 40% of total household spending net of subsistence needs (i.e. food, housing and utilities).
5.3 Resilience

The COVID-19 pandemic has proved to be the most significant disruption to health systems in recent decades. It has shed light on the vulnerabilities and challenges within countries’ emergency preparedness strategies and on their ability to provide healthcare services to their populations. In response to the enduring effects of the pandemic – as well as other recent crises such as cost-of-living pressures and the impact of conflicts like the war against Ukraine – countries are implementing policies to mitigate the ongoing impacts on service delivery, invest in health system recovery and resilience, improve critical areas of the health sector, and fortify their preparedness for future shocks.

The COVID-19 pandemic tested the resilience of the Cypriot health system and initially restricted capacity for elective procedures

During the first waves of COVID-19, hospital capacity was expanded to meet increased demand – particularly for intensive care unit beds – by moving routine services to private hospitals and reserving beds in the public sector for COVID-19 patients. Even before the pandemic, indicators such as bed numbers, hospital discharges and occupancy rates in Cyprus were lower than the EU averages. Intensive care bed capacity expanded from 0.8 per 10 000 population in 2019 to 0.9 in 2021 as part of the pandemic response, to avoid hospital outbreaks and maintain access to emergency care. As a result, however, discharge rates and occupancy rates declined, highlighting the reduction in hospital volumes and activity levels in 2020. Despite the contracting in of extra capacity, there was still a drop in the volume of elective surgical procedures performed in 2020 (Figure 17). However, it also enabled the system to rapidly increase the volume of elective procedures provided in 2021 to try and clear the backlog of cases and avoid increased waiting times in Cyprus, which have previously been a major barrier to access (see Section 5.2).

Figure 17. The COVID-19 pandemic negatively impacted the volume of elective procedures provided

<table>
<thead>
<tr>
<th>Hip replacement</th>
<th>Knee replacement</th>
<th>Breast cancer surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


In 2021, COVID-19 vaccination coverage in Cyprus surpassed the EU average, but momentum has not been maintained

Low COVID-19 infection rates in Cyprus reduced extreme pressure on the health system through 2020, and the initial rollout of the vaccination programme was successful. However, sustaining good vaccination coverage to limit infections has proved more challenging (Figure 18). Low coverage of second booster vaccinations among older age groups is likely to have contributed to the rise in excess mortality in 2021 and 2022 (see Section 2).

Investment in the health system has been significant, and infrastructure modernisation is the top priority

The growth in public spending on health began from a low base and started before the COVID-19 pandemic, in line with health financing reforms that sought to improve financial protection and reduce out-of-pocket spending in Cyprus (see Section 4). With support from EU Structural Funds, a Capacity Master Plan for Health was established to provide the planning and decision-making framework for the healthcare system with at least a 10-year time horizon. The current priority...
for financial and capital investments in the health system is digitisation to support quality of care, efficiency and informed decision making. EU funding through the national Recovery and Resilience Plan (EUR 69.6 million) is mostly earmarked for the modernisation and upgrading of public hospitals (EUR 50 million), but the Plan will also invest in digital health tools (EUR 10 million) (Figure 19). The overall aim of the investment programme is to upgrade buildings and equipment to improve working conditions for staff and enable them to provide high-quality care, and to support the environmental sustainability of the health system.

**Figure 19. Capital spending under Cyprus’s Recovery and Resilience Plan seeks to upgrade and modernise hospital infrastructure and equipment**

Notes: These figures refer to the original Recovery and Resilience Plan. The ongoing revision of the Plan might impact its size and composition. Some elements have been grouped together to improve the chart’s readability.


**Investment in data and information systems has been boosted by the Recovery and Resilience Plan and EU Cohesion Policy**

The key health policy reform in Cyprus has been implementation of the General Healthcare System since 2019. This involved a complete reconfiguring of the health system, which has had a profound impact on all types of service providers. While the focus of this reform was to bring about universal health coverage, it required the rapid scaling up of new data systems to ensure efficiency and transparency. The integrated information system is the backbone of the General Healthcare System and the basic tool for collecting, reporting, monitoring and analysing its activity. The aim is to use the system to link spending to quality indicators and performance monitoring. Through the Recovery and Resilience Plan there will also be considerable investment in digital
health – particularly electronic health records, electronic prescribing and electronic dispensing. Similarly, with the rollout of the EU Cohesion Policy 2021-27 programming, Cyprus has elected to focus investments through this mechanism entirely on digital health. Cyprus is set to invest EUR 8.3 million in digital health services and applications through the EU Cohesion Policy, 60% of which will be co-financed by the EU.4 It is envisaged that these investments in digital infrastructure will align Cyprus with the emerging EU Health Data Space.

