Health Systems in Action

Kyrgyzstan

World Health Organization
REGIONAL OFFICE FOR Europe

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

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KYRGYZSTAN

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Editorial Team

This edition of the Health Systems in Action Insight for Kyrgyzstan was written by Bernd Rechel and Suszy Lessof.

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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Acknowledgements

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This edition of the Health Systems in Action Insight for Kyrgyzstan was written by Bernd Rechel and Suszy Lessof.

HEALTH SYSTEMS IN ACTION: KYRGYZSTAN

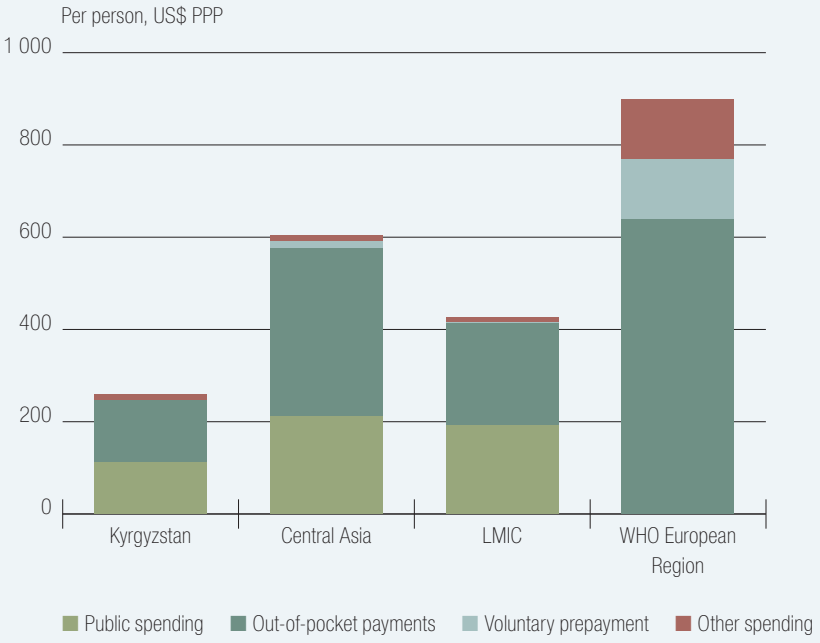
Key points

- Kyrgyzstan's health system provides a state-guaranteed package of services but there are major gaps in population coverage and the scope of publicly funded care is limited.
- Most patients have to make co-payments for inpatient care and only 50% of the so-called basic price of a limited list of (some 70) medicines is covered.
- Government spending on health has declined, with an increasing share of government spending going to other sectors.
- Private expenditure has filled the resulting funding gap and just over half of health spending is now out-of-pocket. This heavy reliance on out-of-pocket payments can lead to catastrophic and impoverishing health spending.
- Ongoing reforms in public finance management are intended to improve the efficiency and effectiveness of public spending.
- Despite efforts to ensure access to health care, there are still marked disparities in provision between rural and urban areas, and barriers linked to cost and gaps in mandatory health insurance coverage.
- Rates of routine childhood vaccinations are high and had improved prior to the COVID-19 pandemic, as had access to HIV services. However, multidrug-resistant tuberculosis remains a considerable public health concern.
- Overall, Kyrgyzstan faces major health challenges in terms of both communicable and noncommunicable diseases. Life expectancy had improved prior to the COVID-19 pandemic but was still one of the lowest in the WHO European Region.
- The population is at risk from poor diet, high blood pressure and smoking and, to a lesser extent, air pollution and alcohol consumption, with men more likely to engage in behavioural risk factors (e.g. smoking and alcohol consumption).
- There have been improvements in mortality from stroke and respiratory diseases, and improvements in premature mortality from noncommunicable diseases, more broadly.
- The capacity of Kyrgyzstan's health system to respond to health emergencies was judged to be low prior to the pandemic, but recorded cases of COVID-19 suggest that the country may have been hit less hard than other countries.
- The pandemic has, nonetheless, disrupted essential health services. This, together with low government health spending, barriers to access, and poor quality of care, suggest recent health gains are under threat.

This report looks at the action Kyrgyzstan 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

Health expenditure per capita is low compared with neighbouring countries

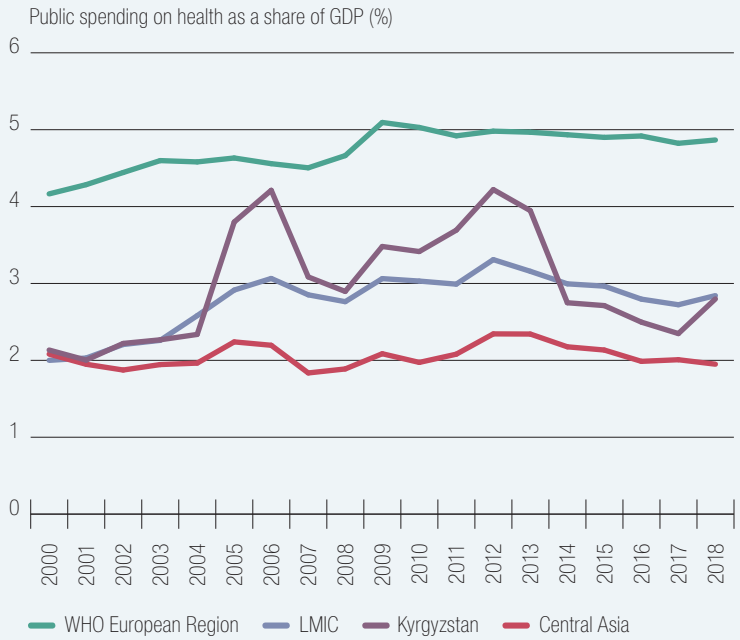


Notes: 2018 data. LMIC: lower-middle-income countries in the WHO European Region (including Tajikistan, a low-income country); PPP: purchasing power parity.

Source: Global Health Expenditure Database (WHO, 2021b).

Fig. 2

Public spending on health as a share of GDP has been very uneven, reflecting changes in government priorities and falling levels of external support



Notes: GDP: gross domestic product; LMIC: lower-middle-income countries in the WHO European Region (including Tajikistan, a low-income country).

Source: Global Health Expenditure Database (WHO, 2021b).

1 ORGANIZING THE HEALTH SYSTEM

Kyrgyzstan's health system relies on public provision of care

The Kyrgyz health system is governed by the Ministry of Health and Social Development which is responsible for the development of national health policies and the regulation of health service provision. The Mandatory Health Insurance Fund (MHIF) pools public funds at the national level for the purchasing of a standardized package of services from health care organizations. Most health care organizations are public and most health workers are salaried employees. Kyrgyzstan has undertaken far-reaching health-reform programmes, including *Manas* (1996–2005), *Manas Taalimi* (2006–2011), *Den Sooluk* (2012–2018) and the current "Healthy Person – Prosperous Country" programme (2019–2030), with a particular focus on health system strengthening for universal health coverage and improving health outcomes. Patient rights and the participation of the public in the governance of the health system are still at an early stage of development.

