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The Health Systems in Action series

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- provide core information and data on health systems succinctly and accessibly
- outline the country health system context in which WHO’s European 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.

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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) outpatient medicines is covered.

- Government spending on health as a share of total public spending has declined, with an increasing share of government spending going to other sectors.

- Private expenditure (mostly in the form of out-of-pocket payments) accounted for 46.3% of health spending in 2019. This 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 services, 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 traditionally 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 COVID-19 pandemic has disrupted essential health services and led to excess mortality.

- Policies and monitoring systems for antimicrobial consumption and resistance are still at an early stage of development.
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 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 outline the services that are publicly financed through the mandatory health insurance system. 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 contractual relationships 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 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 list of 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. There are also 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., 2022). Finally, there is a lack of clarity among patients and providers about what services are covered publicly.

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. Reasons for this include a lack of resources at primary care level and an underdeveloped gatekeeping system. Feldsher-Midwife Points (FAPs) have been established in rural areas to improve access to primary care and maternal and child health care, and each FAP is run by a feldsher (physician’s assistant) and has a family doctor who visits 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. Efforts are underway to strengthen gatekeeping and improve the quality of primary care for the treatment of hypertension and diabetes through using digital tools. In terms of its share of health expenditure, outpatient curative care (including primary care) accounted for only 26.1% of health spending in 2019, which is lower than the share for inpatient curative care (31.9%) or pharmaceuticals (30.1%) (WHO, 2022b).

Specialized ambulatory care is provided by narrow specialists at some Family Medicine Centres (FMCs), and by private providers. Secondary and inpatient care is provided by hospitals at the district and regional level. Tertiary care is only available 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

In 2019 health expenditure in the WHO European Region ranged from 1.5% to 11.7% of gross domestic product (GDP). In Kyrgyzstan it amounted to 4.5% of GDP, an increase from 4.4% in 2000 but far 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 2019 (Fig. 1), with only Tajikistan spending less per person.
Public spending on health as a share of total public spending 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 7.1% in 2019, with other areas of government expenditure pulling ahead. Public expenditure on health now amounts to only 2.3% 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$ 164 (adjusted for purchasing power) in 2013 to US$ 128 in 2015 and 2016, although it did increase to US$ 140 in 2019. This overall decline is 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 a peak of 15.7% in 2004 to just 2.3% in 2019.

Private spending, almost entirely in the form of out-of-pocket expenditure (including informal payments), accounted for 46.2% of health expenditure in 2019, an increase from the levels of the 2000s, but a decrease from the levels seen in 2014–2017. 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).

Out-of-pocket health spending is catastrophic for many and can 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).

Notes: 2019 data (averages are unweighted). 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, 2022b).
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 has 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 out-of-pocket (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).

Source: WHO Barcelona Office for Health Systems Financing.
Kyrgyzstan has begun to rationalize its health care infrastructure

The number of hospitals was reduced from 450 to 135 between 1997 and 2020, with the aim of reducing costs and strengthening primary 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 12 06 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, considering the country’s available resources and its comparatively young population.

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.

In 2021, overall staffing levels included 13 599 physicians and 33 303 nurses, equivalent to 203 physicians and 498 nurses per 100 000 population, and 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. In 2021, the highest numbers of physicians were concentrated in Bishkek and Osh (225 and 246 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). The COVID-19 pandemic seems to have exacerbated geographical imbalances, with physicians leaving primary care posts in rural areas to take on better paid posts in hospitals.

In contrast, the coverage by nurses is generally considered adequate, but in cities such as Bishkek and Osh there are shortages of nurses. 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 geographically, but there are gaps in enrolment in the mandatory health insurance scheme which requires registration 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 internal 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 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 source 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 traditionally achieves high coverage rates for routine childhood vaccinations, with 96% of infants receiving the first dose against measles in 2019 (compared with 95% in the WHO European Region) and 98% of children receiving the second dose (compared with 91% in the WHO European Region). However, there has been some disruption of routine vaccinations due to the COVID-19 pandemic and the coverage rate for the first dose against measles fell to 92% in 2020. Vaccine hesitancy also seems to have increased during the pandemic (Ministry of Health, 2021).

