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Bosnia and Herzegovina

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BOSNIA AND HERZEGOVINA

Health Systems in Action (HSiA) Insights

Bosnia and Herzegovina

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Editorial Team

This edition of the Health Systems in Action Insight for Bosnia and Herzegovina was written by Yulia Litvinova, Boris Rebac, Erwin Cooreman and Bernd Rechel.

The Health Systems in Action series

The Health Systems in Action Insights series supports Member States in the WHO European Region that are not in the European Union. The Insights for each country are intended to:

- provide core information and data on health systems succinctly and accessibly;
- outline the country health system context in which WHO Europe's Programme of Work is set;
- flag key concerns, progress and challenges; and
- build a baseline for comparisons, so that Member States can see how their health systems develop over time and in relation to other countries.

The series is co-produced by the WHO Regional Office for Europe and the European Observatory on Health Systems and Policies. It draws on the knowledge and understanding of the WHO Country Offices and of the Division of Country Health Policies and Systems (CPS), the WHO Barcelona Office for Health Systems Financing and other WHO/Europe technical programmes; as well as the Health Systems in Transition series and the work of the European Observatory on Health Systems and Policies.

The Insights follow a common template that provides detailed guidance and allows comparison across countries. The series is publicly available on the websites of the WHO Regional Office for Europe and the European Observatory on Health Systems and Policies (eurohealthobservatory.who.int).

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Contents page

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HEALTH SYSTEMS IN ACTION INSIGHTS: BOSNIA AND HERZEGOVINA

Key points

- Bosnia and Herzegovina consists of two entities – the Federation of Bosnia and Herzegovina, and the Republika Srpska – and the Brčko District of Bosnia and Herzegovina. The Federation of Bosnia and Herzegovina is further divided into 10 cantons, each governed independently by cantonal governments. The resulting complex structure includes 13 health insurance funds and 14 ministries in charge of health.
- Health policy decisions are centralized in the Republika Srpska and decentralized to the canton levels in the Federation of Bosnia and Herzegovina, complicating reform and consensus-building efforts.
- Although social health insurance schemes are mandatory in both entities, population coverage is not universal and varies across the entities of Bosnia and Herzegovina and the cantons within the Federation of Bosnia and Herzegovina, leaving significant portions of the population with very limited access to publicly financed health care.
- In the case of the Federation of Bosnia and Herzegovina, resource pooling occurs at the cantonal level, which hinders equitable distribution and accessibility of services, particularly in secondary and tertiary care, and results in limited patient choice. In the Republika Srpska and the Brčko District of Bosnia and Herzegovina pooling takes place at the entity/district level.
- Health care provision remains largely hospital-based, although efforts are under way to strengthen primary health care (PHC). Other reforms aim to improve prevention programmes for noncommunicable diseases (NCDs) and immunization, as well as initiatives to digitalize health records and introduce e-health to improve accessibility and efficiency of care.
- Public spending on health as a share of gross domestic product (GDP) declined in the years before the COVID-19 pandemic. Out-of-pocket (OOP) spending is high (amounting to 31% of health spending in 2021), which results in a relatively high degree of financial hardship, affecting over 8% of households in the Federation of Bosnia and Herzegovina and almost 10% in the Republika Srpska.
- Despite increased bed capacity in response to the COVID-19 pandemic, Bosnia and Herzegovina still has a comparatively low ratio of hospital beds per population. Occupancy rates vary significantly between entities, indicating disparities in health care demand and/or resource utilization.
- The numbers of physicians and nurses per population in Bosnia and Herzegovina have increased markedly. However, the country lacks a strategic approach to health workforce development in the face of an ageing health workforce and increasing emigration to other countries.
- Bosnia and Herzegovina experienced substantial excess mortality during the COVID-19 pandemic. Nevertheless, the pandemic did not undo gains in maternal and infant mortality rates, with both reaching historic lows in 2021.
- Prior to the COVID-19 pandemic, mortality rates in the country declined, including premature mortality. Cardiovascular disease remains the leading cause of death and disability. Premature mortality among adults aged 30 to 69 years is mainly due to cancer.
- Behavioural risks such as smoking and unhealthy diets, as well as hypertension and high fasting blood sugar, are major contributors to ill health. Ongoing efforts are aimed at promoting healthy lifestyles, including the implementation of stricter tobacco policies and the provision of smoking cessation services by family doctors.

1 ORGANIZING THE HEALTH SYSTEMS

Bosnia and Herzegovina has complex and fragmented health systems

The current political system of Bosnia and Herzegovina can be traced back to the 1995 Dayton Peace Agreement that ended the war and established a state composed of two entities, each of which enjoys a high degree of autonomy: the Federation of Bosnia and Herzegovina (with a population of about 2.2 million according to the 2013 census) and the Republika Srpska (with about 1.2 million inhabitants in 2013). In addition, the Brčko District of Bosnia and Herzegovina, a self-governing area with roughly 83 500 inhabitants in 2013, was created in 2000. The Federation of Bosnia and Herzegovina is further divided into 10 cantons, each governed independently by cantonal governments. Each administrative unit (the state of Bosnia and Herzegovina, the two entities, the cantons and the Brčko District of Bosnia and Herzegovina) has its own governance structure, resulting in a complex institutional framework. This includes a total of 14 ministries/departments in charge of health and 13 health insurance funds (one each in the Federation of Bosnia and Herzegovina, the Republika Srpska and the Brčko District of Bosnia and Herzegovina, and 10 in the individual cantons of the Federation of Bosnia and Herzegovina).

Health policy decision-making is devolved to the entity/district level, with each having its own laws on health care and on health insurance. In the Federation of Bosnia and Herzegovina, the Ministry of Health makes health policies and coordinates them across its cantons. The 10 cantonal governments are responsible for the planning and delivery of health insurance and health services. Conversely, in the Republika Srpska the health system is centralized, with the Ministry of Health and Social Welfare in the Government of the Republika Srpska holding key authority.

Health policy-making in Bosnia and Herzegovina remains challenging, given the asymmetric and – in the case of the Federation of Bosnia and Herzegovina – fragmented administrative structure and the associated limited inter-governmental cooperation and coordination. Attempts to adopt a common strategy for health sector reforms have not reached consensus (World Bank, 2019, 2020).

While benefits packages are relatively comprehensive, coverage is not universal

Mandatory health insurance contributions are the main source of public funding for the health systems in Bosnia and Herzegovina. They are collected and pooled at the entity (the Republika Srpska), district (the Brčko District of Bosnia and Herzegovina) or canton level (the 10 cantons of the Federation of Bosnia and Herzegovina). Only around 85% of the whole population is covered by social health insurance.

In the Federation of Bosnia and Herzegovina rates of population coverage vary across cantons, from 84% of the population in Herzegovina-Neretva Canton to about 100% in Sarajevo Canton. However, across the Federation of Bosnia and Herzegovina all children (below the age of 18 years), regardless of insurance status, are entitled to the same benefits. Adults without insurance coverage are entitled to a limited range of publicly financed health services, including emergency care, care during pregnancy, treatment of severe mental illness and treatment of selected chronic diseases (Voncina et al., in press a).

In the Republika Srpska employed persons and certain population groups (such as children, dependents of the employed, pensioners, farmers, persons receiving social or unemployment benefits, veterans or war wounded, and some others) are subject to publicly financed coverage. Uninsured individuals – over 20% of the population – are entitled to emergency care only, although those with selected health conditions (for example, cancer, diabetes, epilepsy, etc.) qualify for all publicly financed health benefits (Voncina et al., in press b). The Health Insurance Fund of the Republika Srpska provided full coverage to all residents for three years, 2020–2023, during and shortly after the COVID-19 pandemic. As of 1 August 2023 the financing of health services for the uninsured is strictly based on either contribution status or on grounds specified in the Law on Mandatory Health Insurance (FZO RS, 2023c).

In the Federation of Bosnia and Herzegovina, the insured of the respective cantonal Health Insurance Fund can receive publicly paid primary and secondary services only from that canton's contracted cantonal providers, and not from providers from other cantons of the Federation of Bosnia and Herzegovina. In the Republika Srpska and the Brčko District of Bosnia and Herzegovina, the insured can receive publicly paid health services from contracted providers in the whole entity/district.

The Federation of Bosnia and Herzegovina established a minimum services package that has to be provided in all cantons, in addition to a list of complex services and expensive medicines to be financed by the Federation's Health Insurance and Reinsurance Fund. However, the level of benefits varies across cantons, as they can offer additional services or they do not ensure the minimum services package. Primary care, specialist care, medical products, diagnostic tests and dental care consultations and treatment are subject to fixed co-payments, while outpatient medicines are subject to fixed and percentage co-payments and reference pricing (Voncina et al., in press a). Although there are exemptions from co-payments based on income and age, there is no cap on co-payments.

In the Republika Srpska co-payments are defined by the health insurance fund: physician consultations and hospital treatments are subject to fixed co-payments, while therapies, rehabilitation, diagnostics and outpatient prescription medicines require percentage co-payments. About 50% of the population are exempt from user charges based on income, health status and age and there is a cap on co-payments per service, set at BAM 370 (€190), but the cap is high and does not apply

to co-payments for outpatient prescribed medicines and there is no overall cap (Voncina et al., in press b).

Resource pooling is mainly at cantonal level in the Federation of Bosnia and Herzegovina, with limited redistribution across health insurance funds

As the legal responsibility for health care is decentralized, the pooling of health insurance funds is also done at the lower administrative level, which limits the equitable allocation of budgets and accessibility of services across the country. In the Federation of Bosnia and Herzegovina contributions to cantonal health insurance funds are pooled and allocated at the cantonal level, while approximately 10% of each canton's revenues are pooled across cantons and are allocated to the Health Insurance and Reinsurance Fund of the Federation of Bosnia and Herzegovina. This Fund was introduced in 2002 with the aim of enhancing equity through redistributive capacity across cantonal funds. In practice, the funds pooled by the Health Insurance and Reinsurance Fund of the Federation of Bosnia and Herzegovina are primarily used to purchase high-cost medicines for tertiary health care and new therapies in cancer care (which are provided in specialized tertiary level institutions/hospitals of the Federation of Bosnia and Herzegovina) (Guzvic et al., 2018). This leaves patients with limited choice for secondary health care services such as cardiology services in their cantons of origin (cantonal hospitals) or with long waiting lists for tertiary health care services. There is one insurance fund in each of the Republika Srpska and Brčko District of Bosnia and Herzegovina; pooling takes place at the entity/district level and budgets are allocated to providers on the basis of contracts.

Despite strengthening of primary health care, health service provision remains hospital-centred

In the 2000s, health reforms in Bosnia and Herzegovina focused on strengthening primary health care according to the concept of family medicine, and a rationalization of secondary and tertiary health care. The number of specialists in family medicine increased and the primary health care system was rebuilt. The potential of primary health care is being realized partly through additional budget allocations for primary health care from individual health insurance funds, as seen in the Republika Srpska (FZO RS, 2023a), and partly through financial and technical support from bilateral and international organizations such as the European Union, UNICEF and WHO (Delegation of the European Union to Bosnia and Herzegovina, 2022; UNICEF, 2023).