The benefits package is basic and there are major gaps in population coverage

The State Guaranteed Benefits Programme (SGBP) and the Additional Drug Package provide care as part of the mandatory health insurance system which regulates publicly funded health coverage. The health insurance system is mainly (more than 70%) financed from the national health budget (rather than from health insurance contributions). The MHIF channels 80% of public spending through a contractual relationship with health facilities at all levels of care, under which individual health services covered by the SGBP and the Additional Drug Package are purchased. It is also responsible for financing tertiary care facilities.

The population is entitled to basic essential health services, including emergency, primary and inpatient care. However, the package of services covered is very limited: inpatient care requires co-payments, and not everyone is enrolled in the mandatory health insurance scheme. The Additional Drug Package covers just 50% of the so-called basic price of a specified list of medicines (a restricted list of only approximately 70 international nonproprietary names) in primary care. The difference between 50% of the basic price and the retail price has to be paid out-of-pocket by patients. Furthermore, there are major gaps in population coverage, with 34.5% of the population enrolled with family doctors in 2018 not covered by mandatory health insurance (Moldoisaeva et al., 2021).

The role of primary care in prevention and management of noncommunicable diseases is underdeveloped

In the early years of reform, efforts were focused on strengthening primary care and improving maternal and child health. Physicians in Family Group Practices (FGPs) are responsible for initial visits, check-ups, and, if necessary, examination and treatment. If a consultation with a specialist is needed, the family doctor refers patients to secondary care, although in reality primary care is often bypassed and patients access specialists directly, partly due to the limited scope of practice at primary care level. Feldsher-Midwife Points (FAPs) have been established in rural areas to improve access to primary care and maternal and child health care and are run by a feldsher (a nurse-midwife), as well as a family doctor who visits the FAP regularly. However, primary care is not addressing many diseases that are best managed at the primary care level, including noncommunicable diseases, and it remains poorly oriented towards preventive activities. In terms of its share of health expenditure, primary care accounted for only 21.7% of health spending in 2016, lower than the share for inpatient care (30.5%) or pharmaceuticals (36.1%) (Moldoisaeva et al., 2021).

Specialized ambulatory care is provided by specialists at Family Medicine Centres (FMCs), as well as private medical centres (some of which are contracted by the MHIF to provide publicly funded services). Secondary and inpatient care is provided by hospitals at the district and regional level. Tertiary care is located in the capital, Bishkek, making it more accessible to residents of Bishkek city and Chui region, and resulting in access barriers to people living in other parts of the country.

2 FINANCING AND ENSURING FINANCIAL PROTECTION

Health spending per capita is low

Health expenditure in the WHO European Region in 2018 ranged from 1.6% to 11.9% of gross domestic product (GDP). In Kyrgyzstan it amounted to 6.5% of GDP in 2018, an increase from 4.4% in 2000 but still below the 2012 level of 8.5%. Health expenditure per capita is one of the lowest in the WHO European Region, amounting to US$ 260 PPP (purchasing power parity) in 2018 **(Fig. 1)**, with only Tajikistan spending less per person.

Public spending on health has declined in recent years

In the early 2000s, public spending on health as a share of total government expenditure increased (from 7.1% in 2000 to 12.8% in 2005) as part of a sector-wide approach (SWAp) that external agencies negotiated with the government. Public spending then declined gradually to 8.4% in 2018 with other areas of government expenditure pulling ahead. Public expenditure on health now amounts to only 2.8% of GDP, far below the average for the WHO European Region, although above the average for central Asia **(Fig. 2)**. Per capita public expenditure on health has also fallen from a peak of US$ 127 (adjusted for purchasing power) in 2013 to US$ 88 in 2017, although it did increase to US$ 111 in 2018. This is, at least partly, due to the decreasing role of external funders as Kyrgyzstan transitioned from being a low-income country (LIC) to a lower-middle-income country (LMIC) in 2014. External health expenditure as a percentage of current health expenditure declined from 15.7% in 2004 to 4.7% in 2018.

Private spending, almost entirely in the form of out-of-pocket expenditure including informal payments, accounted for 52.5% of health expenditure in 2018, an increase from the levels of the 2000s. This high share of out-of-pocket expenditure creates access barriers to services for poorer households and results in financial hardship for people using health services **(Fig. 3)**.

Box 1

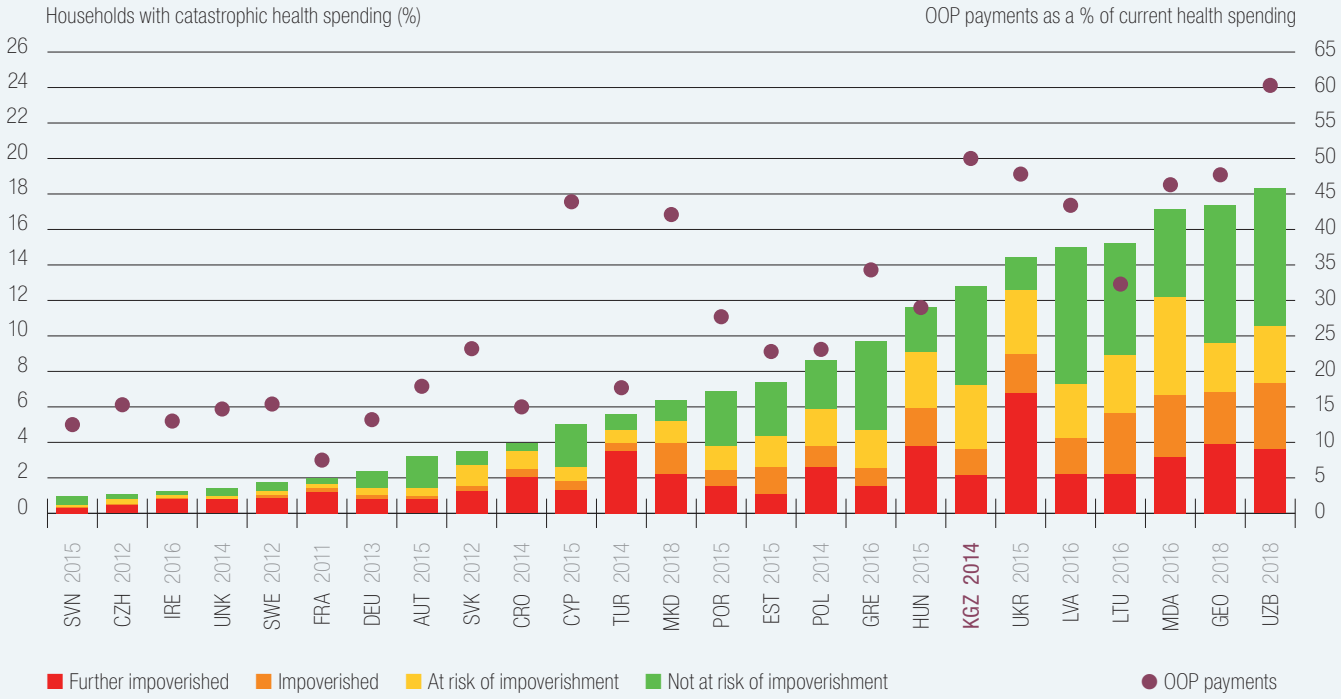
Strategic planning efforts are being made to improve efficiency

The State Programme on Health Protection and the "Healthy Person – Prosperous Country" programme (2019–2030) aim to rationalize the health system infrastructure with a view to reducing waste and placing more emphasis on primary care. Ongoing reforms in public finance management aim to improve the efficiency and effectiveness of public spending, although progress stalled recently due to political instability and the COVID-19 pandemic. Measures include:

- the introduction of programme-based budgeting (linking budgets with health outcomes), in line with the strategic priorities outlined in national programmes;
- the introduction of performance indicators for budgeted programmes and measures to reflect key State Programme aims;
- expanding hospital-substitution services – a new MHIF initiative aiming to increase the use of primary instead of hospital care;
- reforming payments for the treatment of tuberculosis (TB) patients to incentivize outpatient 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.