**Weak gatekeeping in primary care is a key source of inefficiency in the health system**

In 2019, the proportion of primary care visits that resulted in referrals to specialists reached 70%, and although this has now been reduced to 40%, the level is still very high. The aim is to reduce the referral rate to 25% through a combination of new value-based financing mechanisms for primary care and training for personal doctors.

In hospital care, the main challenge to efficiency is overuse of expensive medical imaging for diagnostics. Guidelines and protocols for medical diagnostics are insufficient, and there is a lack of adequate control of contracted private hospitals and their invoicing for services. New ways of calculating the reimbursement rates for providers have sought to integrate quality criteria. The Health Insurance Organisation has introduced an action plan to safeguard the sustainability of the General Healthcare System that focused on controlling the behaviour of contracted providers; strengthening data analysis and controls; creating a culture of rational use of the system by beneficiaries; and better organisation, staffing and development within the system.

**Health workforce shortages are a key capacity constraint and are the focus of many policy efforts**

The Capacity Master Plan for Health considers recruitment, retention and reskilling of the health workforce as part of its long-term objectives. Upskilling opportunities for health workers are also part of the Recovery and Resilience Plan. Longer-term strategic planning is necessary because Cyprus has a shortage of doctors and nurses in the public system (see Section 4). Studying medicine has only been possible in the country since 2013, which is why data on medical graduates are only available from 2019 (Figure 20). Previously, the system relied on medical graduates who studied abroad returning to practise in Cyprus. The number of nursing graduates has decreased substantially in recent years, more than halving since 2014 (Figure 20), and is now much below the EU average.

**Figure 20. Doctors are now graduating from Cypriot universities, but nurse graduate numbers have not recovered from a steep reduction a decade ago**

![Graph showing medical and nursing graduates per 100,000 population from 2010 to 2021](Sources: OECD Health Statistics 2023; Eurostat Database.)

Implementation of the General Healthcare System has allowed public hospitals to change their mode of operation by reducing the bureaucratic workload and rigid hierarchies that hampered recruitment and retention in the public system. As well as improving the attractiveness of working in the Cypriot health system, upgrading the hospitals – including significant investment in new equipment – has also highlighted important training needs to upskill the workforce to use these technologies.

---

4 These EU Cohesion Policy figures reflect the status as of September 2023.
appropriately. This creates space to expand the skill mix in the hospital sector. However, skill-mix solutions are more challenging in primary care, because most personal doctors are in solo practices.

**The COVID-19 pandemic re-emphasised the importance of emergency preparedness in Cyprus**

Pandemic planning has been a particular priority and, at the end of 2022, a new WHO Country Office opened in Cyprus specifically to help strengthen and upgrade preparedness against emerging and epidemic diseases. However, other emergencies are also on the horizon, such as antimicrobial resistance (AMR) and climate change, and health systems also need to prepare for these. Consequently, greening health infrastructure has been highlighted as part of the hospitals upgrading process. Similarly, tackling AMR is a high-priority policy area for Cyprus, and a National Strategy against AMR has been in place since 2012. Designing a new electronic platform for the surveillance of nosocomial antibiotic consumption and healthcare-associated infections is being financed through the Recovery and Resilience Plan. Antibiotic consumption in Cyprus has been falling, but remains high, and rates of designated AMR infection are the highest in the EU (Figure 21).

*Figure 21. In 2021, two in five hospital patients with bloodstream infections in Cyprus tested positive for antibiotic-resistant bacteria*