Primary health care is mainly provided in municipal primary health care centres in both entities. Secondary health care services are provided by outpatient specialists in primary health care centres and hospitals, and tertiary health care in university clinical centres (WHO, 2020).

Overall, more health spending is devoted to inpatient care, which in 2021 accounted for 32.2% of health spending, followed by medical goods (largely medicines) which accounted for 27.8% and outpatient care, including both general and specialized outpatient care (22.9%).

In the Federation of Bosnia and Herzegovina, the cantons are the primary owners of hospitals, while in the Republika Srpska it is the Government of the Republika Srpska. Ownership of the three university clinical centres in the Federation of Bosnia and Herzegovina is shared between the cantons and the Federation of Bosnia and Herzegovina.

2 FINANCING AND ENSURING FINANCIAL PROTECTION

Health spending per capita is higher than in countries with similar income levels

Bosnia and Herzegovina spent 9.6% of its GDP on health in 2021, which was slightly above the EU average (9.4%). Per capita spending on health amounted to US$ 1693 PPP in 2021 **(Fig. 1)**. This was below the average of EU and South-Eastern Europe Health Network (SEEHN) countries (US$ 2062 PPP), but above the average of upper middle-income countries (UMICs) in the WHO European Region (US$ 1646 PPP). The share of public spending on health in Bosnia and Herzegovina was higher than in countries with similar income levels.

Public spending on health is relatively high as a share of GDP but was falling before COVID-19

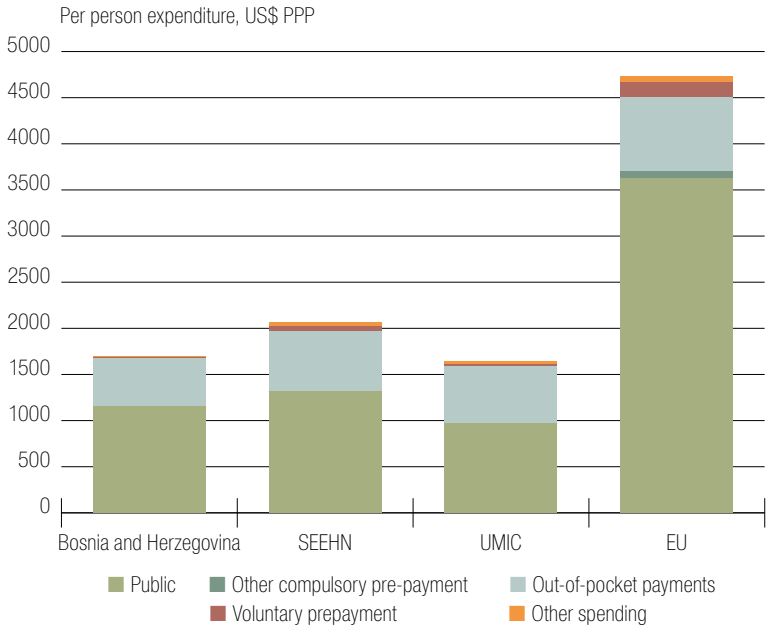
Public spending on health as a share of GDP increased from 4.1% in 2000 to a peak of 6.7% in 2014 and then declined to 6.1% in 2019. It jumped to 6.8% in 2020 (due in part to an increase in public spending on health and economic contraction in response to COVID-19) and fell to 6.5% in 2021 as the economy grew again. The 2021 share was below the EU average (7.1%) but higher than the SEEHN average (5.3%) and the average of the UMICs in the WHO European Region (4.2%) **(Fig. 2)**.

The strong reliance on employment-related contributions raises concerns about financial sustainability

Public spending accounted for 69.0% of health spending in 2021 and 63.5% of public spending came from mandatory social health insurance contributions (payroll taxes) (WHO, 2024b). Formally employed persons represent only about one third of the total number of

Fig.1

Per capita health spending is in line with neighbouring countries and countries with similar income levels

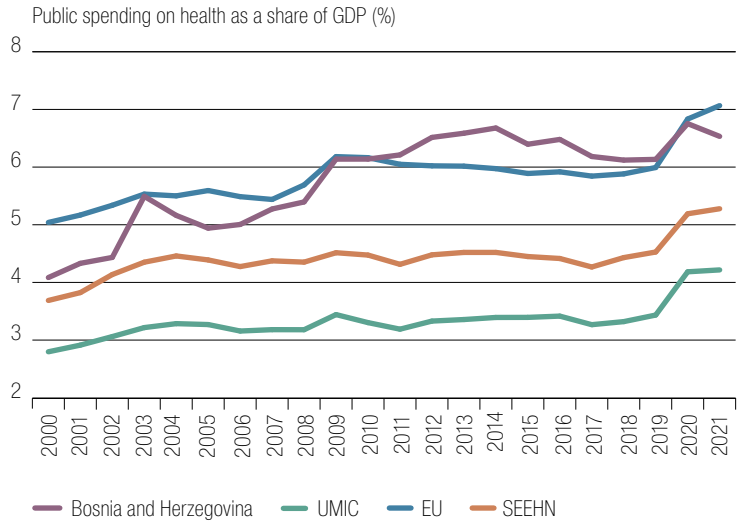


Source: WHO, 2024b.

Note: 2021 data. Public refers to transfers from government budgets and social health insurance contributions. Other compulsory pre-payment refers to premiums for mandatory health insurance schemes in Belgium, Finland, France, Germany, the Netherlands (Kingdom of the) and Switzerland. Other spending includes external funding and some other marginal spending. UMIC: upper-middle income countries in the WHO European Region; PPP: purchasing power parity. SEEHN includes Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, North Macedonia, the Republic of Moldova, Romania and Serbia.

Fig.2

Public spending on health accounts for a substantial share of GDP



Source: WHO, 2024b.

Notes: UMIC: upper-middle-income countries in the WHO European Region; SEEHN includes Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, North Macedonia, Republic of Moldova, Romania and Serbia.

insured persons, and the employee contribution to health insurance remains relatively high at 12%, raising concerns about the financial sustainability of the country's health and social security systems. In addition, government budget transfers to the social health insurance scheme, as well as government funds spent directly on health, are very low as a share of social health insurance scheme revenue (WHO Regional Office for Europe, 2021). Among the ideas for generating more resources for health, health insurance funds in Bosnia and Herzegovina have signed an initiative to abolish or reduce value-added tax (VAT) on medicines and medical devices, or to allocate the revenue from this indirect tax to health insurance funds (FZO RS, 2023b). Currently, health insurance funds and health care institutions in Bosnia and Herzegovina are exempted from paying VAT on medical and health care services. However, they are required to pay 17% VAT on the purchase of medicines, medical devices and equipment for treatment. The financial burden of VAT is significant. In 2022 alone, health care institutions in the Federation of Bosnia and Herzegovina paid more than 164 million convertible marks (about €84 million) in VAT costs. It remains to be seen whether this initiative will be adopted into law, as it is currently being sent to all relevant institutions for further processing.

The share of OOP spending is smaller than in SEEHN countries overall, but increased in 2021

OOP spending on health accounted for 30.7% of health spending in 2021, which was below the average of SEEHN countries (34.6%) but much higher than the EU average (18.7%). Throughout the 2010s, the share of OOP spending was much lower than its peak of 45% in 2005, but there was an increase in 2021, driven by a sharp rise in OOP payments per person in real terms (data not shown) **(Fig. 3)**. OOP spending accounts for almost all (99%) private spending on health.

Payments for medicines and medical products constitute the largest share of OOP spending, followed by spending on specialized ambulatory and hospital treatment. As in many countries in Central and Eastern Europe, informal payments also exist and are most common for hospital and specialized care (Vujičić, 2017). OOP spending, including informal payments, makes population groups with low incomes less likely to access the health services they need.

OOP payments lead to catastrophic health spending, particularly for poor households

Catastrophic health spending is a problem, particularly for poorer households. It is largely driven by OOP payments for outpatient medicines (accounting for 37.3% of catastrophic spending in 2015), diagnostic tests (20.4%) and inpatient care (17.3%) (WHO Regional Office for Europe, 2023). In 2015, about 8.1% of households in the Federation of Bosnia and Herzegovina and 9.9% in the Republika Srpska experienced catastrophic health

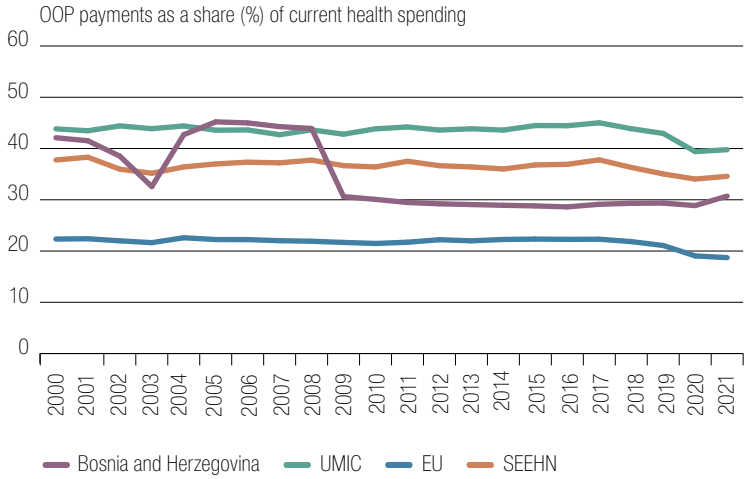
spending (Voncina et al., in press a, in press b) **(Fig. 4)**. This is above levels seen in neighbouring countries such as Croatia, North Macedonia and Slovenia.