Sources: WHO, 2019b (catastrophic health spending); WHO, 2021b (out-of-pocket payments).

Out-of-pocket health care costs are catastrophic for many and lead to impoverishment

In 2014 (the latest year for which data are available), around 13% of households experienced catastrophic health spending – higher than in many countries in the WHO European Region but lower than expected given Kyrgyzstan's heavy reliance on out-of-pocket payments **(Fig. 3)**. One reason for the relatively low incidence of catastrophic health spending is unmet need for health services, including medicines (see below).

Catastrophic out-of-pocket payments are heavily concentrated among poorer households **(Fig. 3)** and are mainly driven by spending on outpatient medicines, outpatient care and inpatient care (Jakab, Akkazieva & Habicht, 2018). The decline in public spending on health in recent years and the growing reliance on out-of-pocket payments is likely to have led to an increase in both catastrophic and impoverishing health spending since 2014.

3 GENERATING RESOURCES, PROVIDING SERVICES AND ENSURING ACCESS

Kyrgyzstan has begun to rationalize its health care infrastructure

The number of hospitals was reduced from 450 to 135 between 1997 and 2019, with the aim of reducing costs and strengthening primary health care and prevention. Specialized facilities were merged and general profile hospitals created, while inefficient small hospitals were transformed into subdivisions of regional hospitals or into primary care providers. This reduction in the number of hospitals was reinforced by a change in the way that hospitals are paid by the MHIF, with the introduction of case-based payments in 2001–2004.

The remaining hospitals are distributed across the country, with hospitals in all seven oblasts and 40 rayons and smaller-scale hospitals in remote villages. The number of hospital beds per 100 000 population has declined dramatically since the early 1990s, decreasing from 1 206 hospital beds per 100 000 population in 1991 to 704 in 2000 and 407 in 2019 **(Fig. 4)**. While this is below regional averages, there is still felt to be overcapacity in terms of hospital infrastructure.

Fig. 4

Kyrgyzstan has reduced the number of hospital beds

Note: Internationally comparable data only available up to 2014.

Source: National data for 2015–2019; WHO, 2021d.

Despite the number of primary care facilities, some geographical barriers persist, exacerbated by physician shortages in rural areas

The distribution of health care facilities (FAPs, FGPs, Family Medical Centres and hospitals) means that most people are within reach of primary care, with mechanisms in place to refer them for more specialized care. There are nonetheless geographical barriers to access in some remote areas, with limited access to health services, despite the use of FAPs. Moreover, approximately 3 000 physician posts at primary care level are vacant.

Overall staffing levels included 14 268 physicians and 25 883 nurses in 2019, equivalent to 219 physicians and 397 nurses per 100 000 population, which fell below the averages for the WHO European Region **(Fig. 5)**. Health workers are unequally distributed across the country, with large differences between regions, and shortages of specialists and family doctors in rural areas. The highest numbers of physicians in 2019 were concentrated in Bishkek and Osh (231 and 262 per 100 000 population, respectively), while in some rural areas there were only about 70 physicians per 100 000 population (equivalent to one physician per 1 429 people). Thanks to incentives introduced in 2018, however, the number of family doctors increased from 1637 in 2018 to 2194 in 2020.

In contrast, the coverage by nurses is considered adequate in all regions. Together with feldshers, nurses work in FAPs in larger rural settlements and provide basic health care activities, antenatal and postnatal care, immunization and health education.

Even urban areas have gaps in coverage, with internal migrants facing particular challenges

Urban provision is more accessible but there are gaps in enrolment in the mandatory health insurance scheme which requires at least a temporary residence permit and basic identification documents. This, and the link between health insurance status and access to some health services, creates barriers for internal migrants from rural areas and small towns to urban centres. These migrants make up an estimated 18% of the population and do not always have the necessary paperwork to enrol.

Furthermore, SGBP entitlement does not translate into full access to health services, partly because out-of-pocket payments create financial barriers. In 2014, 46% of households reported that it was difficult or very difficult to pay for health services (up from 38% in 2009). Households are increasingly resorting to coping mechanisms such as drawing on savings, reducing consumption, seeking family support or selling assets to pay for health care. Out-of-pocket payments are the main reason of unmet need for medicines and also a key driver of financial hardship for households.

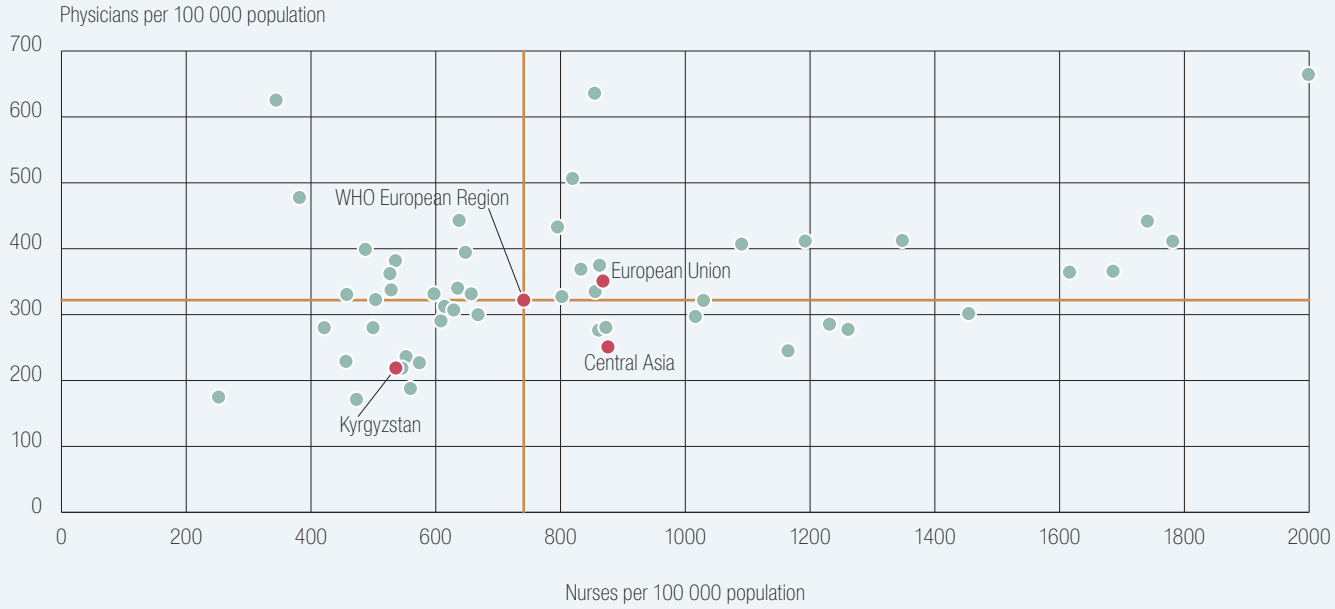
Integrating and improving services for particular populations and conditions has been a priority

Kyrgyzstan has placed a particular focus on improving mother and child health, with a number of national strategies. Pregnant women, women giving birth, women with pregnancy-related or childbirth complications and children under 6 years are entitled to free hospital care. Since 2015, the MHIF has also provided insurance for pregnant women to ensure that those who are uninsured (the majority of whom are from vulnerable groups) have better access to subsidized medicines. However, according to the 2018 Multiple Indicator Cluster Survey (MICS), 77% of women were not aware of the policy and did not know how to register to receive the benefits (National Statistical Committee of the Kyrgyz Republic and UNICEF, 2019).

