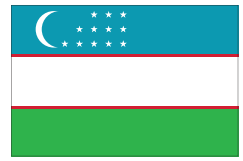


Health Systems in Action



Uzbekistan



**World Health
Organization**

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Observatory



on Health Systems and Policies

a partnership hosted by WHO

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UZBEKISTAN



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This edition of the Health Systems in Action Insight for Uzbekistan was written by Susannah Robinson.

The Health Systems in Action series

The Health Systems in Action Insights pilot 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 health system by health system
- 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 pilot 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 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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This Health Systems in Action Insight was written at the behest of the WHO Regional Office for Europe and in the context of the European Programme of Work. It captures for Member States outside the EU core information on their health systems; flags key issues; and allows comparison across countries and over time.

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This edition of the Health Systems in Action Insight for Uzbekistan was written by Susannah Robinson.

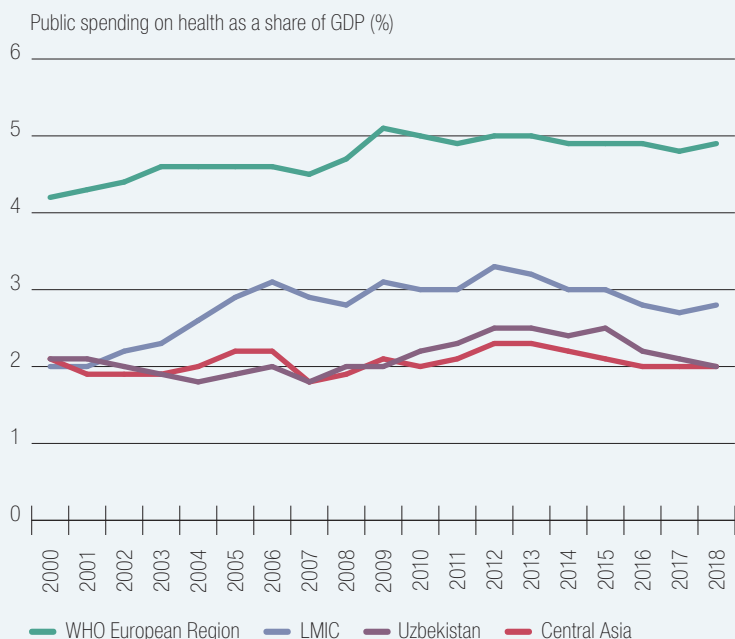
HEALTH SYSTEMS IN ACTION: UZBEKISTAN

Key points

- Uzbekistan's health system provides a publicly financed package of services, but many health services fall outside the scope of this package for most of the population, including a large number of primary, secondary and tertiary services.
- Between 2017 and 2020 government spending on health increased quite significantly, but so did out-of-pocket (OOP) expenditure. OOP expenditure now accounts for over half of health spending, with consequences for financial protection and access to services.
- Life expectancy had improved prior to the COVID-19 pandemic and was the highest among Central Asian countries.
- Rates of routine childhood vaccinations are high, but some communicable diseases such as HIV/AIDS and multidrug-resistant tuberculosis remain a concern.
- Noncommunicable diseases are the main cause of mortality and morbidity in Uzbekistan, with female mortality rates from noncommunicable diseases the highest in the WHO European Region.
- The population is at risk from poor diet, high blood pressure, smoking and air pollution, with men more likely to engage in behavioural risk factors such as smoking.
- There have been major reductions in infant and maternal mortality, reflecting government priorities in recent years, but rates remain high.
- The capacity of Uzbekistan's health system to respond to health emergencies was self-assessed to be low prior to the COVID-19 pandemic. Recorded cases of COVID-19 suggest that the country may have been hit less hard than other countries, but testing and reporting constraints may have contributed to low recorded case numbers.
- During the pandemic Uzbekistan has focused on improving surveillance capabilities and expanding hospital capacity. There is limited information on the extent to which the pandemic has affected the rest of the health system.

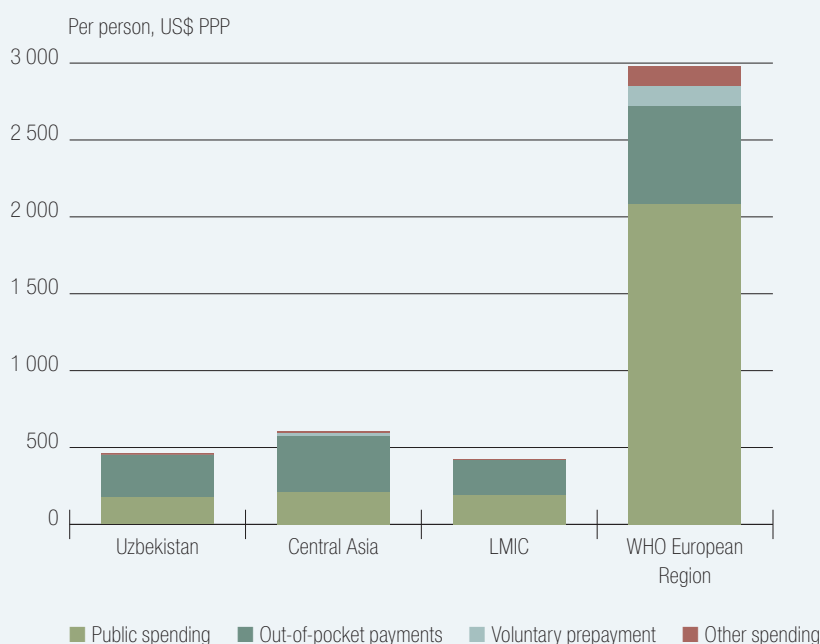
This report looks at the action Uzbekistan is taking to strengthen its health system; to achieve the Sustainable Development Goals; to address the priorities of the European Programme of Work 2020–2025; and to ensure that no one is left behind.

Fig. 1
Public spending on health as a percentage of GDP has declined since 2012



Source: WHO, 2021a.

Fig. 2
Health expenditure per capita is below the Central Asian average



Notes: LMIC: lower-middle income countries in the WHO European Region (including Tajikistan, a low-income country); PPP: purchasing power parity. 2018 data.

Source: WHO, 2021a.

1 ORGANIZING THE HEALTH SYSTEM

Health care provision in Uzbekistan is primarily public

The Ministry of Health is the major player in organizing, planning and managing the health system, and regulation is almost exclusively managed by the government. The system has three levels: national, regional, and district or city level. Having been an extremely centralized system under the former Soviet Union, Uzbekistan has gradually been introducing elements of decentralization to regional and district levels, especially on administrative issues. State health services are funded through national taxation. Health workers in the public sector are salaried employees.

Health services continue to be delivered in large part by the government. The private sector is relatively small but has expanded in recent years, with the number of private providers growing from about 3500 in 2017 to over 6000 in 2020 (World Bank, 2021a). The range of services where the private sector is allowed to operate has expanded from 50 services in 2017 to 177 in 2020, but certain services are still legally required to be provided by the public sector, such as those for HIV/AIDS and tuberculosis.

Comprehensive health service delivery reforms are under way following the “Concept on health development of the Republic of Uzbekistan 2019–2025” adopted in 2018. A priority is to bring health services closer to the population, but patient-centric models of health services are still at an early stage of development and there is little involvement of nongovernmental organizations (NGOs), professional associations or patients in issues of health policy or regulation.