Some health care providers have increased transparency and targeted corruption

In recent decades some health care providers have faced financial deficits resulting from weak and fragmented public sector institutions, decentralized responsibilities and poor financial management (World Bank, 2020). Lack of transparency, budgeting oversight and accountability leads to various consequences, such as overspending, including on salaries for additional staff who are recruited on top of sanctioned posts, corruption and conflict of interest. As a result, health facilities accumulate liabilities towards social security and tax authorities, which in turn cause delays in payments to suppliers and employees, with direct consequences for subsequent access to services and quality of care and a lack of new investments (World Bank, 2020). However, regarding transparency in the health sector, Zenica Cantonal Hospital has pioneered the automatic creation and public disclosure

Fig.3

OOP spending accounts for about one third of health spending

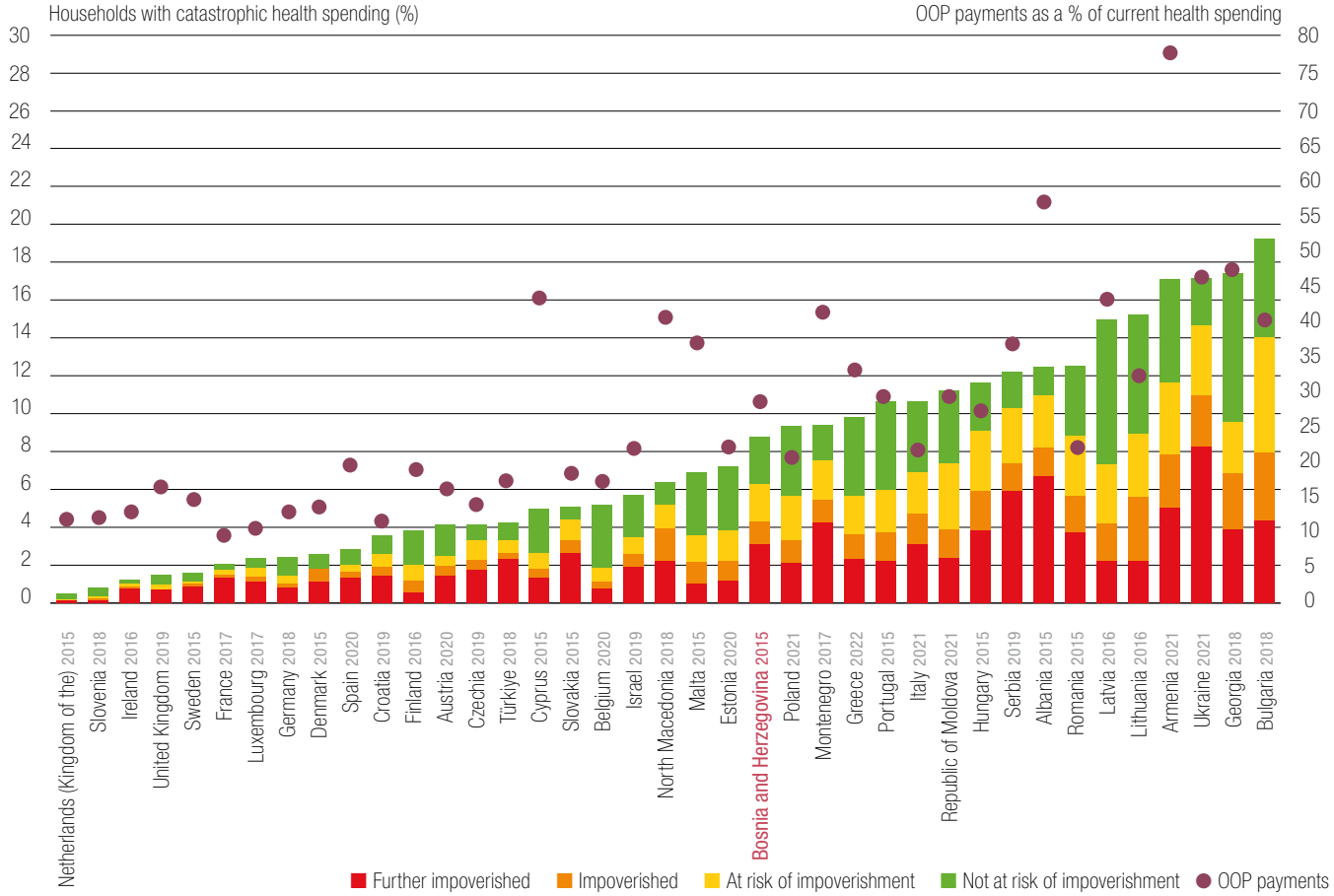


Source: WHO, 2024b.

Notes: SEEHN includes Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, North Macedonia, Republic of Moldova, Romania and Serbia; UMIC: upper-middle-income countries in the WHO European Region; averages are unweighted.

Fig.4

Nearly one in ten households in Bosnia and Herzegovina faces catastrophic health spending



Source: WHO Regional Office for Europe, 2024c.

Notes: The data on OOP payments are for the same year as the data on catastrophic health spending (except for Greece, where data on OOP spending are from 2021). A household is impoverished if its total spending falls below the poverty line after OOP payments; further impoverished if its total spending is below the poverty line before OOP payments; and at risk of impoverishment if its total spending after OOP payments comes within 120% of the poverty line. The poverty line used here is a relative line reflecting basic needs (food, housing, utilities).

of patient waiting lists. Additionally, it has implemented new internal policies targeting corruption in public procurement, conflict of interest, human resources management and financial management. Furthermore, 15 health institutions nationwide have adopted similar rulebooks, integrating anti-corruption measures in these critical areas (European Commission, 2023).

However, the lack of incentives to control and contain expenditure in publicly owned health facilities, in particular hospitals, continues to be a major challenge for health system performance and a source of inefficiency (World Bank, 2020) **(see Box 1)**.

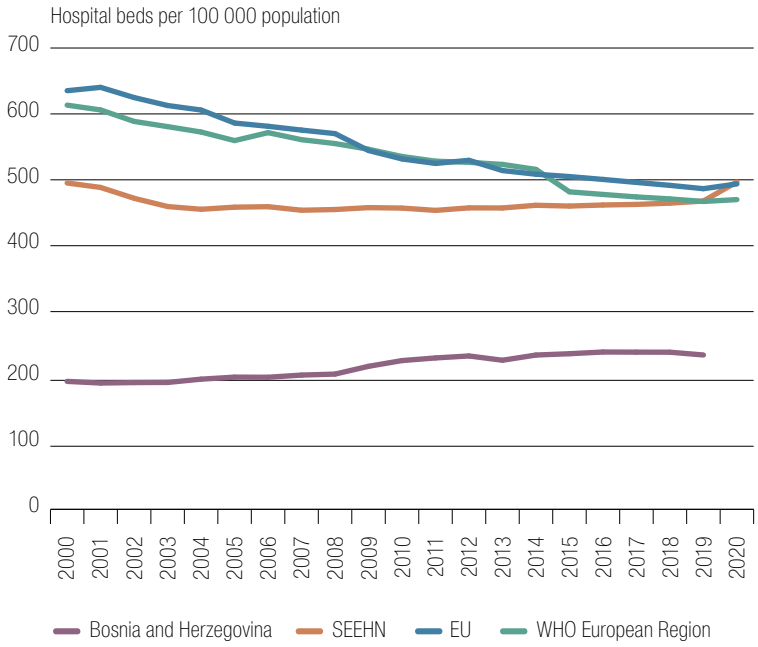
Box 1

Health systems in Bosnia and Herzegovina are characterized by low efficiency

Across the country, health care is still mainly provided in hospitals, although there have been efforts to improve health system efficiency by moving towards primary care settings and strengthening the role of family medicine. Moreover, there are no incentives for joint strategic planning of activities for outpatient and inpatient care and for improved patient coordination across sectors. As a result, many patients with chronic conditions are treated in hospitals. The hospital sector is characterized by the inefficient use of resources, as current payment systems, characterized by underpriced tariffs and fixed hospital budgets, do not incentivize hospitals to provide more ambulatory care or to improve quality of care (World Bank, 2020).

Fig.5

Bosnia and Herzegovina has a much lower rate of hospital beds than most other European countries



Source: WHO, 2024c.

Note: SEEHN includes Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, North Macedonia, the Republic of Moldova, Romania and Serbia.

3 GENERATING RESOURCES, PROVIDING SERVICES AND ENSURING ACCESS

The number of hospital beds increased in response to the COVID-19 pandemic

In 2022, there were 31 acute care hospitals in Bosnia and Herzegovina (21 in the Federation of Bosnia and Herzegovina, 9 in the Republika Srpska and 1 in the Brčko District of Bosnia and Herzegovina). Data on private sector health resources are not available. In 2019, the number of hospital beds per 100 000 population reached 234 **(Fig. 5)**, while the number of discharges from inpatient care per 100 persons reached a peak of 13.9. Compared with other countries in the WHO European Region or the SEEHN countries, the rate of hospital beds per population in Bosnia and Herzegovina is very low.

Statistics from the country's entities indicate that the absolute number of beds increased significantly during the COVID-19 pandemic. In the Federation of Bosnia and Herzegovina it went from 7872 in 2019 to 8595 in 2021, and in the Republika Srpska from 4692 in 2019 to 5150 in 2021. Simultaneously, the average length of stay decreased from 6.9 to 6.2 days in the Federation of Bosnia and Herzegovina and from 6.8 to 5.8 days in the Republika Srpska (Institute for Public Health FBIH, 2023; Public Health Institute Republika Srpska, 2023).

Hospital bed occupancy rates vary significantly between entities, with an average of 46.5% of hospital beds occupied in 2022 in the Federation of Bosnia and Herzegovina and 65.5% in the Republika Srpska. There are also differences between the cantons within the Federation of Bosnia and Herzegovina, with bed occupancy rates in 2022 ranging from 23.4% in Livno (Canton 10) to 55.7% in Zenica (Zenica-Doboj Canton) (Institute for Public Health FBIH, 2023).

There have been efforts to strengthen primary health care through a robust family medicine model

To address the ineffective gatekeeper model of the pre-war health system and improve consistency of care, the country initially introduced a family medicine-based system with robust primary health care features. In 1999, medical schools introduced family medicine as a medical specialty, offering both specialization programmes for newly enrolled students and training for practising physicians. Consequently, family medicine teams, consisting of a family physician and one or two family nurses, were created and introduced into public primary health care centres in municipalities as gatekeepers and providers of primary care services (Hodgetts et al., 2020).

The definition of primary health care is similar across the two entities and the Brčko District of Bosnia and Herzegovina and includes family medicine, child health care, community nursing care, hygienic and epidemiological services, emergency primary care, women's reproductive health care, health care for non-specific and specific lung diseases, community-based physical and mental rehabilitation, dental health care, laboratory and radiological diagnostics at the primary level, and pharmacy services. In the Federation of Bosnia and Herzegovina, primary health care is provided through 80 primary health centres with affiliated local clinics, totalling 966 primary health care units in 2022. Primary health care in the Republika Srpska consists of 54 primary health centres and one family medicine local clinic (Institute for Public Health FBIH, 2023; Public Health Institute Republika Srpska, 2023). In the Brčko District of Bosnia and Herzegovina, health care delivery is managed by the Health Centre Brčko (JZU Brčko), which operates four health centres and 18 primary health care units. Additionally, it contracts services from 39 family medicine clinics (Government of the Brčko District of Bosnia and Herzegovina, 2023).