Kyrgyzstan achieves high coverage rates for routine childhood vaccinations, with 96% of infants receiving the first dose against measles in 2018 (compared with

Fig. 5

Kyrgyzstan has fewer doctors and nurses than many other countries



Note: 2019 data for Kyrgyzstan, 2014 data for central Asia, the European Union and the WHO European Region, 2015 or latest available for countries.

Source: WHO, 2021d.

Fig. 6

There is scope to improve access to HIV testing and treatment

Abbreviation: ART: antiretroviral therapy.

Source: UNAIDS, 2020.

95% in the WHO European Region) and 98% of children receiving the second dose (compared with 91% in the WHO European Region). Routine childhood vaccinations are free of charge and provided at birth in maternity hospitals and subsequently by primary care providers under the coordination of the Republican Centre for Immunoprophylaxis. However, vaccinations at primary care level require doctors to be present, as nurses and feldshers are not allowed to vaccinate independently.

There has also been a focus on HIV/AIDS, TB and mental health, with pilots being implemented to improve the integration of services. The efforts to improve the provision of HIV services for patients at the primary care and community level has increased the proportion of people living with HIV who are diagnosed, treated and have a suppressed viral load but lack of staff motivation and continued stigmatization of patients remain major barriers. Kyrgyzstan still falls below the 90:90:90 target set out by UNAIDS for 2020 **(Fig. 6)**.

Kyrgyzstan remains one of the 30 countries in the world with the highest rates of multidrug-resistant (MDR)-TB and is among the 18 high-priority countries for TB in the WHO European Region (WHO, 2020c). In recent years, the role of primary care has been promoted as the key to early detection, diagnosis and treatment of TB, including drug-resistant TB. Primary care has also taken on a role in managing interactions with other services (such as for TB and public health). A cadre of staff, known as public assistants, based in primary care (FMCs and FGPs) provide support to TB patients and interact with medical personnel, with their role having expanded recently to link different services. However, major obstacles to improved TB care remain **(Fig. 7)** and the estimated proportion of TB cases that are detected and successfully treated in Kyrgyzstan has declined from 79.2% in 2005 to 71.3% in 2017. The rate of treatment success was higher for drug-susceptible TB cases (81% in 2018, compared with a WHO European Region average of 75%) and lower for MDR-TB cases (55%, lower than the WHO European Region average of 59%). The country now falls below the central Asian average **(Fig. 7)**, possibly because of the large proportion of MDR cases, which are more difficult to treat. Treatment adherence is a challenge and low treatment adherence is often associated with labour migration. Kyrgyzstan plans to achieve national and regional targets through the introduction of fully oral treatment regimens for TB and MDR-TB and digital adherence solutions, such as video-supported treatment.

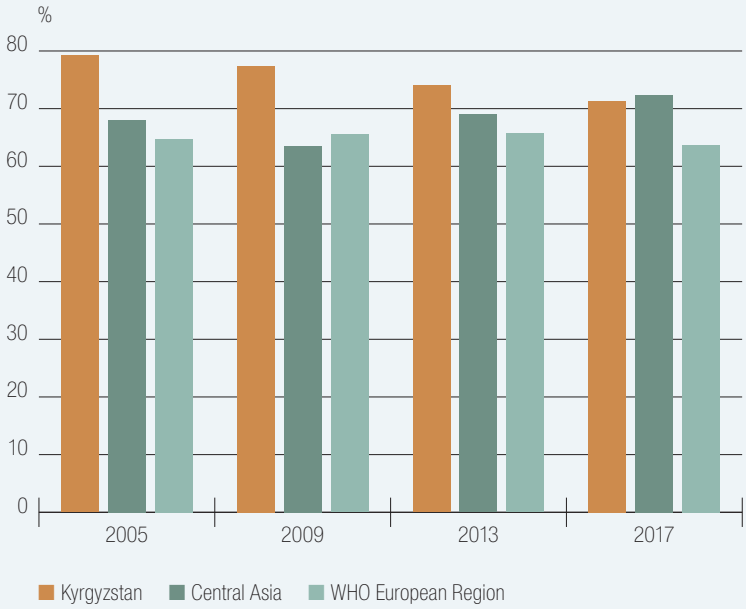
In terms of services for patients in need of outpatient mental health care, there has also been a recognition of the need for expanded primary care services, but these steps are still at an early stage of development.

Overall, Kyrgyzstan has improved access to essential services

In terms of the universal health coverage service coverage index **(Fig. 8)**, access to essential services increased from 48 (out of 100) in 2000 to 70 in 2017, although this was still below the averages for central Asia and the WHO European Region. The improving headline figures

Fig. 7

Effective treatment coverage of TB has declined

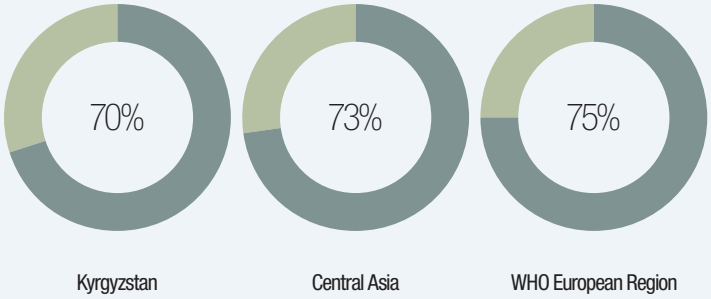


Note: Proportion of TB cases detected and successfully treated (estimate).

Source: WHO, 2021c.

Fig. 8

Kyrgyzstan comes close to regional averages for the universal health coverage service coverage index



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, 2021b.

may mask persisting challenges in improving quality of care. For example, mortality from acute myocardial infarction in inpatient settings increased from 10.5% in 2011 to 14.8% in 2016. This might indicate problems in the quality of care, but further investigations are needed to confirm this (WHO, 2018). The 2019 WHO assessment of sexual, reproductive, maternal, newborn, child and adolescent health in the context of universal health coverage in Kyrgyzstan found that, despite mother and child health being a high priority for the country, there are significant deficits, such as lack of provision of adolescent-friendly sexual and reproductive health services, problems with efficient neonatal transport and suboptimal quality of care in the treatment of common childhood conditions and antenatal care, particularly overtreatment and overhospitalization (WHO, 2019a).