A universal benefits package is provided but there are major gaps in coverage

A basic benefits package is paid for and provided by the state and officially free of charge to all citizens, in line with the 1996 Law on Health Protection. The package includes primary care, emergency care and specialized care for groups of the population classified by the government as vulnerable. It also includes care for certain “socially significant and hazardous conditions”, including diseases such as poliomyelitis, tuberculosis, leprosy, HIV/AIDS and syphilis, and certain noncommunicable diseases such as cancer. The de facto package largely excludes secondary and tertiary care, as well as outpatient pharmaceuticals, for significant parts of the population. This can create perverse incentives whereby patients visit emergency care, which is provided free of charge, because of a lack of more appropriate specialized services – which risks overburdening emergency services. There are plans to revise the benefits package,

currently being piloted in Syrdarya oblast (region), in line with the Presidential Resolution 4890 adopted in 2020, establishing a strategic purchaser of health services.

Inpatient public facilities are permitted to charge fees for services provided outside the state-funded package. Since voluntary health insurance is not common, shortfalls for health needs not met by state-funded services are usually paid for fully out of pocket by individuals, which creates financial barriers to access and may lead to financial hardship.

Most health spending goes to pharmaceuticals and inpatient care

According to the WHO Global Health Expenditure database, in 2018 most health spending (37.5%) went on medical goods (mostly essential medicines) and inpatient curative care (35%), compared to only 6.3% on general outpatient curative care, 5.6% on specialized outpatient curative care and 2.6% on preventive care (WHO, 2021a). However, according to data from the Ministry of Finance, in 2019 about 26% of government health expenditure was spent on primary care services. The reason for this discrepancy could be that government spending on primary care includes outpatient and inpatient care at district level.

The emergency care system is considered to be better provided with equipment, medical aids and devices, and medications than other publicly run health facilities. Public health services have largely retained their traditional focus on communicable diseases.

2 FINANCING AND ENSURING FINANCIAL PROTECTION

Public spending on health is very low, but similar to the Central Asian average

The main source of public revenue for the health system is taxation. In 2018 public spending on health amounted to 2% of GDP, a ratio that has declined since 2012 (Fig. 1). The trend of public spending in Uzbekistan is similar to the Central Asian average, but far below the average of the WHO European Region as a whole, which was more than double in 2018 (4.9%).

Per capita expenditure on health in Uzbekistan amounted to US\$ 459 in 2018 (adjusted for purchasing power), which was below the Central Asian average (US\$ 606), but above the average for lower-middle income countries in the WHO European Region (US\$ 426) (Fig. 2). However, the low per capita spending in US\$ is a concern when considering the high cost of critical

Box 1

Improving payment and provider efficiency

Uzbekistan's concept for development of the health sector to 2025 – approved by Presidential Decree 5590 in 2018 – aims to transform its health system into a modern and high-performing model, and to improve the health of all people by making progress towards universal health coverage. It focuses on three areas: improving life expectancy (with a particular emphasis on reducing premature mortality), health system and financing reform, and capacity building.

In a major departure from the current financing structure, one of the core pillars of this new strategy is the proposed introduction of a new single-payer state health insurance organization: the State Health Insurance Fund. In November 2020 Presidential Resolution 4890 formally established this new organization as a national purchasing agency to be financed through the central government budget to purchase health services defined in a new state-guaranteed benefits package, which will be available to the whole population. The pilot project began on 1 July in Syrdarya oblast, and national roll-out is planned from the end of 2022.

inputs such as medicines, devices and equipment, and the relative shortage of these essential items.

Very high levels of out-of-pocket spending can be catastrophic and pose a barrier to accessing services

Public expenditure accounted for only 38.2% of current health expenditure in 2018, with out-of-pocket (OOP) spending making up 60.3%. This share of OOP spending was higher than for most other countries in the WHO European Region and far above the average for LMIC in the region (50.6% in 2018) (Fig. 3).

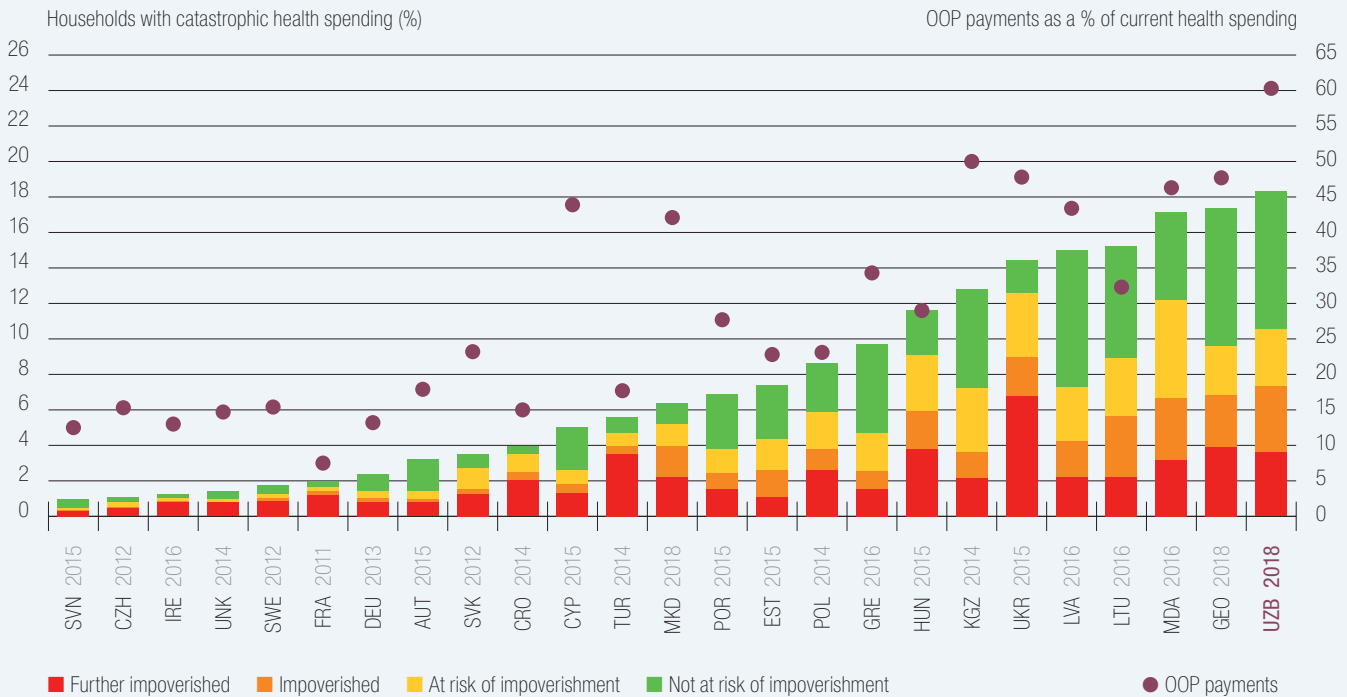
OOP payments create financial barriers to access and financial hardship for people using health services, especially for poorer households and people with health conditions not covered by the state benefits package. For many people, eligibility criteria for the benefits package are not directly linked to income levels. Whilst the government has introduced some measures to address this, financial protection for vulnerable households remains a challenge.