<table>
<thead>
<tr>
<th>Country</th>
<th>% of bloodstream infections due to MRSA among hospital patients tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greece</td>
<td>43</td>
</tr>
<tr>
<td>Romania</td>
<td>42</td>
</tr>
<tr>
<td>Croatia</td>
<td>41</td>
</tr>
<tr>
<td>Italy</td>
<td>35</td>
</tr>
<tr>
<td>Portugal</td>
<td>25</td>
</tr>
<tr>
<td>Spain</td>
<td>24</td>
</tr>
<tr>
<td>Malta</td>
<td>22</td>
</tr>
<tr>
<td>Hungary</td>
<td>20</td>
</tr>
<tr>
<td>Poland</td>
<td>19</td>
</tr>
<tr>
<td>EU</td>
<td>16</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>15</td>
</tr>
<tr>
<td>France</td>
<td>11</td>
</tr>
<tr>
<td>Ireland</td>
<td>10</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>9</td>
</tr>
<tr>
<td>Estonia</td>
<td>8</td>
</tr>
<tr>
<td>Greece</td>
<td>6</td>
</tr>
<tr>
<td>Germany</td>
<td>5</td>
</tr>
<tr>
<td>Belgium</td>
<td>4</td>
</tr>
<tr>
<td>Austria</td>
<td>3</td>
</tr>
<tr>
<td>Finland</td>
<td>3</td>
</tr>
<tr>
<td>Sweden</td>
<td>2</td>
</tr>
<tr>
<td>Denmark</td>
<td>2</td>
</tr>
<tr>
<td>Estonia</td>
<td>2</td>
</tr>
<tr>
<td>Iceland</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: Percentage of bloodstream infections due to methicillin-resistant Staphylococcus aureus (MRSA) among patients with symptoms of bloodstream infections who have growth of Staphylococcus aureus in tested blood samples. Data refer to 2021.
Sources: ECDC, WHO Regional Office for Europe.

### 6 Spotlight on mental health

**The burden of mental health issues in Cyprus is high**

Although there are significant gaps in information about the prevalence of mental health issues in Cyprus, as in other EU countries, available evidence suggests that they affect a relatively high proportion of the population. Even before the COVID-19 pandemic, the OECD estimated that the direct and indirect costs of mental health problems totalled EUR 569 million in 2015, which was equivalent to 3.2 % of GDP (OECD, 2018). A high proportion of the indirect costs of mental health problems were due to the high unemployment rate for people with depression.

According to estimates from the Institute for Health Metrics and Evaluation (IHME), one in six people in Cyprus (17.2 %) had a mental health issue in 2019 – a proportion slightly higher than the EU average (16.7 %). The most common mental health conditions in Cyprus are anxiety disorders (estimated to affect 7.2 % of the population) and depressive disorders (3.8 %). Alcohol and drug-use disorders affect 2.6 % of the population, but this is lower than the EU average (3.4 %) (Figure 22).
Data from EHIS in 2019 show that 5 % of Cypriot adults reported experiencing depression before the pandemic, although gaps by gender and income were notable. About 5.8 % of women reported depression in 2019 compared to 3.4 % of men, and women and men in the lowest income quintile were about four times more likely to report depression than those in the highest quintile.

Complex social and cultural factors affect suicidal behaviours and the reporting of suicide deaths. Consequently, while mental health problems increase the risk of suicide, suicide rates in Cyprus remain low relative to the burden of mental health problems, and the gender gap between male (5.4 per 100 000 population) and female (1.6 per 100 000 population) suicide rates is comparatively narrow.

Mental health services are provided predominantly by public sector providers

Under the universal General Healthcare System, mental healthcare is provided by the specialist Mental Health Services Directorate. Patients need a referral from their personal doctor, and make a copayment of EUR 6-10 to access mental health services. Outpatient mental healthcare is led by psychiatrists working in multi-professional teams based in public primary care health centres. Community mental health nursing teams are also involved in primary prevention and mental health promotion, with a wide range of services and activities. The Directorate also runs a Centre of Prevention and Psychosocial Support for children aged up to 17 and their families. Children and adolescents with mild to moderate psychological difficulties are referred to the Centre, whose staff can work in both family and school settings.

As in several other EU countries, many Cypriots reported unmet needs for mental healthcare specifically during the pandemic. According to a Europe-wide survey carried out in spring 2021 and spring 2022, 11 % of Cypriots reported unmet needs for healthcare, of which 30 % were related to mental healthcare (Figure 23).

Recent health system reforms have changed the way mental health services are provided

The health system reforms introduced in 2019 encompassed both inpatient and outpatient mental health services, and both are now the responsibility of the State Healthcare Services Organisation. These changes to mental health services took precedence over plans to develop a mental health strategy in 2019, although in 2023 calls were once again made for a new strategy to be developed.