4 IMPROVING THE HEALTH OF THE POPULATION

Life expectancy in Kyrgyzstan has increased, but still lags behind regional averages

Prior to the COVID-19 pandemic, life expectancy in Kyrgyzstan increased from 67.8 years in 2000 to 73 years in 2016 (69.4 years for males and 76.5 years for females) **(Fig. 9)**. However, this was below the central Asian average (71.6 years in 2015) and well below the averages for the WHO European Region (78 years in 2016) and the European Union (EU; 28 countries) (81.2 years in 2017).

The increase in life expectancy for males was 5.5 years and for females, 4.3 years (2000–2016). In males, most of the gains were due to reductions in mortality from respiratory conditions (1.4 years), external causes (1.1 years) infectious diseases and stroke (0.9 year each), particularly in men under 75 years. In females, improvements in reductions in mortality from stroke (1.6 years) and respiratory conditions (1.4 years) dominated.

These gains point to some improvement in the availability, accessibility and quality of care, as deaths from stroke, respiratory conditions and infectious diseases are largely amenable to health care interventions. However, lack of progress on ischaemic heart disease shows that there is still a lot of room for improvement for health system action, as well as for reducing the impact of risky behaviours, such as smoking, alcohol consumption and poor diet, which need a stronger public health and intersectoral approach.

Infant mortality has fallen dramatically but remains high, as does maternal mortality

Maternal mortality remains one of the highest in the WHO European Region. It is estimated at 60 per 100 000 live births in 2017, far exceeding the central Asian average of 23.6 **(see Country data summary)**. However, Kyrgyzstan has achieved major progress in reducing infant mortality (to 16.4 per 1 000 live births in 2019 from 52.1 in 1995, although this was still more than double the average for the WHO European Region).

Despite the steady decline in the infant and child mortality rate over the past 15 years, there are marked variations in rates between the country's districts **(Fig.10)**. These seem to suggest differences in the accessibility and quality of care (which would explain the higher mortality in more rural and remote districts). However, mortality is also higher at the perinatal referral centres for high-risk pregnancies in Osh and Bishkek city. The mortality rate of children is higher in households in the poorest wealth quantile and among mothers with a low level of education. Furthermore, the mortality rate of children under 5, who were born within 2 years after a previous birth is 3.6 times higher than among children born within 4 or more years after a previous birth (WHO, 2019a).

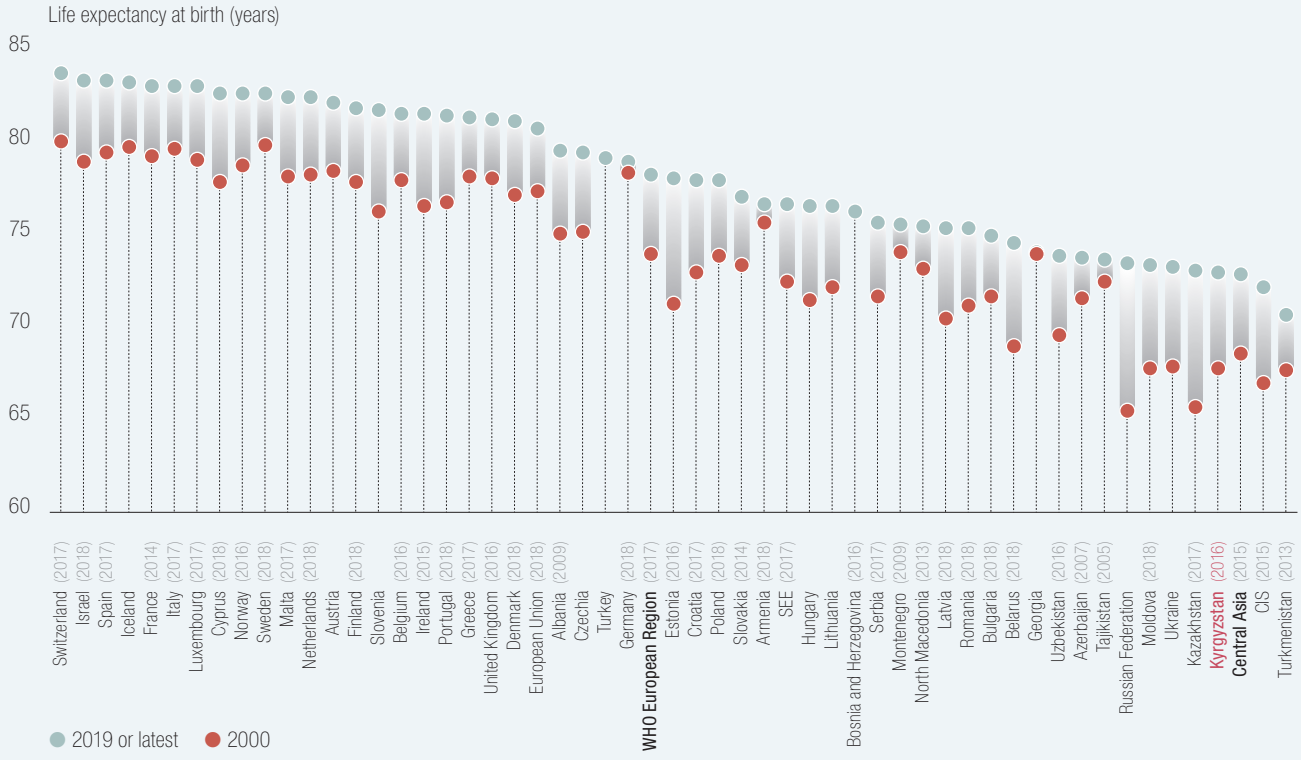
Deaths from noncommunicable diseases are high, reflecting risky behaviours and health system weaknesses, but premature mortality has declined

Kyrgyzstan faces a high mortality burden from noncommunicable diseases **(Fig.11)** and reducing this burden was one of four priority areas of the *Den Sooluk* reform programme (2012–2018). Cardiovascular diseases account for half of overall mortality, with ischaemic heart disease and stroke being the two leading causes of death (with 390 deaths per 100 000 population from ischaemic heart disease, compared with 248 in central Asia and 136 in the WHO European Region). Other important causes of death include cancer, respiratory diseases and road traffic deaths.

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 Kyrgyzstan (in particular among males), but shows a declining trend **(Fig.12)**, at least up to 2016. This suggests that improvements in living conditions, lifestyles and health care were having an impact. It is unclear how recent declines in public spending on health and the COVID-19 pandemic will affect these trends in the coming years.