In 2018 around 18% of households experienced catastrophic health spending (Fig. 3). In 2020, 18% of households reported that at least one household member had not sought medical treatment due to cost (World Bank, 2021b). Overall, high shares of people have reported that they are unable to afford basic needs and more than half of participants in a recent study reported that they did not have any savings (World Bank, 2020b).

Informal payments for health services have also been reported, which can further limit access to care,

Fig.3

Share of households with catastrophic health spending by risk of impoverishment and out-of-pocket payments as a share of current spending on health



Notes: The data on OOP payments are for the same year as the data on catastrophic health spending. 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). AUT: Austria; CRO: Croatia; CYP: Cyprus; CZH: Czechia; DEU: Germany; EST: Estonia; FRA: France; GEO: Georgia; GRE: Greece; HUN: Hungary; IRE: Ireland; KGZ: Kyrgyzstan; LVA: Latvia; LTU: Lithuania; MDA: Republic of Moldova; MKD: North Macedonia; POL: Poland; POR: Portugal; SVK: Slovakia; SVN: Slovenia; SWE: Sweden; TUR: Turkey; UNK: United Kingdom; UKR: Ukraine; UZB: Uzbekistan.

Source: WHO, 2021a.

especially for lower income groups. Since the early 2000s the government has introduced a number of reforms to reduce informal payments, such as formal co-payments for a number of hospital services. However, it is unclear whether these policies have been successful in reducing informal payments. International experience suggests that the introduction of formal co-payments is not effective in reducing informal payments (Kutzin, Cashin & Jakab, 2010).

3 GENERATING RESOURCES, PROVIDING SERVICES AND ENSURING ACCESS

Infrastructure investment is centralized but some areas remain underfunded

The national government is responsible for investment in state-owned facilities. Most investments are made in accordance with national priority plans, but local governments provide some capital investment in areas such as construction and equipment. Major infrastructure investments have tended to focus on primary care facilities and central hospitals, although there have also been investments in some

tertiary specialty centres and facilities for cancer and tuberculosis (Ahmedov et al., 2014).

Hospital capacity relative to population used to be lower than in other Central Asian countries. Uzbekistan saw a steady decline in the number of beds per 100 000 population between 2000 and 2014, but the ratio has increased since then (Fig. 4). The private sector contributes an increasing share of capacity, amounting to 23.4% of all hospital beds in 2018.

In terms of investment in information technology (IT) in government-owned health institutions, this has been mostly confined to basic electronic data collection and entry. The national medical information system is still largely paper-based. However, there is national and regional interest in accelerating the adoption of telemedicine services and major investments are being made to develop a comprehensive electronic health information system. In 2020 Uzbekistan commissioned the first telemedicine clinic to support remote examinations of children and adolescents in Muynak oblast. A new Deputy Minister of Health responsible for IT in the health system has been appointed, and a new national eHealth architecture is being drafted. An ambulance dispatch system has been automated in Tashkent, with a national roll-out planned in 2021–2022. There are also ongoing efforts to introduce eHealth applications into state primary care clinics, with a pilot running in a number of primary care facilities in Tashkent and a second planned in Syrdarya oblast in the second half of 2021.

The ratio of nurses and doctors in Uzbekistan is higher than in Central Asia overall

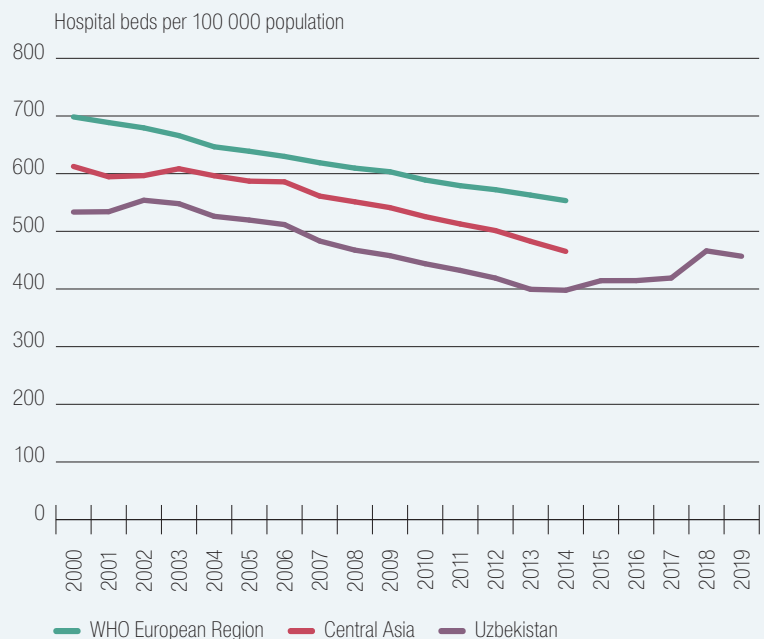
Medical education in Uzbekistan is mainly provided by public institutions and partially financed by the state. Each of the four major professional groups (physicians, nurses, dentists and pharmacists) follows a separate training pathway.

The number of physicians per 100 000 population has declined since 1990, partly due to a perceived surplus of physicians in the early years of independence, which led to cutbacks in enrolments for medical schools. In 2014 there were 245 physicians per 100 000 population, compared to a European regional average of 283. However, by 2019 this number had risen to 276 physicians per 100 000 population (State Committee on Statistics, 2020) and a new private medical university – Akfa Medline – has begun operating in Tashkent, which is expected to expand in the future. Anecdotally, there are still challenges with physician emigration to regional neighbours such as the Russian Federation and Kazakhstan, mainly due to better earning opportunities.

In contrast, there has been only a small reduction in the ratio of nurses. In 2019 there were 1100 nurses per 100 000 population (State Committee on Statistics, 2020) – above the 2014 averages for the WHO European Region, the EU and Central Asia (Fig. 5).

Fig. 4

The number of hospital beds in Uzbekistan has increased again in recent years



Note: hospital beds per 100 000 population, internationally comparable data only available up to 2014.

Sources: WHO, 2021b (for regional averages); State Committee on Statistics, 2020 (national data for 2015–2019).

As in many other countries, there are some disparities in the regional distribution of health professionals, with a concentration in urban areas and shortages in rural areas. Given that about half of Uzbekistan's population is living in rural areas, this disparity potentially affects a sizeable part of the population.

The health system performs well with regard to childhood immunizations, but less well with regard to other communicable diseases

Coverage for basic immunization services is good. In 2018, 96% of infants received their first dose of the measles vaccine, and 99% of those infants received their second dose. This share is higher than the WHO European average of 91% for the second dose, but in line with rates in neighbouring countries. Polio vaccination (DTP3) coverage is also high, at 98% of all infants.

Access to effective tuberculosis treatment stood at 92% among new and relapse cases, 78% among previously treated cases registered in 2018 and 61% among MDR-RR TB cases started on second-line treatment in 2017, very close to the average of the WHO European Region. However, there were fluctuations over the past decade and the rate in 2017 was lower

Box 2

The challenge of MDR-TB

While the incidence of tuberculosis (TB) has been declining in Uzbekistan in recent years, multidrug- and rifampicin-resistant TB (MDR/RR-TB) present a serious challenge.