Health reforms aim to improve prevention and digitalization

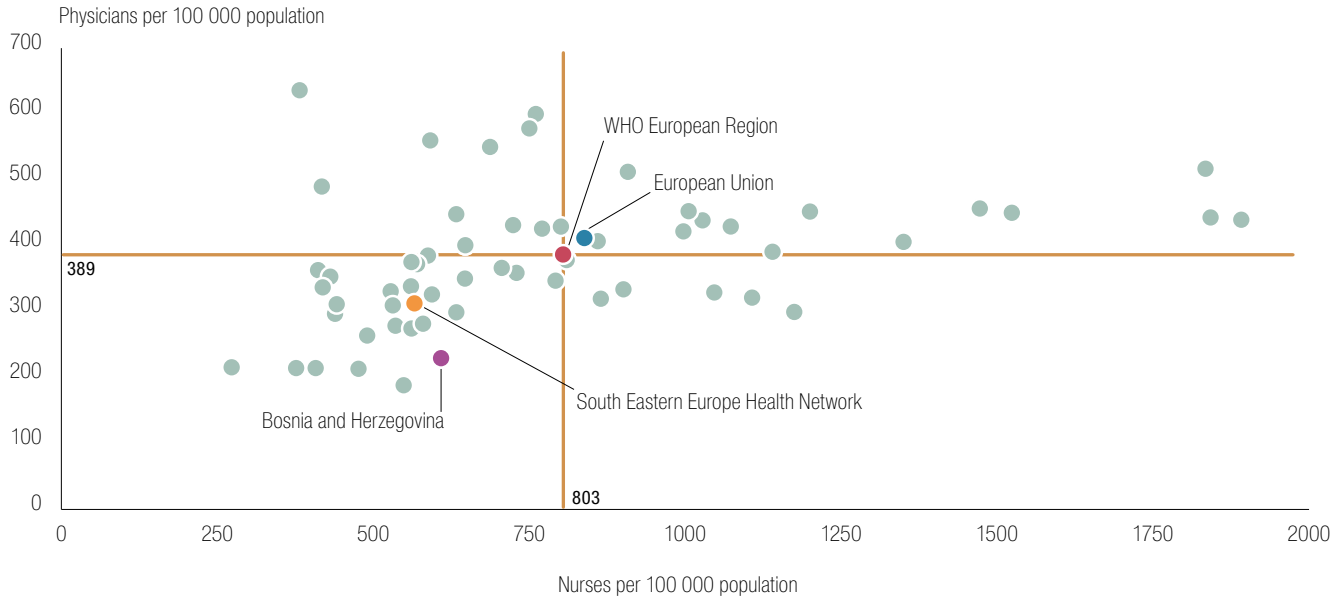
Health reforms have been supported through funds from the World Bank (World Bank, 2020) and the EU-supported Economic Reform Programme 2022–2024 and 2024–2026 (BIH Directorate for Economic Planning, 2024). Regarding the health of the population **(see Section 4)**, the main objective for 2024–2026 is to improve NCD prevention and childhood immunization services through comprehensive preventive programmes. Other action points include the continued digitalization of the health systems in the two entities. For instance, the Federation of Bosnia and Herzegovina introduced electronic health records (EHRs) through the 2021 amendment of the Law on Health Records. Although not all cantons meet the required minimum for information technology (IT), some piloted health care digitalization projects that support the use of e-prescriptions, such as Sarajevo (since 2015) and Tuzla Cantons (since 2022). In 2022, the Republika Srpska unified the use of EHRs and enabled the availability of e-prescriptions through the implementation of the Integrated Health Information System Project (IZIS), coordinated by the Republika Srpska Health Insurance Fund (FZO RS, 2023d). In addition to electronic prescriptions, IZIS allows insured individuals to access their complete health records, including diagnostic test results, and book appointments with any contracted health care provider, including those based on referrals.

Rates of doctors and nurses are comparatively low

In Bosnia and Herzegovina, doctors make up about 25% of the health workforce, while nurses account for almost three times as many, 67% (WHO, 2020). However, the rate of nurses in Bosnia and Herzegovina, at 608 per 100 000 population in 2019, although higher than in the SEEHN countries (567), was much lower than the average for the WHO European Region (803 per 100 000). The rate of doctors, 232 per 100 000 population in 2019, was also well below the regional average **(Fig. 6)**. Despite having fewer health professionals overall, the country has a nurse-doctor ratio of 2.6, which is higher than the ratio in the WHO European Region (2.1) and in the SEEHN countries (1.9).

Fig.6

Bosnia and Herzegovina has comparatively few health professionals



Source: WHO, 2024e.

Notes: Densities were multiplied by 10 to calculate the density per 100 000 population. Averages are based on latest available years. SEEHN includes Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, North Macedonia, the Republic of Moldova, Romania and Serbia.

Efforts to enhance the role of nurses in primary health care in Bosnia and Herzegovina include the "Strengthening Nursing in Bosnia and Herzegovina project" (ProSes), initiated by the Swiss Agency for Development and Cooperation in 2012. In 2024, already the fourth canton in the Federation of Bosnia and Herzegovina is planning a comprehensive programme for nurse training in leadership, new care guidelines and community nursing (Fondacija FAMI, 2024). In addition, the role of nurses and other PHC workers is being reinforced to address the growing burden of mental health needs **(Box 2)**.

Accessibility of health services has improved but some gaps remain

The universal health coverage (UHC) service coverage index provides a measure of access to essential services across the region. Overall, this index has increased in Bosnia and Herzegovina from 44 (out of 100) in 2000 to 66 in 2021. However, the index declined from a peak of 70 in 2017, suggesting that access might have declined during the COVID-19 pandemic **(Fig. 7)**.

The most vulnerable groups in Bosnia and Herzegovina in terms of unmet health care needs include poor households, uninsured groups of the population, the unemployed and older people, particularly women. The highest rates of unmet health care needs are reported by households headed by single older individuals (9%) or single females, as well as those not engaged in the labour market (8%) (UNDP, 2021). Long travel distances are the second most important reason for unmet need after cost (Jarke, Džindo & Jakob, 2019). In addition, women, especially those from marginalized backgrounds, such as Roma, face challenges in accessing sexual and reproductive health services. Immunization coverage among Roma children is also particularly low (Jarke, Džindo & Jakob, 2019). The COVID-19 pandemic further highlighted gender disparities, emphasizing the need for gender-inclusive relief and recovery measures (European Commission, 2023).

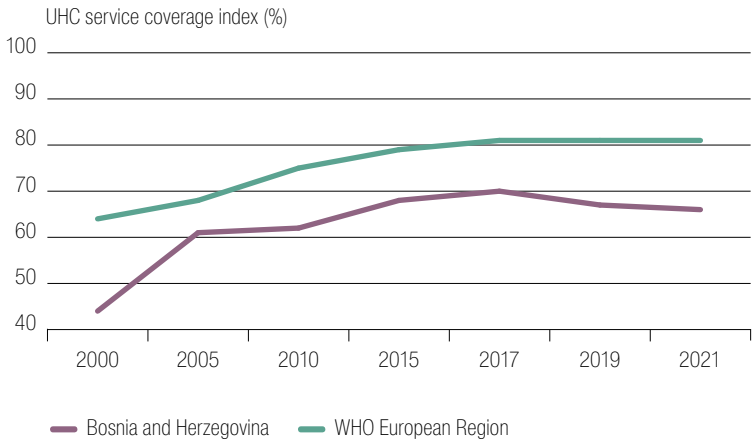
Box 2

Empowering PHC workers to address mental health needs

The "Mental Health Project in Bosnia and Herzegovina" forms part of the Swiss Cooperation Programme for 2021–2024. Its goal is to train PHC workers in family medicine in the Federation of Bosnia and Herzegovina and the Republika Srpska to be able to timely detect and manage depression and anxiety in adults. The project also aims to reduce stigma and raise awareness of these conditions in society, while improving collaboration among stakeholders and enhancing the capacity of all those involved in delivering person-centred care (SDC, 2021).

Fig.7

Access to essential health services has declined in recent years



Source: WHO, 2024c.

Note: UHC service coverage index, defined as the average estimated coverage of essential services based on tracer interventions (including reproductive, maternal, newborn and child health; infectious diseases; NCDs; and service capacity and access) among the general and the most disadvantaged populations.

Declining measles immunization rates are alarming

While Bosnia and Herzegovina had relatively high rates of routine vaccination among infants, there has been a steady decline in immunization rates for all recommended diseases since 2012. This decline was much exacerbated during the years 2019–2021, which coincided with the COVID-19 pandemic. The third dose of the diphtheria-tetanus-pertussis vaccine (DTP3) for infants reached a historic low of 72% in 2020, but improved to 75% in 2022 (compared to 94% in the WHO European Region). The immunization rates of infants receiving the first dose against measles decreased from 94% in 2012 to just 58% in 2022, and for the second dose to only 60% (compared to 94% and 91% respectively in the WHO European Region).

Due to the low vaccination rates, the country continues to experience measles outbreaks. The most recent outbreak was reported in the first half of 2024, with over 7 000 measles cases recorded (ECDC, 2024). The majority of cases affected children under the age of 9 years (Musa et al., 2024). In terms of barriers to uptake, parents of unvaccinated children reported individual and contextual barriers to vaccination, in particular concerns about safety, mistrust of health workers and resentment of compulsory measles vaccination. Urban-rural differences included urban parents being more likely to report experiences of vaccine shortages and very few having received information leaflets (Musa et al., 2021).

The prevalence of HIV/AIDS and tuberculosis is low

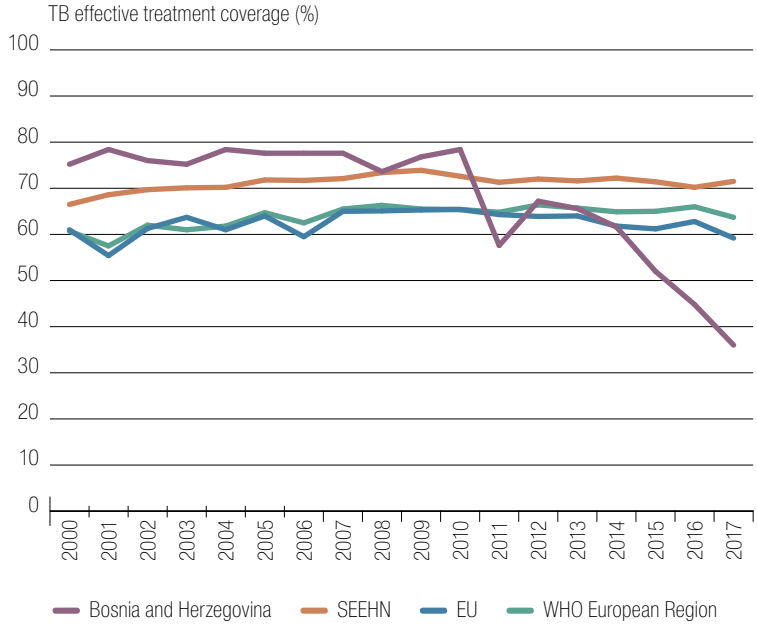
Bosnia and Herzegovina has low rates of HIV/AIDS and tuberculosis (TB). For HIV, the country has low rates of

newly diagnosed HIV infections, amounting to 1.7 per 100 000 population in 2022, compared with 12.4 per 100 000 population in the WHO European Region (ECDC and WHO Regional Office for Europe, 2023).