Fig. 9

Life expectancy in Kyrgyzstan is one of the lowest in Europe

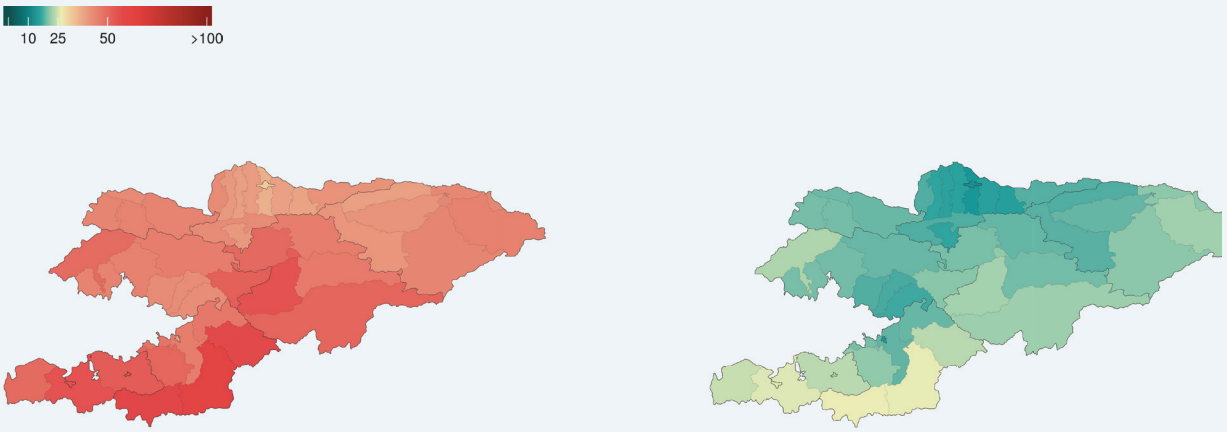


Notes: Data are for 2019 or latest available year (shown in brackets). CIS: Commonwealth of Independent States; SEE: South Eastern European countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, North Macedonia, Romania, Serbia).

Source: WHO, 2021d.

Fig. 10

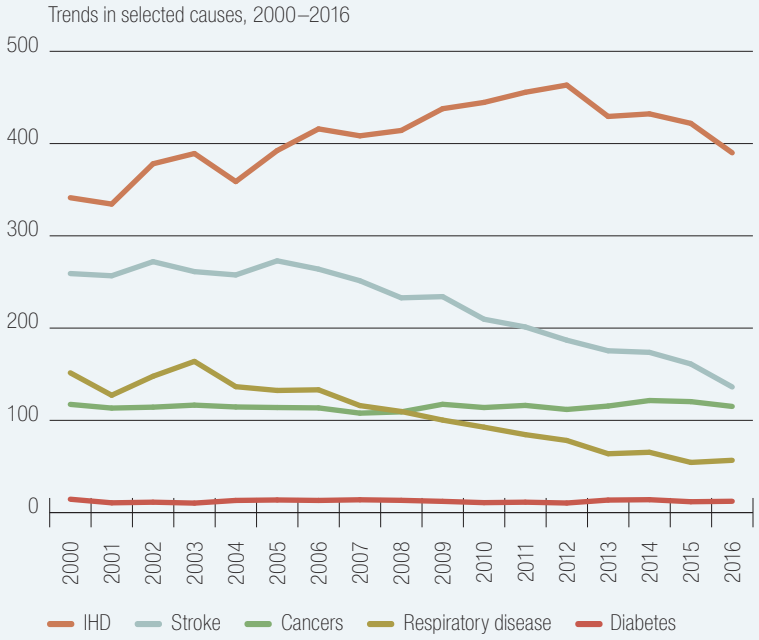
Infant mortality in Kyrgyzstan has seen stark declines, but regional imbalances remain



Source: IHME, 2020.

Fig. 11

Ischaemic heart disease is the main cause of death

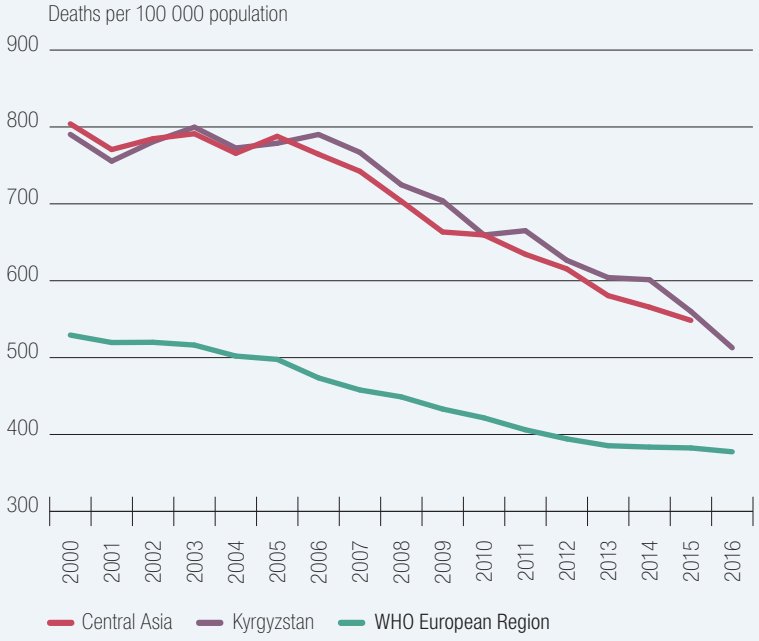


Note: IHD: ischaemic heart disease.

Source: WHO, 2021b.

Fig. 12

Fewer people are dying prematurely from noncommunicable diseases



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.

Major risk factors include dietary risks, high blood pressure and smoking

The major risk factors contributing to mortality include issues associated with unhealthy diets (including over- and undernutrition), with overweight showing an increasing trend (from 38.3% of the population in 2000 to 48.3% in 2016, mirroring an increase in central Asia overall from 40.0% to 49.5%) and lack of physical activity. High mortality attributable to high blood pressure and high LDL cholesterol indicates substantial scope for action in terms of both behavioural and health system performance dimensions, such as the control of chronic conditions at the primary care level. Men, those living in rural areas, and people with lower levels of education are less likely to be measured for biological risk factors (WHO, 2020b).

Among the major behavioural risk factors, smoking stands out, in particular for males, with male smoking prevalence exceeding 50% throughout the period 2000–2018 (compared with 32.4% in central Asia in 2018) and smoking accounting for 17.3% of all deaths in 2019 **(Fig. 13)**. This highlights that tobacco control policies are underdeveloped **(Box 2)**.

Alcohol consumption is a lesser risk factor, but although consumption is about half of the WHO European Region average (3.9 litres per capita and year, compared with 7.8 in the WHO European Region) it is significantly higher than the average for central Asia of 2.3 litres.

Poverty levels remain high, with access to safe water and sanitation an additional challenge in rural areas

Poverty levels have decreased in recent years, but 22.4% of the population were still living below the national poverty line in 2018 **(see Country data summary)**. Poverty is associated with the immediate risk factors (such as dietary risks, smoking and access to health services) discussed above, but also exposure to low temperatures and indoor air pollution. Air pollution, including both outdoor and household air pollution, was estimated to account for 12.0% of all deaths in 2019.

Access to water and sanitation is another challenge. Only 68.2% of the population had access to safely managed drinking-water services in 2017 (53.9% in rural areas versus 93.5% in urban areas), an increase from 46.3% in 2000. Poor access to water and sanitation was estimated to be the 17th leading risk factor for deaths in 2019, a slight improvement from 2000 when it was the 14th leading risk factor.