In 2020 Uzbekistan was one of 30 high-burden MDR-TB countries in the world. Its share of MDR/RR-TB cases in 2019 was estimated at 12% of new cases and 22% of previously treated cases (WHO, 2020). Whilst its rates are lower than in several neighbouring countries, including Kazakhstan (27% among new and 64% among previously treated) and Kyrgyzstan (29% among new and 69% among previously treated), the challenge of MDR-TB is considered by the Ministry of Health as a priority public health issue.

Treating MDR-TB is difficult and expensive. Treatment is lengthy, and the drugs required are much more expensive than those used in standard treatment regimens and can have severe side-effects. In 2019 the national MDR-TB treatment success rate was 61% for MDR-RR TB cases started on second-line treatment in 2017.

The government of Uzbekistan has adopted policies to address the issue, including the National Strategy Concept of Healthcare Improvement for 2019–2025, which sets out targets for reducing TB incidence. Uzbekistan is committed to eliminating TB by 2050. However, MDR-TB prevention and reduction efforts will need to be stepped up in order to achieve this goal. Implementing fully oral short treatment regimens for MDR-RR TB cases and increasing access to new drugs could be important next steps for the country.

than in 2005 (Fig. 6). Rising rates of multidrug-resistant TB make progress more difficult (Box 2).

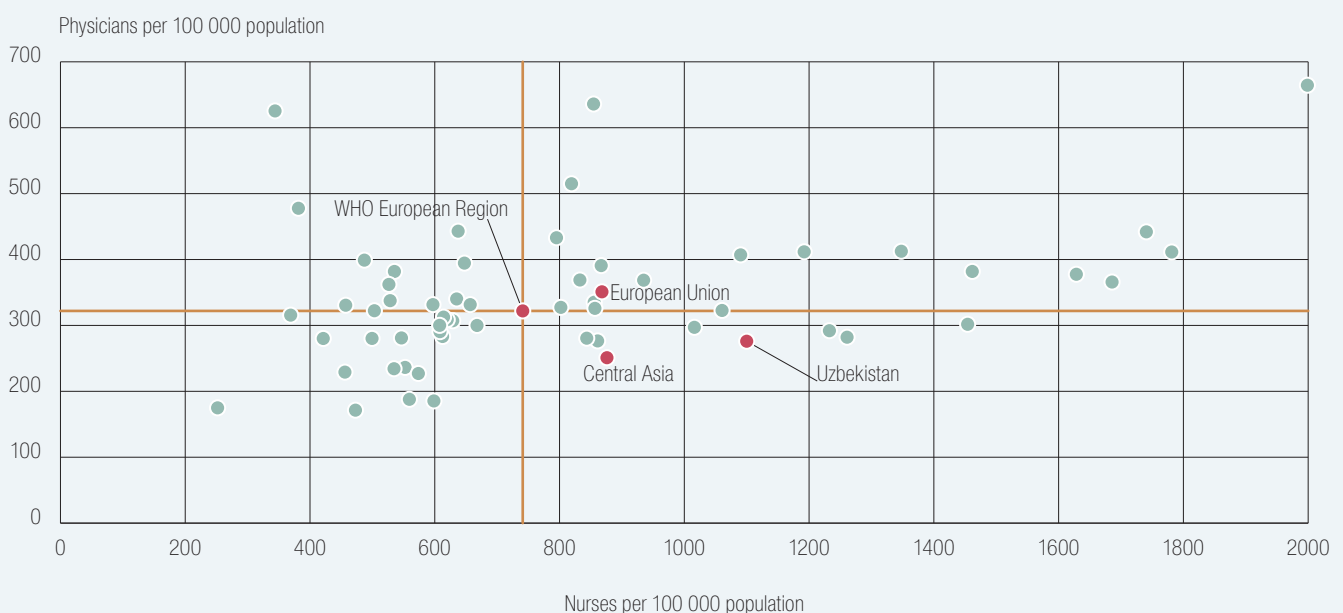
Work on HIV prevention and response in Uzbekistan remains challenging, and levels of HIV-related stigma and discrimination are high. The government does provide antiretroviral (ARV) treatment with support from a grant from the Global Fund, but adherence is a challenge.

Uzbekistan has improved overall service access, but challenges remain

In terms of the universal health coverage (UHC) service coverage index, access to essential services has seen considerable improvement in Uzbekistan over the past two decades, increasing from 56 (out of 100) in 2000 to 73 in 2017. These figures are below the averages for the WHO European Region, but slightly higher than the average for Central Asia (Fig. 7).

Fig. 5

Uzbekistan has fewer doctors than many other countries but more nurses



Notes: 2014 data for other countries and regional averages; 2019 for Uzbekistan.

Sources: WHO, 2021b; for Uzbekistan: State Committee on Statistics, 2020.

Whilst this is a positive development, it is not clear whether this coverage measure fully reflects the reality of access to services, especially for particular health conditions or populations. User charges (both formal and informal) can limit access to necessary care, and services for conditions excluded from the basic benefits package may be unaffordable for some. In addition, there are long waiting times in public facilities for certain services, although without a formal system of waiting lists.

The government has aimed to ensure equal geographical access to rural primary care units based on location and population. However, the use of aggregate proxies for health needs – such as geography and population numbers – can lead to insufficient resource allocation for certain population groups or health needs, such as older residents living in rural areas, or people with rare or complex health needs. Other barriers also exist, such as unreliable electricity and water supply to some rural health facilities (Ahmedov et al., 2014).

With the current health reform programme, the National Strategy Concept of Healthcare Improvement for 2019–2025, the government is pursuing a reform agenda centred around improving universal health coverage, with an emphasis on elements such as chronic diseases, early detection and long-term care. It is hoped that this will improve financial protection and access to quality services.

4 IMPROVING THE HEALTH OF THE POPULATION

Life expectancy in Uzbekistan prior to the COVID-19 pandemic was higher than in all other Central Asian countries

Life expectancy in Uzbekistan has shown steady improvements since 2000, increasing from 67.2 years to 73.9 years by 2016 (Fig. 8). Female life expectancy stood at 76.3 years in 2016, compared to a life expectancy of 71.6 years for males. This gender gap of 4.7 years is lower than the average in the WHO European Region (6.3 years).

Infant and maternal mortality rates have declined but remain areas of concern

With historically high infant and maternal mortality rates, maternal and child health has been one of the main government priorities in the health sector. Several high-profile government programmes have been developed with the aim of decreasing infant and maternal mortality. Maternal mortality is estimated

Fig. 6

Effective treatment coverage of new, non-drug-resistant TB cases has improved in recent years but is still below 2005 levels

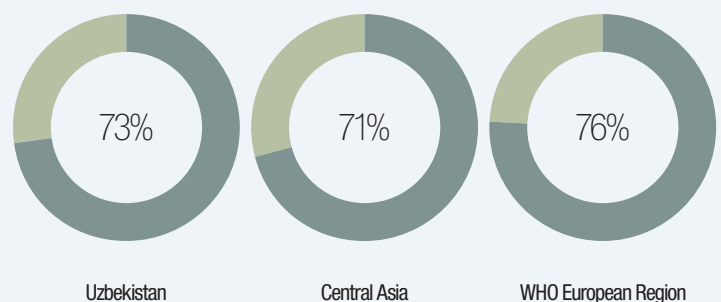


Note: Proportion of TB cases detected and successfully treated (estimate).