The major challenge for mental health services is fully meeting the needs of an ever-increasing number of refugees and asylum seekers needing psychological support. The situation is more difficult because asylum seekers are not covered by the General Healthcare System. In 2021, the Mental Health Services Directorate received a grant from the EU Asylum, Migration and Integration Fund for a project to provide mental health services for migrants.
7 Key findings

- While life expectancy in Cyprus is high (81.7 years in 2022), and 78% of Cypriots report being in good health, women live much of their lives after the age of 65 with disability and illness. Almost one fifth (19%) of all deaths in Cyprus in 2019 could be attributed to tobacco consumption (including direct and second-hand smoking), which is above the EU average (17%). However, deaths attributable to other behavioural risk factors are below the EU averages, including alcohol consumption (4% in Cyprus; 6% across the EU) and dietary risk factors (14% in Cyprus; 17% across the EU).

- Rates of mortality from preventable and treatable causes were low in Cyprus before the pandemic. The main cause of preventable mortality was lung cancer, which is consistent with high smoking rates – particularly among Cypriot men. However, the high levels of mortality attributed to COVID-19 in 2021 are likely to increase preventable mortality rates in that year. The main causes of treatable mortality in Cyprus are ischaemic heart disease, breast cancer and colorectal cancer, although cancer mortality in Cyprus is among the lowest in the EU. However, data limitations mean that attributing low treatable mortality rates to the performance of specific parts of the system is not possible.

- The growth in public spending on health began from a low base and started before the COVID-19 pandemic, in line with health financing reforms that sought to improve financial protection and reduce out-of-pocket expenditure in Cyprus. Out-of-pocket spending as a share of total health spending fell markedly from 34% in 2019 to 18% in 2020 and 10% in 2021. This is likely to reduce levels of catastrophic spending on health significantly.

- Before the reforms introducing the General Healthcare System in Cyprus, long waiting times were an important barrier to medical care, and patients frequently paid out of pocket in full to access services more quickly. Now most capacity in the private sector has been contracted by the Health Insurance Organisation to provide publicly funded services. It is therefore difficult to disentangle the impact of increased demand due to COVID-19 infections and the health system treating more patients who were previously unable to access services.

- During the first waves of the pandemic, hospital capacity was expanded to meet increased demand – particularly for intensive care unit beds – by moving routine services to private hospitals and reserving beds in the public sector for COVID-19 patients. However, despite the contracting in of extra capacity, there was still a drop in the volume of elective surgical procedures performed in 2020. The extra capacity was used in 2021 to try and clear the backlog of cases, and the volume of elective care provided was increased markedly to avoid longer waiting times. The key capacity constraint currently is health workforce shortages, particularly for nurses.

- The current priority for financial and capital investments in the health system is digitisation to support quality of care, efficiency and informed decision making. Investments through the Recovery and Resilience Plan and EU Cohesion Policy should make an important contribution to this. The overall aim of the investment programme is to upgrade buildings and equipment to improve working conditions for staff and enable them to provide high-quality care, and to improve the retention and recruitment of health workers.

- Mental health is an important issue in Cyprus that exerts a particularly high burden through indirect costs, such as high levels of unemployment for people with chronic mental health conditions. Wider health system reforms consolidated the public provision of mental health services as part of a universal benefits package. An EU-funded project has sought to extend provision for especially vulnerable groups, such as asylum seekers, who are not entitled to access statutory health services.
Key sources

Theodorou M et al. (2023), Cyprus: health system review, Health Systems in Transition (In press).


References


The Country Health Profiles are a key element of the European Commission’s State of Health in the EU cycle, a knowledge brokering project developed with financial support from the European Union.

These Profiles are the result of a collaborative partnership between the Organisation for Economic Co-operation and Development (OECD) and the European Observatory on Health Systems and Policies, working in tandem with the European Commission. Based on a consistent methodology using both quantitative and qualitative data, the analysis covers the latest health policy challenges and developments in each EU/EEA country.

The 2023 edition of the Country Health Profiles provides a synthesis of various critical aspects, including:

- the current state of health within the country;
- health determinants, with a specific focus on behavioural risk factors;
- the structure and organisation of the health system;
- the effectiveness, accessibility and resilience of the health system;
- For the first time in the series, an account of the state of mental health and related services within the country.

Complementing the key findings of the Country Health Profiles is the Synthesis Report by the European Commission.

For more information, please refer to: ec.europa.eu/health/state

Please cite this publication as:
OECD/European Observatory on Health Systems and Policies (2023),
Cyprus: Country Health Profile 2023, State of Health in the EU,

ISBN 9789264792456 (PDF)
Series: State of Health in the EU
SSN 25227041 (online)