Resilience against health emergencies has been improved

Kyrgyzstan is highly exposed to natural hazards and has experienced conflicts and political instability in its recent history. It has been designated one of the WHO Health Emergencies (WHE) Programme's priority countries and has adopted a multihazard national emergency response plan for 2017–2021. The Ministry of Health sees emergency preparedness as a high priority.

There have been numerous tailored simulation exercises, at central and oblast level, to test responses to key high-risk hazards, in particular floods, earthquakes, mass casualty events and foodborne disease outbreaks in cities. More recently, Kyrgyzstan has used WHO tools to mount operational simulation exercises to understand core capacities and emergency preparedness at points of entry with a view to better preventing and responding to public health risks, including COVID-19.

Box 2

Public health action is underdeveloped

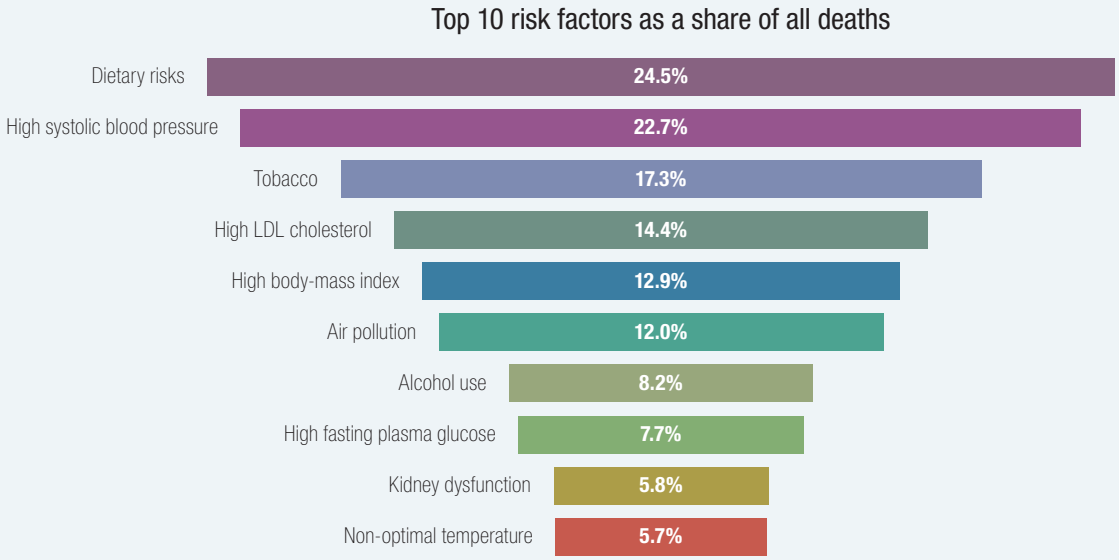
Public health services in Kyrgyzstan retain a traditional focus on the prevention and control of communicable diseases, especially TB, HIV/AIDS and diarrhoeal infections. They are much less involved in addressing noncommunicable disease through measures such as addressing smoking, alcohol consumption, obesity and nutrition. Preventive activities in primary care are also still underdeveloped.

Despite the fact that Kyrgyzstan is a signatory of the WHO Framework Convention on Tobacco Control, the country has not implemented many of the tax and non-tax measures it has committed to. Tobacco tax in Kyrgyzstan is among the lowest in the WHO European Region. Nicotine-replacement therapy has to be paid out-of-pocket and is not covered by the state. Consequently, smoking prevalence remains very high, in particular among males.

In the 2019 Global Youth Tobacco Survey of schoolchildren aged 13–15 years, 25.5% of boys and 8.9% of girls indicated that they had smoked tobacco at least once.

Fig. 13

Dietary risks, high blood pressure and smoking are the main immediate risk factors as a share of all deaths

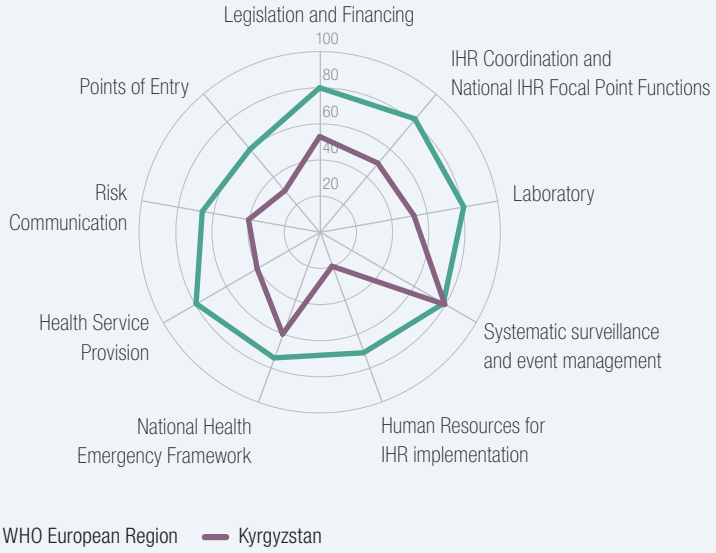


Note: Shares overlap and, therefore, add up to more than 100%. LDL: low-density lipoprotein.

Source: IHME, 2019.

Fig. 14

Kyrgyzstan scored low in core capacities for the implementation of the International Health Regulations prior to the COVID-19 pandemic

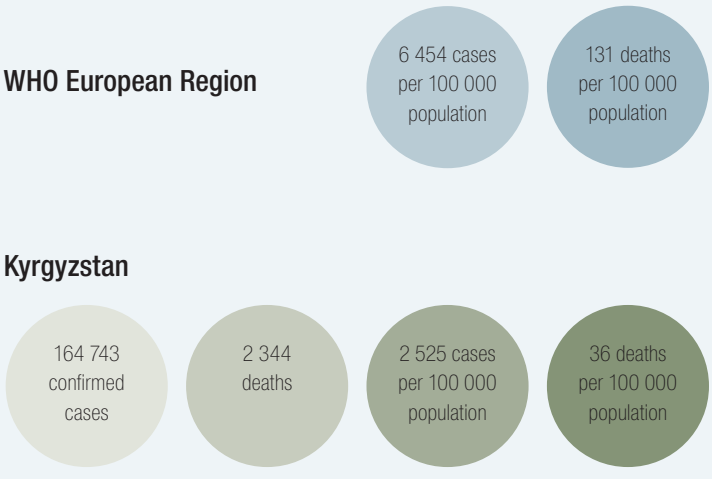


Note: Country self-assessment on selected core capacities for the implementation of the International Health Regulations.

Source: WHO, 2021c.

Fig. 15

COVID-19 seems to have affected Kyrgyzstan less than many other countries



Note: Data as of 3 August 2021.

Source: WHO, 2021a.

5 SPOTLIGHT ON COVID-19

Kyrgyzstan reported a low capacity to address public health emergencies prior to the COVID-19 pandemic

According to Kyrgyzstan's self-assessment on the implementation of the International Health Regulations (IHR) in 2019, the country scored low on selected core capacities that would allow it to respond to a pandemic, when compared with the average for the WHO European Region **(Fig. 14)**. Capacity scores were seen as particularly low in terms of human resources (20% versus 71% in the WHO European Region) and capacity at points of entry (30% compared with 60%).