Source: WHO, 2021c.

Fig. 7

Uzbekistan does comparatively well in terms of UHC service coverage

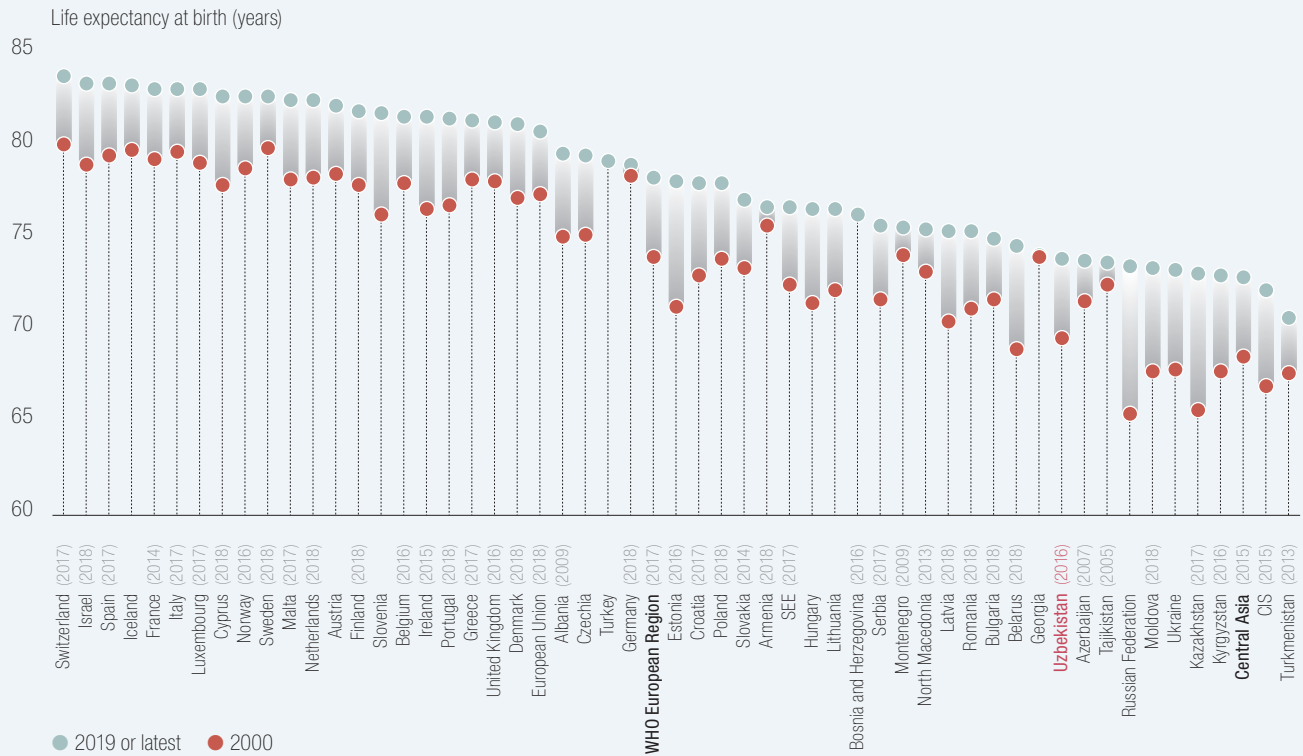


Note: Universal health coverage service coverage index in 2017, defined as the average estimated coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health; infectious diseases; noncommunicable diseases; and service capacity and access; among the general and the most disadvantaged population.

Source: WHO, 2021c.

Fig. 8

Life expectancy in Uzbekistan is higher than in neighbouring countries



Notes: Data are for 2019 or latest available year (shown in brackets). CIS: Commonwealth of Independent States;

SEE: South Eastern European countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, North Macedonia, Romania, Serbia).

Source: WHO, 2021b.

to have declined from 41 deaths per 100 000 live births in 2000 to 29 in 2017. However, it is more than twice the average of the WHO European Region (13 maternal deaths per 100 000 live births) and is also higher than the rates in Tajikistan and Kyrgyzstan.

Infant mortality is estimated to have declined from 51.8 deaths per 1000 live births in 2000 to 15.6 in 2019, which was below the Central Asian average of 17.6 in the same year. However, infant mortality remains high compared to the European regional average. In general, high maternal and infant mortality rates may be indicative of quality issues with antenatal care and hospital services, since major causes of death such as preterm birth complications, bleeding, hypertension and sepsis should not result in death in well-performing hospitals. Whilst overall deaths from neonatal disorders have been declining, specific issues such as neonatal sepsis and encephalitis have increased again in recent years, suggesting a need to further improve the quality of neonatal care.

Noncommunicable diseases are a sizeable health threat

Noncommunicable diseases (NCDs) are the leading cause of mortality and morbidity in Uzbekistan, as is the case for much of the WHO European Region.

They were estimated to be responsible for 84% of all deaths in Uzbekistan in 2018, higher than the global average of 71% (WHO, 2018b). Of the top 10 leading causes of deaths recorded in 2019, six were due to noncommunicable diseases. An economic burden analysis showed that economic losses from NCDs (direct and indirect costs) make up 9.3 trillion sum, equivalent to 4.7% of gross domestic product in 2016 (WHO, 2018a).

In 2016 NCDs accounted for 559 deaths per 100 000 population, a decline from previous years, but still nearly 50% greater than the average of the WHO European Region of 378 deaths per 100 000 population. Uzbekistan ranks among the countries with the highest NCD mortality rates in the WHO European Region.

Female deaths from NCDs are lower (445 per 100 000 population) than among males (686) but are nearly 75% higher than the average of the WHO European Region. They were the highest reported rate of NCD deaths in the WHO European Region in 2016 (WHO, 2021b). Ischaemic heart disease is the leading cause of NCD deaths (Fig. 9).

Premature mortality (in people aged 30–69 years) from major noncommunicable diseases (cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases) is also high in Uzbekistan (in particular among males) (Fig. 10).

Mental, neurological and substance use conditions, including depression, anxiety disorders, psychosis, epilepsy, dementia and alcohol-use disorders, also pose a major challenge in Uzbekistan. Between 1991 and 2017 there was an overall increase of 15% in the incidence of people registered with mental disorders. Real rates of disorders such as anxiety and depression may be even higher, given the low uptake of treatment and the stigma surrounding mental health conditions. The government has responded to this challenge by starting to improve the provision of mental health services.

Major mortality risk factors are also connected to noncommunicable diseases

In terms of risk factors as a share of all deaths, high systolic blood pressure and dietary risks are the biggest drivers of mortality, estimated to be involved in 30.7% and 28.2% of all deaths respectively (Fig. 11).