Although Bosnia and Herzegovina has made significant progress in reducing TB infections, with a nearly 50% reduction in prevalence between 2004 and 2014, prevalence in 2014 (64 per 100 000 population) was still higher than the average in the WHO European Region (48). Despite historic lows in the incidence of new TB cases per 100 000 population, at 10.4 in 2020 and 11.1 in 2021, for unclear reasons effective treatment coverage, which combines treatment coverage and treatment success rate, has declined in recent years to one of the lowest levels in the WHO European Region **(Fig. 8)**.

Fig.8

Effective treatment coverage for tuberculosis decreased sharply in recent years



Source: WHO, 2024c.

Note: Proportion of TB cases detected and successfully treated (estimate).

4 IMPROVING THE HEALTH OF THE POPULATION

The latest internationally available life expectancy data refer to 2016

The latest mortality data reported by Bosnia and Herzegovina to WHO refer to 2016. According to these data, life expectancy at birth stood at 76.3 years, which was higher than the SEEHN average (75.9), but almost two years below the average of the WHO European Region (78.2) **(Fig. 9)**. The difference in life expectancy at birth between the sexes was 4.9 years in 2016, with a male life expectancy of 73.8 years and a female life expectancy of 78.7 years.

Although not yet reflected in internationally available data on life expectancy, the COVID-19 pandemic can be assumed to have had a detrimental impact on life expectancy and mortality trends in Bosnia and Herzegovina. From 2020 to 2023, the country experienced a cumulative COVID-19 death rate of 500 per 100 000 population, the fourth highest in the world after Peru, Bulgaria and Hungary (WHO, 2024a). The peak in COVID-19 deaths occurred in the spring of 2021. Excess mortality, which includes deaths directly caused by the SARS-CoV-2 virus and those indirectly related to pandemic disruptions, was almost twice the WHO European Region average, with Bosnia and Herzegovina recording 391 excess deaths per 100 000 population in 2021, compared with a regional average of 207 **(Fig. 10)**.

Improvements in perinatal and neonatal care have led to significant reductions in maternal and infant mortality

Improvements in perinatal and newborn care in PHC settings, improved patient safety measures during childbirth, and other efforts by health care providers to raise standards of maternal and newborn care in health facilities have been substantial (UNFPA, 2021). Coverage of perinatal health services has increased, with skilled health personnel attending 99.9% of births (UNICEF, 2024). In 2021, Bosnia and Herzegovina achieved a historically low infant mortality rate of 4.8 deaths per 1000 live births, below the average of the WHO European Region of 6.3 deaths per 1000 live births and slightly above the average of 4.6 deaths per 1000 live births in SEEHN countries.

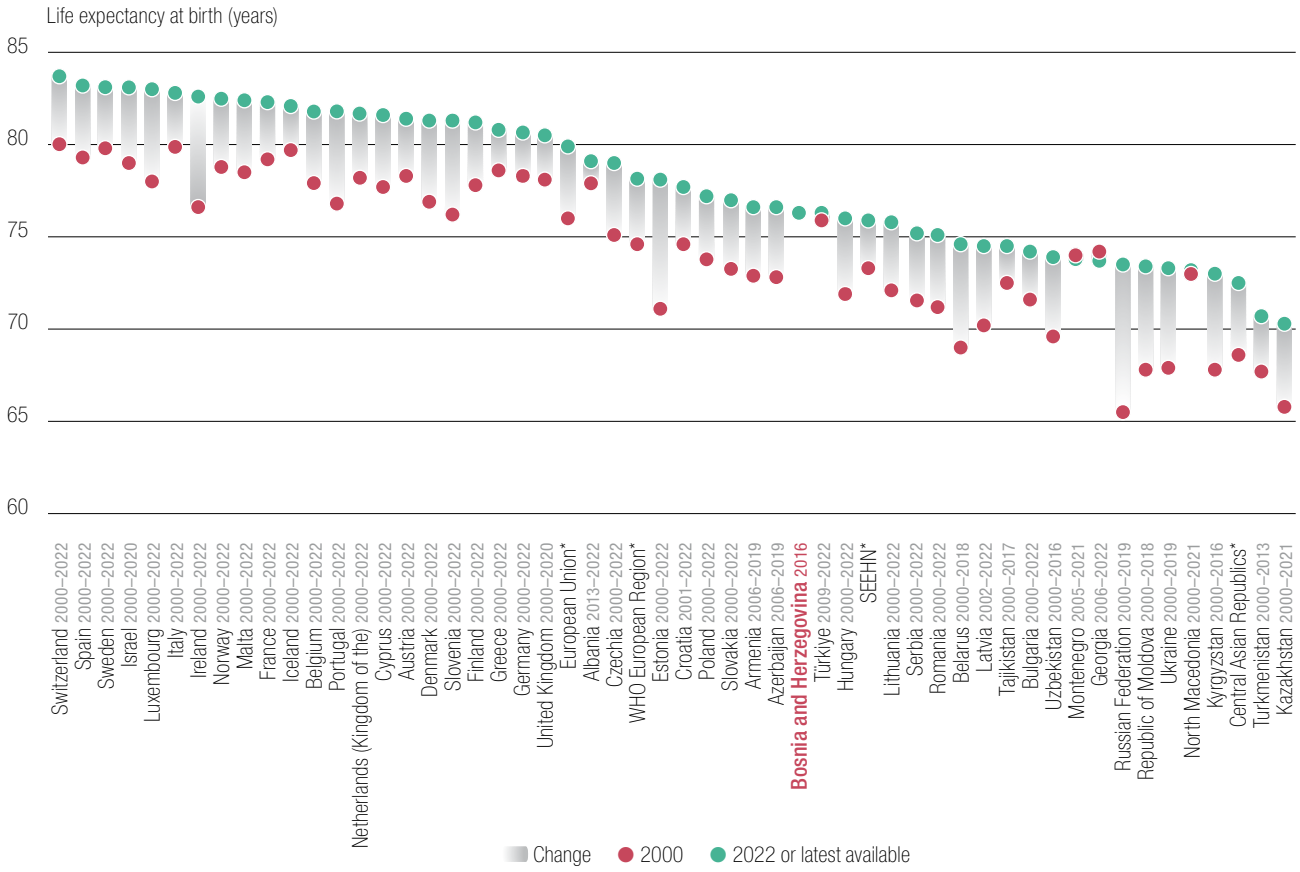
Maternal mortality has also decreased, from an estimated 15.6 deaths per 100 000 live births in 2000 to 5.7 deaths per 100 000 live births in 2020. This was lower than the average for both the WHO European Region (12.6 deaths per 100 000 live births) and SEEHN countries (7.3). However, it has been estimated that about 13% of women in Bosnia and Herzegovina do not receive perinatal care, increasing to 21% among Roma women. The Gender Plan 2023–2027, adopted in October 2023, aims to address existing disparities in access to reproductive and perinatal health care through improved legislation and services focused on family planning, prevention and protection, particularly for marginalized groups (Ministry for Human Rights and Refugees Agency of Gender Equality, 2023).

Noncommunicable diseases drive overall mortality patterns

With a total population of 3.2 million in 2022 (WHO, 2024c), Bosnia and Herzegovina has experienced negative population growth, influenced by the long-term decline in the number of births, the increase in

Fig.9

Life expectancy in Bosnia and Herzegovina remains below the average of the WHO European Region

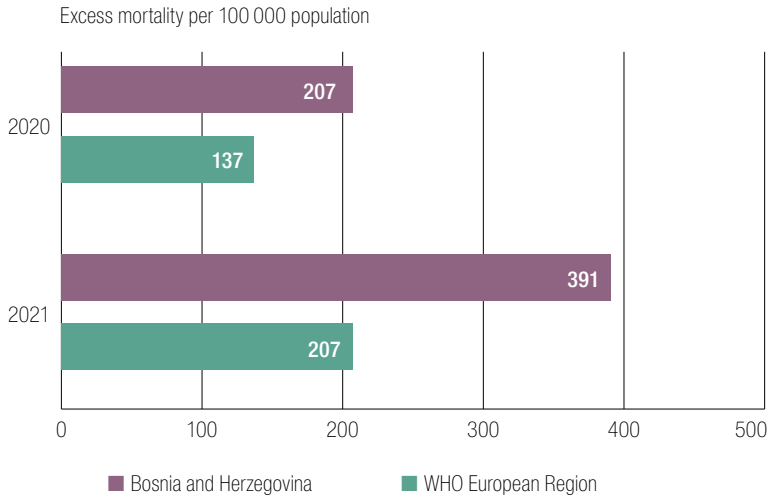


Source: Eurostat, 2024, for EU/EEA countries, Albania, Montenegro, North Macedonia, Serbia, Armenia, Azerbaijan, Georgia and Türkiye; WHO Regional Office for Europe, 2024a, for all others.

Notes: * averages are based on years with data available. The South-Eastern Europe Health Network (SEEHN) includes Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, North Macedonia, the Republic of Moldova, Romania and Serbia.

Fig.10

Bosnia and Herzegovina had a high number of excess deaths during the COVID-19 pandemic



Source: WHO, 2023.

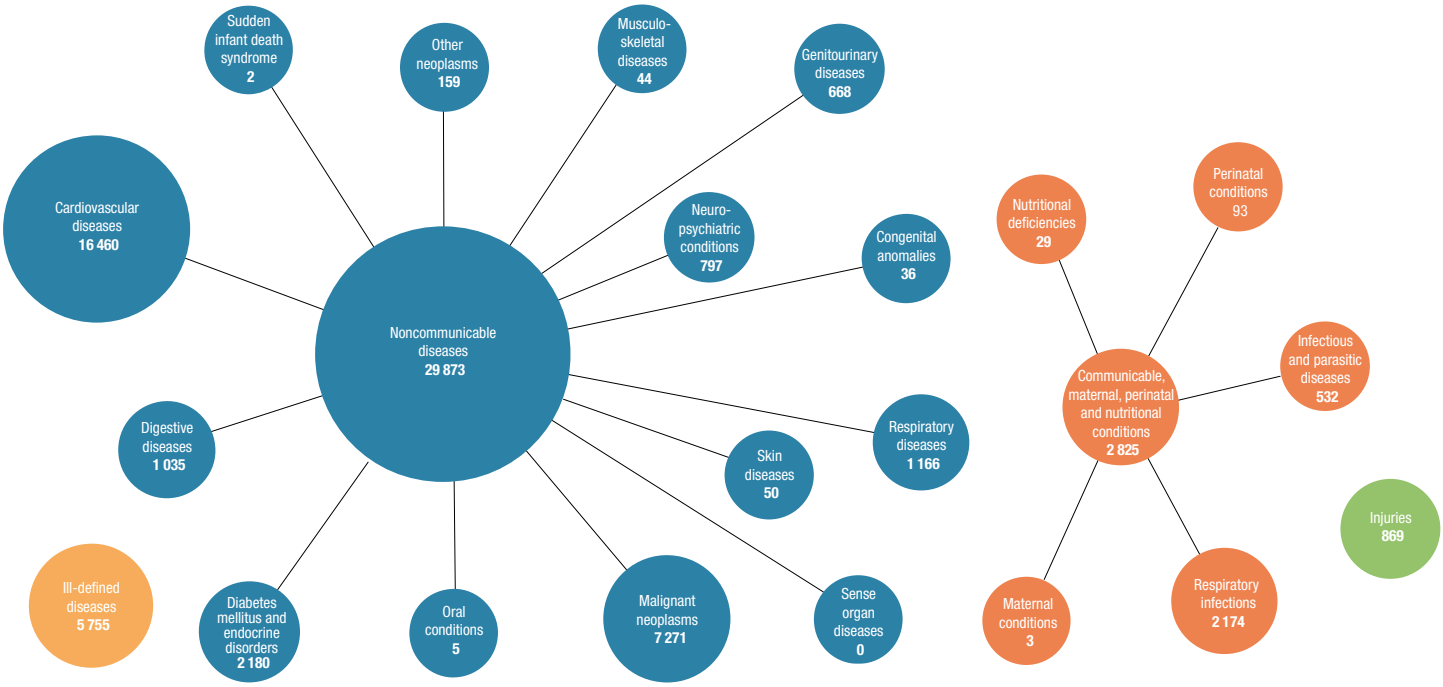
Note: Excess mortality from all causes of death, defined as the difference between the total number of deaths and the number that would have been expected in the absence of a crisis (for example, the COVID-19 pandemic). This difference is assumed to include deaths attributable directly to COVID-19 as well as deaths indirectly associated with COVID-19 through impacts on health systems and society.