This aligned with the findings of the 2016 Joint External Evaluation (JEE) of the IHR (2005) core capacities which identified: national legislation, policy and financing related to IHR; biosafety and biosecurity; availability of human resources; and capacities to combat antimicrobial resistance as areas to be strengthened.

Despite this, the pandemic's impact on the population seems to have been less severe than in many other countries in Europe **(Fig. 15)**.

Kyrgyzstan reacted early to the COVID-19 pandemic, but has faced a disruption of essential health services

In January 2020, the government established a Republican COVID-19 Task Force under the Prime Minister, consisting of all ministries and state agencies. An intersectoral interagency contingency plan for COVID-19 set out approaches for preparations for and responses to the COVID-19 outbreak. Support from international development partners was coordinated through two main platforms: the Disaster Response Coordination Council (DRCU), led by the Ministry of Health and WHO, and the Development Partner Coordination Council, led by WHO and the World Bank.

Kyrgyzstan has tried to maintain essential services, including through mobile health applications, but there has been some disruption, particularly to mother and child health services (Stakeeva et al., 2021). Routine vaccination services were temporarily suspended in March 2020, although the Ministry of Health has since used mobile immunization teams and mobile clinics to deliver catch-up immunizations. Lockdown also decreased the availability of services such as contraception counselling, violence prevention and response, and termination of unwanted pregnancies, and diagnosis and treatment of sexually transmitted diseases. According to the MICS 2020 follow-up assessment of the impact of COVID-19 on children (National Statistical Committee of the Kyrgyz Republic and UNICEF, 2021), antenatal care services were not affected, but there were challenges in postnatal

care. Only 11% of neonates were visited for a postpartum observation in the first 2 days and 47% in the first 6 days. Safe abortion services in government facilities decreased by 25–28%, although those in private facilities increased by 68–85% (Askerov, Maksutova & Bozgorpoeva, 2020). Essential services for the population more broadly have also been affected, but it is still too early to assess impact.

6 EUROPEAN PROGRAMME OF WORK (EPW)

Moving towards universal health coverage

The government has taken steps towards ensuring universal access to quality care without financial hardship and WHO, together with other development partners, has supported these efforts. In 2020, for the first time, Kyrgyzstan committed to regulating prices for a list of selected medicines (the Additional Drug Package) that are part of universal benefits provided by the government. WHO has supported this pilot project with technical assistance, policy dialogues and collaboration among development partners.

The first months of 2021 saw a large-scale restructuring of the political system of Kyrgyzstan, with substantial implications for health governance and financing. Among other changes, the MHIF was merged with and subordinated to the Ministry of Health and Social Development. This merger raised concerns about the loss of independence of the institution. WHO provided technical assistance that led to MHIF remaining an independent institution, making it more resilient to political shocks.

Improvements have been achieved in terms of quality of care. These have included efforts to improve the management of hypertension and diabetes in primary care. In 2021, the Ministry of Health and Social Development, with WHO support, issued an order on improving the quality of care for stroke. It also set up a task force on strengthening primary health care.

Access to routine vaccinations has been disrupted during the COVID-19 pandemic. With technical assistance from the WHO Country Office, Kyrgyzstan established mobile immunization teams to improve access to immunization services during the pandemic for people living in remote communities and for children of internal migrants in large urban areas. This helped to fill gaps in immunization coverage in all regions of the country.

Protecting against health emergencies

WHO has been Kyrgyzstan's main international partner in ensuring the country's preparedness for disease outbreaks and other public health emergencies.

When the first COVID-19 case was recorded in Kyrgyzstan on 18 March 2020, the country had some systems in place. Nonetheless, COVID-19 brought about multiple challenges, but Kyrgyzstan used the opportunity to invest in its existing preparedness and response capacities for public health emergencies. The country has made progress in various areas, including in strengthening IHR coordination, preparedness at points of entry, emergency operations centre functionality, surveillance and risk assessment, laboratories, infection prevention and control, case management and risk communication.

Immediately after the WHO Director-General declared the COVID-19 outbreak as a public health emergency of international concern, WHO led a rapid needs assessment in Kyrgyzstan to identify gaps that

COUNTRY DATA SUMMARY

	Kyrgyzstan	Central Asia	WHO European Region	EU-28
Life expectancy at birth, both sexes combined, years [a]	73 (2016)	72.9 (2015)	78 (2016)	81.2 (2017)
Estimated maternal mortality per 100 000 live births (2017)	60	23.6	13	6.1
Estimated infant mortality per 1 000 live births [a] (2019)	16.4	17.7	7.5 (2018)	3.5 (2018)
Population size, in million (2019)	6.5	72.6	927.2	512
GDP per capita, PPP US$ (2019)	5 486	12 427	36 813	46 699
Poverty rate at national poverty lines [a] (2018)	22.4	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, 2021d; World Bank, 2021.

should be addressed by the country's public health system in the context of COVID-19. This initiative was eventually used as a basis in developing Kyrgyzstan's country preparedness and response plan (CPRP).

Following the rapid needs assessment, WHO also supported the CPRP development process, a blueprint that has guided the country's response to COVID-19 at national and subnational levels, as well as calls for assistance from international partners. Through the CPRP, the country successfully raised over US$ 53 million for the health sector response.

The magnitude of the COVID-19 pandemic has underscored the importance of multisectoral coordination and collaboration during a public health emergency. The Government of Kyrgyzstan recognized this and, with support from WHO, worked to ensure that the operational mechanisms across government agencies were functioning. In preparation for the deployment of the COVID-19 vaccine, Kyrgyzstan developed preparation and operational readiness guidelines for the COVID-19 vaccine roll-out, with support from WHO, setting up a National Deployment and Vaccination Plan and a COVID-19 Vaccine Communication Plan.

Promoting health and well-being

The WHO Country Office in Kyrgyzstan supports the population's health and well-being through the promotion of multisectoral actions to address the risk factors for noncommunicable diseases, the promotion of healthy settings and Health in All policies, and by helping to address the social determinants of health.

WHO has supported the efforts of the national health authorities to promote tobacco-free environments. The Third World Nomad Games in 2018 and the National Nomad Games in 2019 were conducted in smoke-free environments and the State Agency on Youth Physical Culture and Sport has approved a smoke-free policy for all its events and sport facilities. In 2020, the municipality of Bishkek engaged in intersectoral collaboration on tobacco control and adopted smoke-free policies for parks, sport facilities and public transport.

The country has improved its monitoring and surveillance of noncommunicable disease risk factors. In collaboration with WHO, a STEPwise Approach to NCD Risk Factor Surveillance (STEPS) survey on noncommunicable disease risk factors was undertaken, together with a gender analysis of survey data. Kyrgyzstan has joined the WHO European Childhood Obesity Surveillance Initiative to measure trends in overweight and obesity among primary school-aged children. The Global Youth Tobacco Survey is a school-based survey designed to enhance the capacity of countries, now including Kyrgyzstan, to monitor tobacco use among youth and to guide the implementation and evaluation of tobacco prevention and control programmes. In 2019 Kyrgyzstan became a member of the Health Behaviour in School-Aged Children (HBSC) research network. The HBSC collects data every 4 years on health and well-being, social determinants and health behaviours among 11-, 13- and 15-year-old children.

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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.

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