Smoking prevalence amongst those aged 15 and over, at 11.7% in 2018, is one of the lowest in the WHO European Region, declining from 13.4% in 2007. This compares to a prevalence rate of 24.6% in the WHO European Region and 17.3% in Central Asia in 2018. The smoking prevalence rate is much lower among females, amounting to only 1.3% in 2018 (the same rate as in 2007). Male smoking prevalence is much higher, but has declined from 26% in 2007 to 22.9% in 2018. Alcohol consumption, at 1.6 litres per capita in 2018, is low, compared to an average in the WHO European Region of 7.8 and a Central Asian average of 2.3.

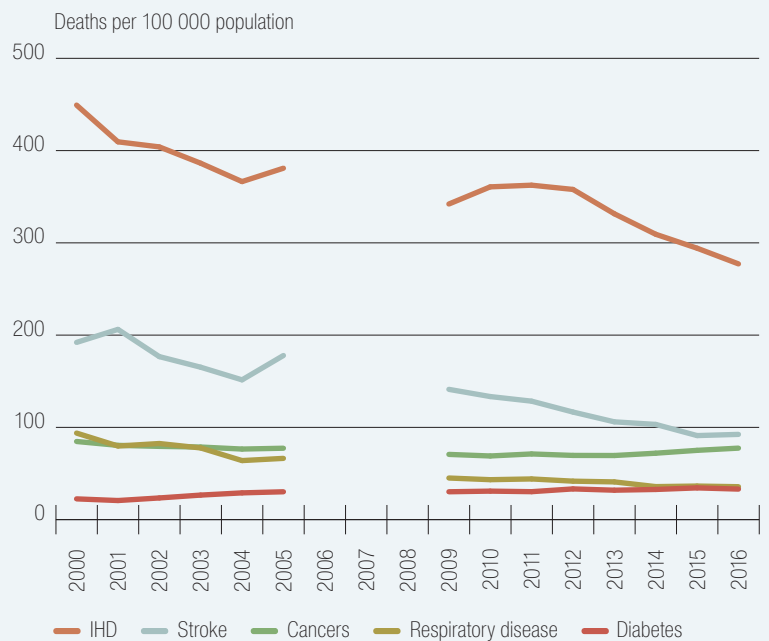
Obesity levels among adults (16.6% in 2016) are lower than the average of the WHO European Region (23.3%) but have nearly doubled since 2000, with women more likely than men to be obese. Levels of low physical activity (19.1% in 2016) are below the average of the WHO European Region (29.3%), and rates of inactivity are much higher for women than men.

Air pollution is also a significant risk factor. Around two thirds of air pollutants are caused by land vehicles. There is no indication of a national air quality policy and environmental issues in general are not a high priority. In cities such as Tashkent, Farghona and Olmaliq, nitrogen dioxide and particulates exceed WHO recommended levels, whilst in rural areas heavy use of agricultural chemicals has led to degrading air quality. There is some air quality legislation – such as the Law on the Protection of Atmospheric Air – but local enforcement capacity is limited (United Nations Environment Programme, 2015).

Overall an estimated 63% of premature mortality in Uzbekistan is attributable to behavioural risk factors which, if properly addressed, could potentially save an estimated 3.9 million life years.

Fig. 9

Ischaemic heart disease is the primary cause of NCD mortality and has declined in recent years

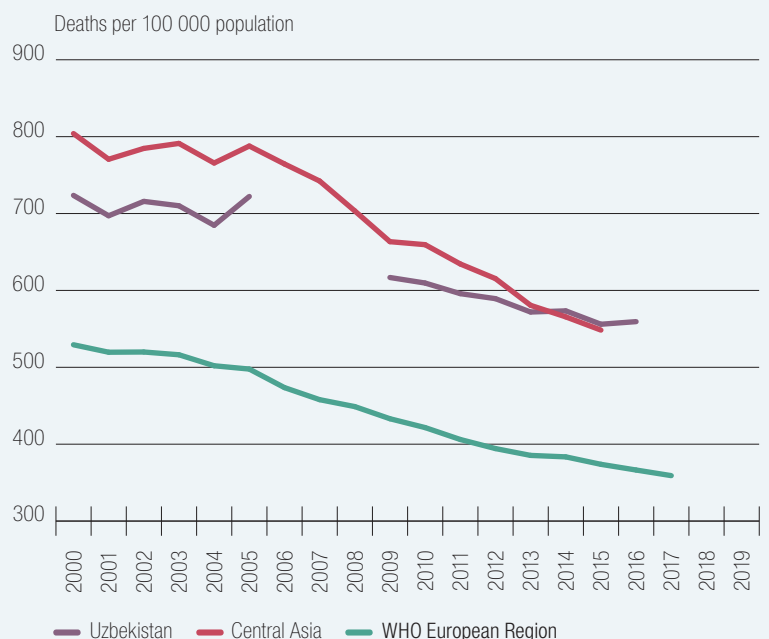


Note: IHD: ischaemic heart disease.

Source: WHO, 2021b.

Fig. 10

Premature mortality from NCDs has declined but remains high



Note: Premature mortality (in people aged 30–69 years) from major noncommunicable diseases (cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases).

Source: WHO, 2021b.

Box 3**Cross-sectoral collaboration to improve health and well-being**

Despite limited formal mechanisms for multisectoral collaboration, the government has begun using an intersectoral approach to tackle specific health issues. In response to the COVID-19 pandemic the Ministry of Health has engaged with a wide variety of sectors, including employment, transport and tourism. Prior to the pandemic, an area of intersectoral collaboration that had seen some gains was risk factors for noncommunicable diseases (NCDs).

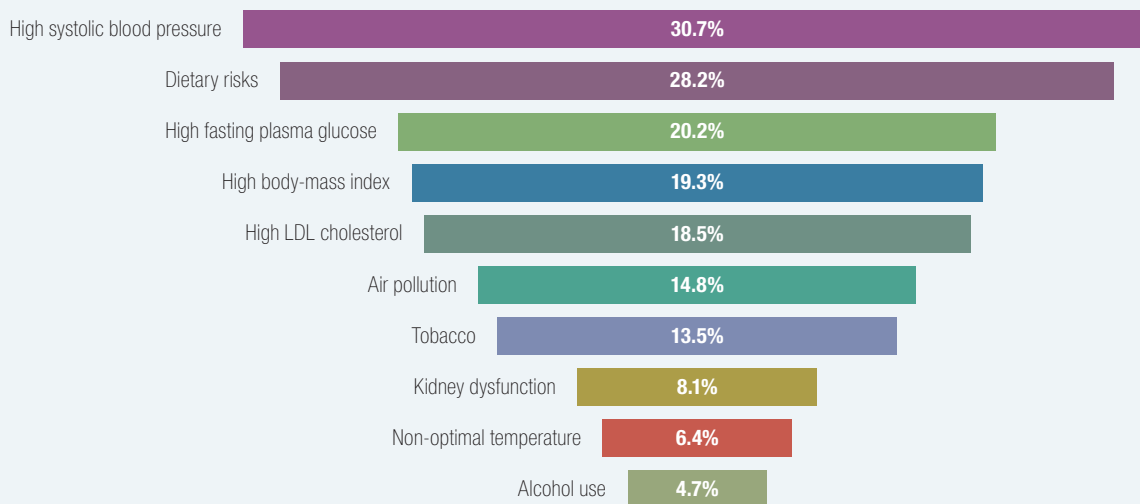
In November 2020 a Presidential Decree on healthy nutrition, physical activity and sport, on preventive health and health promotion was adopted. There is some collaboration between government departments responsible for health, taxation and trade: for example, the sale of alcohol without excise labels is prohibited and excise duties are increased annually (although they are still at the lower end of the range for countries in the

WHO European Region). There is scope to expand this work across other areas in the future. In nutrition, the Ministry of Preschool Education has collaborated with the Ministry of Health and WHO to develop a healthy cookbook for preschool facilities in Uzbekistan, to support the recommended reductions in salt, sugar and fats (and eliminating trans fats).