population mortality and outmigration. The high burden of NCDs influences the overall pattern of mortality, with cardiovascular diseases being the leading group of causes of death in 2022 **(Fig. 11)**. In 2022, the Federation of Bosnia and Herzegovina saw an overall mortality rate of 1080 deaths per 100 000 population; 484 deaths per 100 000 population were due to diseases of the circulatory system. Cancer accounted for about 19% of total deaths in the entity, with lung cancer being the most common type (Institute for Public Health FBIH, 2023). In the same year, the Republika Srpska had a similar distribution of mortality, with cardiovascular diseases being the leading cause, amounting to 606 deaths per 100 000 population. Cancer accounted for 16.2% of all deaths (Public Health Institute of the Republika Srpska, 2023).

Following the establishment of action plans for the prevention and control of NCDs in the Federation of Bosnia and Herzegovina in 2018 and in the Republika Srpska in 2019, the entities have continued to work on adapting and producing tools for cardiovascular disease risk assessment and management in primary care settings, and on developing comprehensive prevention programmes for cardiovascular disease, diabetes, cancer and mental health (Ramic-Catak et al., 2023; BIH Directorate for Economic Planning, 2024).

Fig.11

Cardiovascular diseases accounted for more than 40% of all deaths in Bosnia and Herzegovina



Source: WHO, 2024f.

Note: Overview of the distribution of causes of total deaths grouped by category. Data refer to 2022.

More people aged 30–69 years die from cancers than from other causes

In recent years, premature mortality (among people aged 30–69) from four major NCDs (cardiovascular diseases, cancers, diabetes and chronic respiratory diseases) in the WHO European Region has gradually declined from 529 per 100 000 population in 2000 to 344 in 2019. Similarly, in SEEHN countries, premature mortality from these NCDs fell from 597 per 100 000 population in 2000 to 420 in 2019. Data available for Bosnia and Herzegovina for 2011, 2014 and 2016 show rates higher than those in the WHO European Region, but lower than those in SEEHN countries overall (see Fig. 12). It is difficult to draw conclusions about trends because of missing data, but the most recent updates indicate an increase from 407 deaths per 100 000 population in 2011 to 429 in 2016.

Cancer is the leading cause of death among people aged 30–69 years in Bosnia and Herzegovina. Despite this, there are still no countrywide cancer control plans or early detection programmes. Both the Federation of Bosnia and Herzegovina and the Republika Srpska have cancer registries. However, unlike in the Republika Srpska, there is no systematic, but only opportunistic screening in the Federation of Bosnia and Herzegovina, due to legal barriers and limited financial resources. The Brčko District of Bosnia and Herzegovina lacks both a registry and early detection programmes (European Commission, 2023).

Fig.12

Data on premature mortality from NCDs in Bosnia and Herzegovina are incomplete

Source: WHO Regional Office for Europe, 2024b.

Notes: Premature mortality among those aged 30–69 years from four major NCDs (cardiovascular diseases, cancers, diabetes mellitus and chronic respiratory diseases). SEEHN includes Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, North Macedonia, the Republic of Moldova, Romania and Serbia.

Ischaemic heart disease and stroke cause the greatest burden of disease

The burden of disease measured in disability-adjusted life years (DALYs) remains high in Bosnia and Herzegovina. DALYs aim to measure the overall disease burden and are expressed as the number of years lost to due to ill health, disability or premature mortality. In 2021, COVID-19 had by far the greatest impact on the burden of disease, accounting for more than 6330 DALYs per 100 000 population. This was followed by ischaemic heart disease and stroke, which together amounted to almost 8500 DALYs per 100 000 population **(Fig. 13)**. Among adolescents (people aged 10–19 years), the most DALYs were lost due to road injury (WHO, 2024d). The burden of mental ill health, although not estimated to be among the top 10 causes of DALYs in 2021, is increasing and requires further policy action **(see Box 3)**.

Hypertension and smoking are leading risk factors for mortality

High blood pressure, smoking and dietary risks are the main immediate risk factors for mortality in Bosnia and Herzegovina. Hypertension was estimated to account for more than 23% of all deaths in 2021, dietary risks for more than 14% and tobacco use for more than 12% **(see Fig. 14)** (Global Burden of Disease Collaborative Network, 2024). Metabolic risks such as hypertension and high blood sugar are often associated with unhealthy lifestyles, including tobacco and alcohol use, poor diet and low physical activity (Majić, Arsenović and Čvokić, 2023).

As for smoking, Bosnia and Herzegovina, at 34.2% in 2023, had the second highest estimated prevalence of tobacco use among people aged 15 years and older in the WHO European Region, second only to neighbouring Serbia, where the prevalence was estimated at 36.7%. In 2023, 41.5% of males aged 15 years and over and 27.3% of females were estimated to be regular smokers, both 12 percentage points higher than the respective averages in the WHO European Region in 2020 (WHO Regional Office for Europe, 2024b). The prevalence of tobacco use in Bosnia and Herzegovina has declined steadily, from almost 47% in 2000 to 35.5% in 2020 and 34.2% in 2023, reflecting the impact of gradual improvements in tobacco control policies. Cigarette prices have steadily increased, in direct correlation with rising excise taxes, and smoking cessation services have become available through family doctors. However, there is still considerable room for improvement, including in addressing the growing consumption of vaping products among young people (Njie et al., 2023).

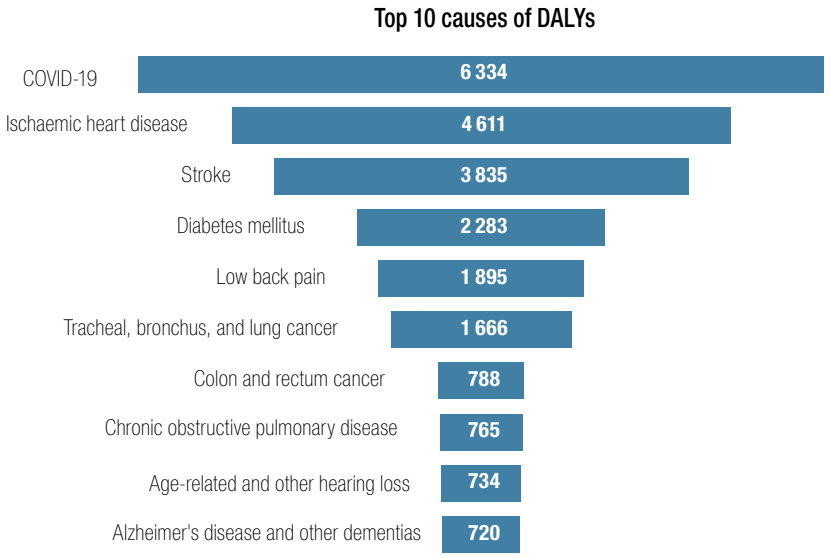
Unhealthy diets and overweight and obesity are major challenges

In 2016, Bosnia and Herzegovina had a lower prevalence of overweight (53.3%) than the averages for both the WHO European Region (58.7%) and SEEHN countries (58.5%). According to the Global Nutrition Report 2020, the country has made no progress towards reducing obesity, with an estimated 18.4% of adult women and 17.1% of adult men living with obesity. The prevalence of obesity in Bosnia and Herzegovina is lower than the average in the WHO European Region of 23.3% for women and 22.2% for men, but the burden of diabetes is substantial, with an estimated 6.9% of adult women and 8.0% of adult men affected (Global Nutrition Report, 2023).

The country currently lacks a national strategy for healthy lifestyles and nutrition. Low fruit and vegetable consumption and high salt and fat intake are common dietary risks contributing to the disease burden. In 2018, only 35% of adults reported eating fruit daily and only 28% included vegetables in their daily diet **(Box 4)** (WHO Regional Office for Europe, 2019).

Fig.13

After COVID-19, cardiovascular conditions are leading causes of ill health and premature death



Source: Global Burden of Disease Collaborative Network, 2024.

Note: Top 10 causes of DALYs per 100 000 population for both sexes and all ages. Data refer to 2021.

Box 3

Measures are being taken to address the high burden of mental illness

The prevalence of anxiety and depressive symptoms in Bosnia and Herzegovina is estimated to be high, with some studies suggesting levels of over 70% among adults in 2022, the third year of the COVID-19 pandemic (Šljivo & Kulenović, 2023). Efforts to strengthen mental health services have been supported by NGOs and international agencies. At the request of the Ministry of Health of the Federation of Bosnia and Herzegovina and the Ministry of Health and Social Welfare of the Republika Srpska, UNICEF has intensified its support to ensure access to mental health and psychosocial services, with a particular focus on children, adolescents, parents, caregivers and professionals to prevent burnout. Among other activities, this support included the establishment of the Blue Phone (*Plavi telefon*) helpline. In total, more than 45 000 people, including 5000 children and parents, have benefited from this initiative (Kovačević, 2021).

While Bosnia and Herzegovina lacks a national mental health strategy, it has made progress in mental health care reforms since 1996, with a focus on community-based services. A network of 74 community mental health centres is serving the whole country. These centres employ multidisciplinary teams, including psychiatrists, psychologists, social workers, nurses and sometimes specialists, such as occupational therapists and speech therapists. The shift towards community-based care aims to provide effective, efficient and quality mental health services that are tailored to users' needs and accessible to as many people as possible. However, challenges remain, particularly in terms of systematic prevention of alcohol disorders and drug abuse, and rehabilitation and social reintegration programmes, which vary across different parts of the country (European Commission, 2023).