Tobacco control is an area where intersectoral collaboration could strengthen the enforcement of existing policies. Uzbekistan already has a smoke-free law on public transport, introduced in 2015, but a 2017 WHO assessment scored compliance as 2/10 (scores below 5 are low compliance). To improve compliance, involving the Minister of Internal Affairs in tobacco control enforcement was flagged as a priority by stakeholders (WHO, 2018a). A comprehensive draft law on tobacco and alcohol regulation has also recently passed the first readings in the Parliament, which proposes a comprehensive definition of tobacco products, including novel products, and a series of restrictions to support a tobacco-free environment, sales and administrative code changes.

Fig. 11

High systolic blood pressure and dietary risks are leading risk factors contributing to deaths in Uzbekistan

Top 10 risk factors as a share of all deaths

Note: Shares overlap and, therefore, add up to more than 100%. LDL: low-density lipoprotein.

Source: IHME, 2019.

Poverty levels remain high, and access to safe water and sanitation can be a challenge

In 2013 Uzbekistan's poverty headcount ratio using national poverty lines was recorded as 14.1% of the population, slightly below the WHO European Regional average that year of 15.4%. In 2018 this figure had reportedly declined to 11.4% of the population, below the European Regional average of 14.9% (WHO, 2021b). The World Bank is now working with the government of Uzbekistan on major revisions to poverty estimates.

Poverty is known to affect exposure to risk factors for noncommunicable diseases, such as poor diet. Child and maternal malnutrition is a persistent challenge, with 20% of non-pregnant women aged between 15 and 49 estimated to suffer from anaemia in 2017 (UNICEF, 2019). To tackle a series of issues with unhealthy diet, the government of Uzbekistan has introduced a number of measures, including flour fortification and vitamin supplements for children and women of reproductive age. Uzbekistan announced a plan to introduce front-of-package food labelling and regulation has been prepared for introduction from July 2021. The labelling will initially be done on a voluntary basis, but will become mandatory from 2025.

To strengthen primary care in response to the national NCD burden, the Ministry of Health is updating WHO Package of Essential Noncommunicable Disease (PEN) protocols and planning the nationwide scale-up of successful pilot projects in the oblasts of Fergana and Kashkadarya. In addition, national specialists are actively engaged in the introduction of implementation research on brief interventions on NCD risk factors at the primary care level and on nutrition policies in schools.

Uzbekistan's water services and sanitation infrastructure, constructed mostly during the Soviet period, is considered in need of extensive rehabilitation and renewal. It has not kept pace with the needs of a growing population, resulting in stagnation and decline in the quality of water services in many areas (World Bank, 2020a). This results in poor access to safe water and sanitation and preventable ill-health.

5 SPOTLIGHT ON COVID-19

Prior to the COVID-19 pandemic, Uzbekistan reported relatively low capacity to address public health emergencies

According to Uzbekistan's self-assessment on the implementation of the International Health Regulations in 2019, the country scored lower than the WHO European Region overall for some of the core capacities that would allow it to respond to a pandemic (Fig. 12). Capacity scores were seen as particularly low in terms of IHR coordination (40%, against 82% in the WHO European Region) and capacity at points of entry (40% compared to 60%).

According to official data, the pandemic's impact on the population seems to have been less severe than in many other countries. As of 3 August 2021 Uzbekistan had recorded 131 079 confirmed cases of COVID-19 and 886 deaths (Fig. 13). A low death rate may be connected to the country's demographic structure, with its relatively young population, but other factors may also be at play, such as low rates of testing and reporting.

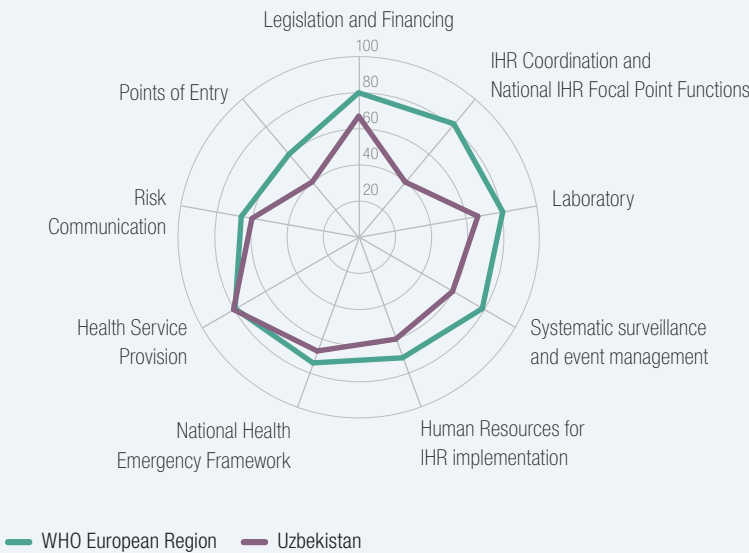
The COVID-19 crisis response is led by the Agency of Epidemiology and Sanitary Well-Being under the leadership of the Ministry of Health and supported by a National COVID (inter-ministerial) Committee chaired by the Prime Minister. In addition, six other COVID task forces were established, chaired by the government and co-chaired by UN organizations and development partners.

In the early stages of the pandemic the country focused on rapidly expanding capacity for care and diagnostics (Rechel, 2021). A 3139-bed stationary COVID-19 hospital was constructed in Tashkent, following the example of the Chinese emergency specialty hospitals. Modular infectious diseases hospitals with a total number of 23 168 beds and triage and treatment centres with a total number of 8994 beds were established in all regions of the country. Surveillance and laboratory capacity were also ramped up substantially (Shadmanov et al., 2021).

In terms of testing, both PCR and antigen tests are now available for citizens with results usually available within 72 hours. However, private tests cost on average between 220 000 and 420 000 Som (US\$ 20–40), and in the early stages of the pandemic free testing was not available to all. Furthermore, those who tested positive for COVID-19 were often required to be hospitalized in COVID-19 hospitals, irrespective of severity. This may have been a significant disincentive to people from getting tested, given negative media coverage about the conditions in the COVID-19 hospitals in the early stages of the pandemic.

Fig. 12

In 2019 Uzbekistan scored lower than average in some core capacities for the implementation of the International Health Regulations



Note: Country self-assessment on selected core capacities for the implementation of the International Health Regulations.

Source: WHO, 2021c.

Uzbekistan does have the capacity for genetic sequencing to identify COVID-19 variants, but in practice sequencing is limited due to lack of supplies such as reagents.

Since the beginning of the pandemic, the government of Uzbekistan has demonstrated commitment to international cooperation and has shown interest in exchanging experiences on issues related to outbreak response and patient treatment. Missions from Germany, the Russian Federation, South Korea and Turkey have visited the country (Shadmanov et al., 2021).