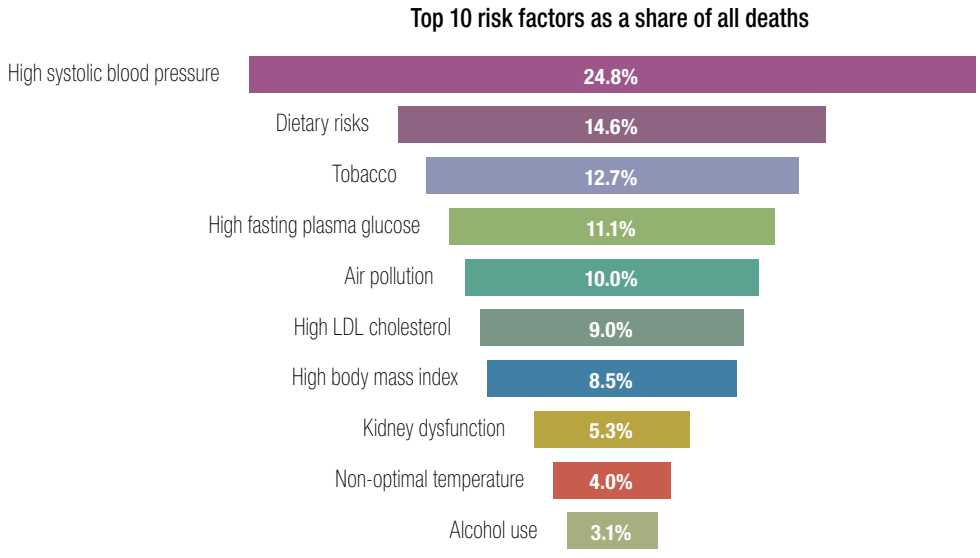
Both indoor and outdoor air pollution contribute to premature mortality

Every tenth death in Bosnia and Herzegovina in 2021 was estimated to be attributable to outdoor and indoor air pollution **(see Fig. 14)**. The age-standardized death rate per 100 000 population due to ambient and household air pollution in 2019 was estimated at 114 for both sexes, with a rate of 136 for males and 95 for females (WHO, 2024c). Urban areas in particular suffer from high concentrations of harmful fine particles (PM 2.5) in the air. Average annual ambient concentrations of PM 2.5 in 2023 were 5.5 times higher than the WHO recommended air quality standard (10 µg/m3) (IQAir, 2024).

The heavy reliance on burning coal and wood in stoves for domestic heating, especially during the winter months, and burning coal for electricity generation are major contributors to premature mortality from exposure to air pollution (Matkovic et al., 2020). Responsibility for air quality control in the country is decentralized, leading to considerable regional differences in air quality, control and monitoring. While some cantons in the Federation of Bosnia and Herzegovina, such as Sarajevo and Una-Sana, have introduced or expanded air quality plans focused on reducing harmful particulate matter, others have yet to take this step.

Fig.14

Metabolic factors along with smoking are estimated to cause most deaths in Bosnia and Herzegovina



Source: Global Burden of Disease Collaborative Network, 2024.

Note: Percentage of all deaths attributable to risk factors for both sexes and all ages. Shares overlap and therefore add up to more than 100%.

Box 4

The eating-out environment is characterized by unhealthy foods

The WHO Country Office in Bosnia and Herzegovina, in collaboration with the WHO Regional Office for Europe, has conducted a food environment assessment in Bosnia and Herzegovina as part of the FEEDcities project. Assessments of the urban food environment in the cities of Sarajevo and Banja Luka found high levels of trans-fatty acids and sodium in snacks sold by street vendors. Although more homemade than industrial foods were observed, the availability of fruit and vegetable-based foods was limited. The assessment highlighted the need to strengthen food control policies and nutrition education, including strategies to increase access to nutritious foods in both the Federation of Bosnia and Herzegovina and the Republika Srpska, as an ongoing effort to improve the food environment and prevent NCDs (WHO Regional Office for Europe, 2019; Sousa et al., 2022).

5 SPOTLIGHT ON HEALTH WORKFORCE TRENDS

The rates of physicians and nurses are increasing

Since the mid-2000s, the health care sector has seen continuous growth in the number of health professionals. As a result, the number of physicians per 100 000 population has increased from 199 in 2013 to 232 in 2019. Despite this growth, the country still lags behind the WHO European Region average of 387. Similarly, the ratio of nurses per population in Bosnia and Herzegovina increased from 546 per 100 000 in 2013 to 608 in 2019, remaining substantially lower than the WHO European Region average of 784 per 100 000 population **(see Fig. 15)**.

As the health needs of the population change **(see Section 4)**, the development of the workforce in Bosnia and Herzegovina requires a more strategic approach. This includes a recognition of the needs of the mostly female health workforce, with women comprising 87.7% of doctors in 2015 and 77.5% of nurses in 2018 (WHO, 2024e). The Republika Srpska aims to create five-year human resource plans for public health care institutions and to establish a register of health professionals to facilitate informed human resource planning (BIH Directorate for Economic Planning, 2024).

The number of generalists has increased, but limited data hamper analysis

According to data from the WHO National Health Workforce Accounts, there was a slight increase in the number of generalist medical practitioners in Bosnia and Herzegovina, rising from 738 (9.8% of all doctors in 2012) to 760 (10.5% of all doctors in 2019) **(Fig. 16)**.

Further analysis by entity reveals a significant growth in the total number of general practitioners in PHC in the Federation of Bosnia and Herzegovina, increasing by over 70% from 554 (12% of all doctors) in 2010 to 961 (18% of all doctors) in 2021. As of 2021, there was an average of 1192 inhabitants per medical doctor in PHC. The highest ratio was observed in the Una-Sana Canton (2097) and the lowest in the Bosnian Podrinje Canton Goražde (574) (Institute for Public Health FBIH, 2022). However, more recent detailed estimates from the Republika Srpska were not available.

The ageing of health workers is a concern

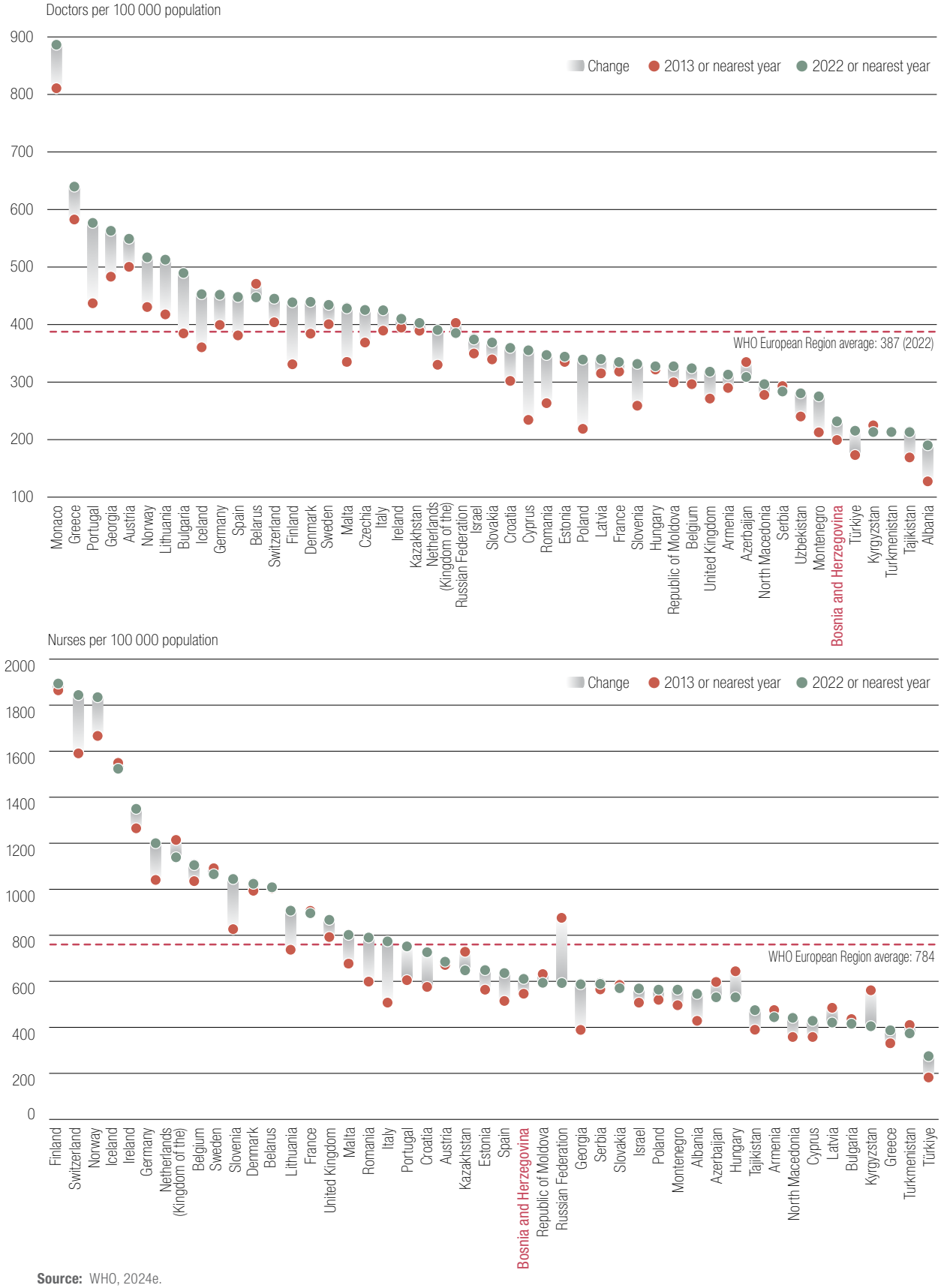
While the ageing of the health workforce, particularly nurses, is a less urgent issue in Bosnia and Herzegovina compared to other countries **(Fig. 17)**, the trend is increasing overall. Between 2013 and 2018, the number of nurses aged 55 years and older more than doubled, rising from 10% to 21%. The age distribution among physicians reveals an even higher proportion of individuals aged 55 and over. For example, in 2019 over a quarter (27.5%) of all practising doctors in the Federation of Bosnia and Herzegovina were aged 55 and over (Cilovic-Lagarija et al., 2021). Despite a growing number of medical graduates and good potential to replace retiring health professionals, a number of young professionals find it difficult to find employment in Bosnia and Herzegovina and consider emigrating (IOM, 2021).

Many young health professionals leave Bosnia and Herzegovina

Although the number of health workers in Bosnia and Herzegovina is growing, many emigrate to other European countries, particularly Germany and Croatia (IOM, 2021). This is partly due to more favourable conditions in these destination countries, such as relaxed visa restrictions and bilateral employment agreements, especially in Germany. In 2022, there was a surplus of unemployed health professionals, especially nurses, in various districts of the Federation of Bosnia and Herzegovina, the Republika Srpska and the Brčko District of Bosnia and Herzegovina (Agency for Labour and Employment, 2023). An increasing number of mobility programmes address this surplus in the labour market. Economic factors, such as higher wages and better working conditions in destination countries, are major drivers of emigration among health professionals in Bosnia and Herzegovina.