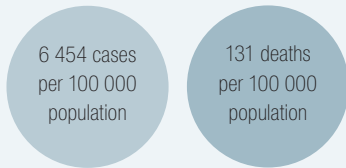
In August 2020 Germany’s Robert Koch Institute (RKI), together with the World Health Organization Regional Office for Europe, participated in an Intra-Action Review for COVID-19 to identify current best practices, gaps and lessons learned, as well as to propose corrective measures and actions to improve and strengthen the COVID-19 response. The priority areas identified included: (1) reviewing, updating and implementing the National Strategic Preparedness and Response Plan (SPRP) for COVID-19, (2) establishing a national Public Health Emergency Operations Centre, (3) introducing an integrated digital surveillance and reporting system, as well as (4) refining treatment guidelines and diagnostic procedures.

It is not known what the impact of the pandemic so far has been on health worker capacity or health financing. However, the continuation of essential health services for the population, particularly for the most vulnerable, has been highlighted as a key challenge facing the country in the wake of the pandemic.

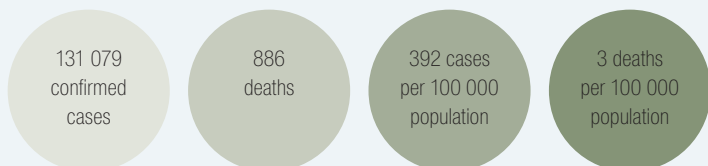
Fig. 13

Uzbekistan has recorded a very low number of deaths due to COVID-19

WHO European Region



Uzbekistan



Note: Data as of 3 August 2021.

Source: WHO, 2021d.

6 EUROPEAN PROGRAMME OF WORK (EPW)

Moving towards universal health coverage

Uzbekistan is striving to move towards universal health coverage and WHO supports these efforts. A range of initiatives is ongoing or planned for the near future, including strengthening the health system and especially primary care and health financing reform; promoting evidence-based health sector policies; introducing a health management information system (HMIS); improving supply chain management; revising service delivery models including multi-profile facilities; improving health workforce training to comply with international standards; and ensuring access to the state-guaranteed benefits package, which will be available to the whole population.

WHO supports the development of mechanisms and protection of the rights of health workers to improve professional development and decent working conditions; provides technical assistance on case management of HIV and TB (with a focus on drug-resistant TB); supports the implementation of an enhanced and sustainable system for vaccine-preventable diseases; supports an intersectoral programme on antimicrobial resistance; and helps to strengthen laboratory services. In addition, WHO supports strengthening national capacity to diagnose and treat NCDs, including mental illness, with training for clinical staff and the development of postgraduate training.

An important step forward towards more proactive population health management at primary care level is the new Presidential Decree on risk stratification which established four risk groups based on diagnoses and NCD-related behavioural risk factors. Information on risk stratification can be used to produce community health profiles, which can form the basis for discussing health priorities at community level and designing population-level interventions.

Protecting against health emergencies

In light of the COVID-19 pandemic, and to reinforce protection against future health emergencies, WHO supports the implementation of the Joint External Evaluation (JEE) of International Health Regulation (IHR), led by the Ministry of Health. WHO also continues to support the health system response to COVID-19 through technical assistance to strengthen the health system, the training of health workers, procurement of essential equipment, enhanced surveillance systems, and building infectious disease laboratories.

Promoting health and well-being

WHO works with the government of Uzbekistan to promote opportunities for healthy choices for all socioeconomic groups, including through the introduction of new approaches such as healthy settings and “Health For All” policies. These approaches will support policies that promote healthy lifestyles, including nutrition and health literacy for all age groups, with a particular focus on vulnerable groups. Incorporating behavioural and cultural insights in future programmes will be crucial to the promotion of healthy choices, particularly for nutrition, and will see a special focus on supporting vulnerable groups. WHO also provides technical support for efficient and sustainable service delivery systems

COUNTRY DATA SUMMARY

	Uzbekistan	Central Asia	WHO European Region	EU-28
Life expectancy at birth, both sexes combined, years ^a	73.9 (2016)	72.9 (2015)	78.3 (2017)	81.2 (2017)
Estimated maternal mortality per 100 000 live births (2017)	29	23.6	13	6.1
Estimated infant mortality per 1 000 live births ^a (2019)	15.6	17.7	7.5 (2018)	3.5 (2018)
Population size, in million (2019)	33.6	72.6	927.2	512
GDP per capita, PPP US\$ (2019)	7 308	12 427	36 813	46 699
Poverty rate at national poverty lines ^a (2018)	11.4	14.1 (2017)	14.9	17

^a Latest year for which data are available shown in brackets.

Notes: EU-28: 28 EU Member States until 2020; GDP: gross domestic product; PPP: purchasing power parity.

Sources: WHO, 2021b; World Bank, 2021c.

in reproductive, sexual, women, newborn, child and adolescent health at all levels of care and in school settings. These areas of cooperation include engagement with WHO European Programme of Work regional flagship initiatives on digital health, mental health, immunization and promoting healthier behaviours.

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WHO Regional Office for Europe

WHO is the authority responsible for public health within the United Nations system. The WHO Regional Office for Europe (WHO/Europe) covers 53 countries, from the Atlantic to the Pacific oceans.

To support countries, WHO/Europe seeks to deliver a new vision for health, building a pan-European culture of health, where health and well-being goals guide public and private decision-making, and everyone can make healthy choices. WHO/Europe aims to inspire and support all its Member States to improve the health of their populations at all ages. WHO/Europe does this by providing a roadmap for the Region's future to better health; ensuring health security in the face of emergencies and other threats to health; empowering people and increasing health behaviour insights; supporting health transformation at all levels of health systems; and by leveraging strategic partnerships for better health.

European Programme of Work 'United Action for Better Health in Europe'

The European Programme of Work (EPW) sets out a vision of how the WHO Regional Office for Europe can better support countries in our region in meeting citizens' expectations about health.

The social, political, economic and health landscape in the WHO European Region is changing. United action for better health is the new vision that aims to support countries in these changing times. "United", because partnership is an ethical duty and essential for success, and "action" because countries have stressed their wish to see WHO move from the "what" to the "how", exchanging knowledge to solve real problems. The WHO European Region's solidarity is a precious asset to be nurtured and preserved and, through the EPW, WHO/Europe supports countries as they work together to serve their citizens, learning from their challenges and successes.

The European Observatory on Health Systems and Policies

The European Observatory on Health Systems and Policies supports and promotes evidence-based health policy-making so that countries can take more informed decisions to improve the health of their populations. It brings together a wide range of policy-makers, academics and practitioners, drawing on their knowledge and experience to offer comprehensive and rigorous analysis of health systems in Europe. The Observatory is a partnership hosted by WHO/Europe. Partners include the governments of Austria, Belgium, Finland, Ireland, Norway, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the Veneto Region of Italy (with Agenas); the European Commission; the French National Union of Health Insurance Funds (UNCAM), the Health Foundation; the London School of Economics and Political Science (LSE) and the London School of Hygiene & Tropical Medicine (LSHTM). The Observatory is based in Brussels with hubs in London (at LSE and LSHTM) and at the Berlin University of Technology.