Fig.15

The number of health professionals in Bosnia and Herzegovina is increasing, but remains comparatively low

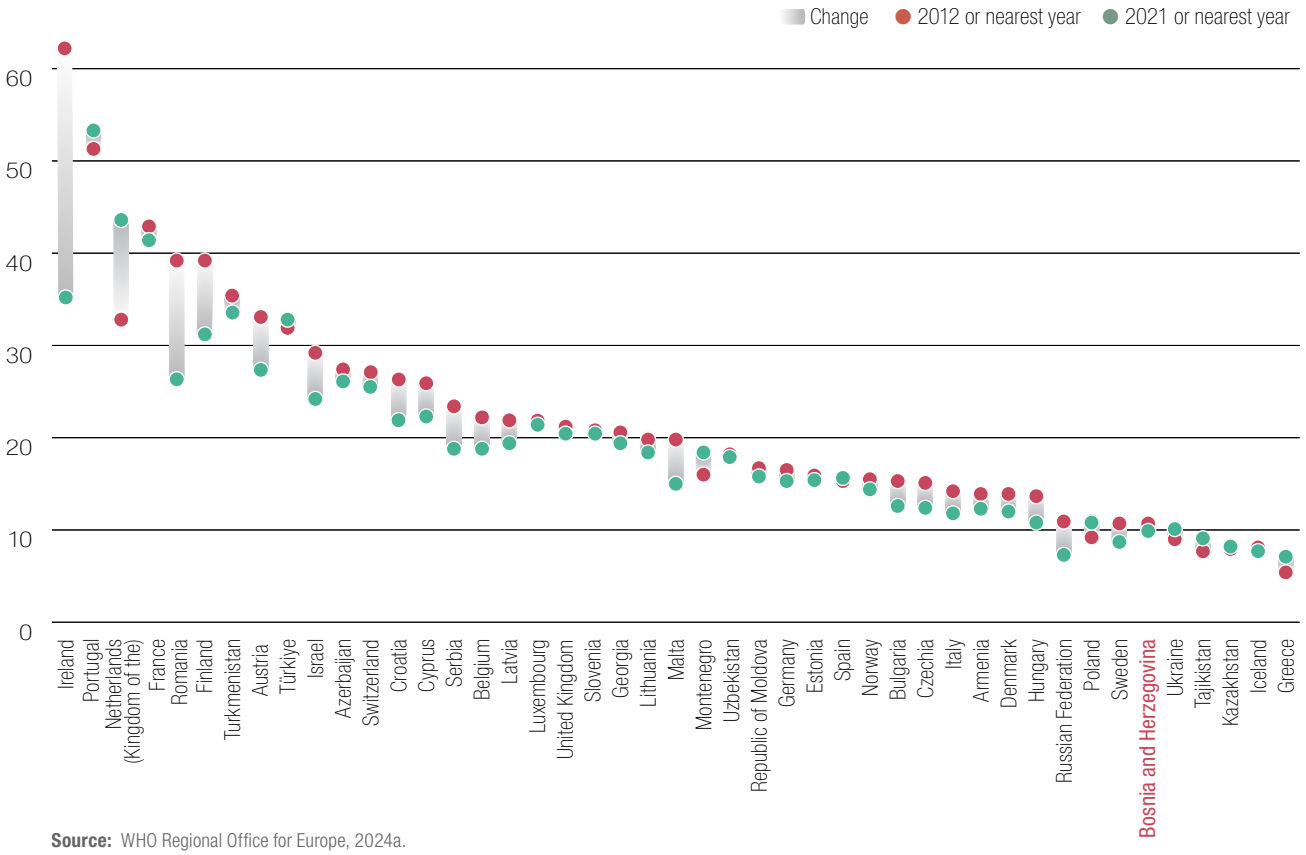


Source: WHO, 2024e.

Note: For Bosnia and Herzegovina, the latest data are for 2019. The number of nurses plotted for Austria has to be treated with caution, due to breaks in the time series and switching between "licensed to practise" and "practising" workforce numbers.

Fig.16

The number of generalist medical practitioners in Bosnia and Herzegovina is comparatively low

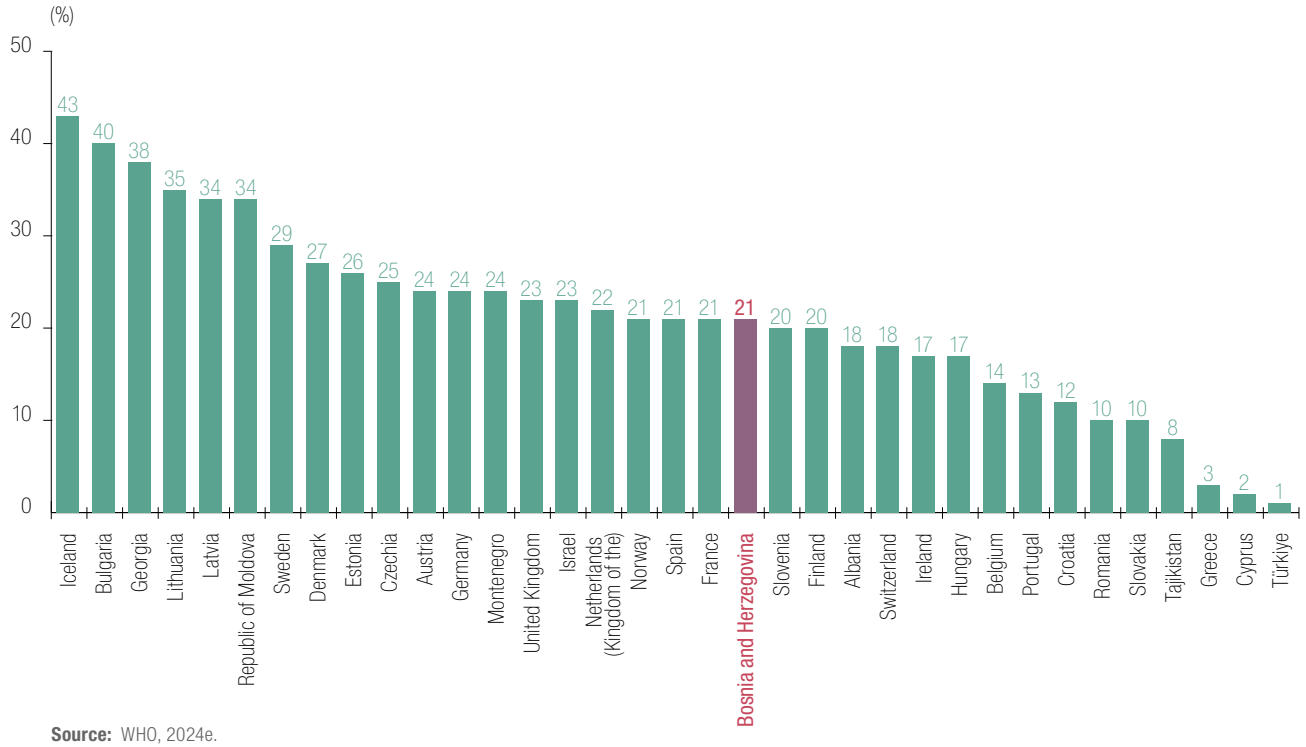


Source: WHO Regional Office for Europe, 2024a.

Notes: Latest data for Bosnia and Herzegovina are for 2019. Generalist medical practitioners (ISCO-08 code: 2211) are physicians who do not limit their practice to certain disease categories or methods of treatment and may assume responsibility for the provision of continuing and comprehensive medical care to individuals, families and communities. They include general practitioners, district medical doctors, therapists, family medical practitioners, primary health care physicians, medical doctors (general), medical officers (general) and medical interns or residents specializing in general practice or without any area of specialization yet. Although in some countries 'general practice' and 'family medicine' may be considered as medical specializations, these occupations are also classified here. The data for Ireland should be treated with caution due to a break in series.

Fig.17

One in every five nurses in Bosnia and Herzegovina is aged 55 years or older



Source: WHO, 2024e.

6 EUROPEAN PROGRAMME OF WORK (EPW)

Moving towards universal health coverage (UHC)

Bosnia and Herzegovina has made progress in increasing the share of the population covered by essential services. Recent initiatives of the governments of the Federation of Bosnia and Herzegovina and the Republika Srpska aim to expand community-based mental health centres and strive to integrate the regional flagship Mental Health Coalition of the EPW. Moreover, the governments are committed to improve access to PHC by adopting information and communication technologies such as telemedical solutions. WHO supports the digitization in PHC to also ensure continuity of care in future health emergencies.

Protecting against health emergencies

During the COVID-19 pandemic, access to medical supplies, protective equipment and digital infrastructure to maintain essential services was disrupted. To improve pandemic preparedness in the future, the Ministry of Civil Affairs of Bosnia and Herzegovina and health authorities in the Federation of Bosnia and Herzegovina, the Republika Srpska and Brčko District of Bosnia and Herzegovina are committed to review their emergency preparedness and response capacities. Moreover, legal obstacles for public procurement and more effective and efficient emergency management need to be prioritized in this context.

Promoting the health and wellbeing of the population

The WHO Regional Office for Europe supports the governments of the Federation of Bosnia and Herzegovina and the Republika Srpska in developing programmes and activities to prevent and control NCDs. To make further progress in tobacco control, a new tobacco control law in the Federation of Bosnia and Herzegovina, developed with WHO technical assistance, was adopted in May 2022. It bans smoking in workplaces and public places, bans tobacco advertising, introduces pictorial warnings on tobacco packages and regulates labelling and ingredients.

COUNTRY DATA SUMMARY

	Bosnia and Herzegovina	SEEHN	WHO European Region	European Union
Life expectancy at birth, both sexes combined (years)	76.3 (2016)	75.9 [a]	78.2 [a]	79.9 [a]
Estimated maternal mortality per 100 000 live births (2020)	5.7	7.3	12.6	6.4
Estimated infant mortality per 1 000 live births (2021)	4.8	4.6	6.3	3.2
Population size, in millions (2022)	3.2	54.7	929.1	512.7
GDP per capita, PPP$ (2021)	16 846	30 022	38 936	48 615
Poverty rate at national poverty lines, % of population	16.9 (2015)	22.6 (2017)	14.9 (2018)	17.0 (2018)

Sources: WHO Regional Office for Europe, 2024a;

[a] Eurostat, 2024, for EU/EEA countries, Albania, Montenegro, North Macedonia, Serbia, Armenia, Azerbaijan, Georgia and Türkiye.

Note: SEEHN includes Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, North Macedonia, the Republic of Moldova, Romania and Serbia; life expectancy averages refer to latest available years.

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