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. Efforts to improve the provision of HIV services for patients at the primary care and community levels have 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 and the COVID-19 pandemic has disrupted access to testing and treatment. Consequently, Kyrgyzstan falls far below the 95:95:95 target set out by UNAIDS for 2025 (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, 2020). 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 and the estimated proportion of TB cases that are detected and successfully treated in Kyrgyzstan has declined from
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78.3% in 2008 to 71.3% in 2017 (Fig. 7). 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%). There is a large proportion of MDR cases, which are more difficult to treat. Poor treatment adherence is another challenge, and 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 been a recognition of the need for expanded primary care services, but these steps are still at an early stage of development.

Prior to the COVID-19 pandemic, Kyrgyzstan had improved access to essential services

The universal health coverage (UHC) index — a global indicator that monitors progress towards Sustainable Development Goal (SDG) 3, target 3.8.1, on coverage of essential health services — increased from 48 (out of 100) in 2000 to 70 in 2019 (Fig.8), although this was still below the average for the WHO European Region. Furthermore, improvements in access to essential services may mask persisting challenges in improving

**Fig. 6**
There is much scope to improve access to HIV testing and treatment

**The UNAIDS 95:95:95 vision calls by 2025 for:**

- 95% people living with HIV who know their status
- 95% people who know their status who are on antiretroviral treatment
- 95% people on ART who achieve viral suppression

**By 2020 Kyrgyzstan had achieved:**

- 65% people living with HIV who know their status
- 48% people who know their status who are on antiretroviral treatment
- 43% people on ART who achieve viral suppression

**Abbreviation:** ART, antiretroviral therapy.
**Source:** UNAIDS, 2022.

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**Fig. 7**
Effective treatment coverage of TB is comparatively high

Notes: TB: tuberculosis. Proportion of TB cases detected and successfully treated (estimate).
**Source:** WHO, 2022c.
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 UHC 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).

The COVID-19 pandemic has resulted in a disruption of essential health services

Kyrgyzstan has tried to maintain essential services throughout the pandemic, including through mobile health applications, but there has been some disruption, particularly to mother and child health services (Stakeeva & Mamatalieva, 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%. Essential services for the population more broadly have also been affected, but it is still too early to assess impact.

Life expectancy in Kyrgyzstan has increased, but still lags behind the average of the WHO European Region

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). This was in line with the central Asian average (73 years in 2015), but well below the averages for the WHO European Region (78.3 years in 2017) and the European Union (EU; 28 countries) (80.9 years in 2018).

Between 2000 and 2016 male life expectancy increased by 5.5 years and female life expectancy by 4.3 years. 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 both for health system action, and for reducing the impact of risky behaviours, such as smoking, alcohol consumption and poor diet, which need a stronger public health and intersectoral approach.

Maternal and child health are health policy priorities

While significant gains have been made in reducing maternal mortality, it still remains high when compared with other countries in the WHO European Region.
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Maternal mortality was estimated at 60 per 100,000 live births in 2017, far exceeding the central Asian average of 23.6 (see Country data summary). COVID-19 has jeopardized recent gains. In 2020 maternal mortality increased by 58.4% compared with 2019, with 39.7% of cases related to COVID-19 infections. Over the past 15 years, Kyrgyzstan has achieved significant reductions in neonatal, infant and child mortality rates. Under-5 mortality fell from 65 deaths per 1,000 live births in 1990 to 17.5 in 2020. Neonatal mortality declined from 24 deaths per 1,000 live births in 1991 to 11.7 in 2020. Despite the steady decline in infant and child mortality rates, 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 quintile 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 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 the 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.
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, 2020).

Among the major behavioural risk factors, smoking stands out, in particular for males, with male smoking prevalence exceeding 50% throughout the period 2000–2020 (compared with 27.1% in central Asia overall in 2020) and smoking estimated to account 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. Although consumption is about half of the WHO European Region average (4 litres per capita and year in 2019, compared with 7.8 in the WHO European Region) it is significantly higher than the average for central Asia of 2.8 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 with 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.

The COVID-19 pandemic has resulted in excess mortality

According to official data, Kyrgyzstan recorded a comparatively low number of COVID-19-related deaths. However, as in most other countries in Europe, the pandemic is expected to have affected overall mortality rates since 2020, with preliminary estimates of excess mortality indicating a peak in August 2020 (Fig. 14).

5 SPOTLIGHT ON ANTIMICROBIAL RESISTANCE

Kyrgyzstan has one of the lowest rates of antibacterial consumption in Europe, but with a higher rate of Watch antibiotics

Kyrgyzstan has implemented national surveillance of antimicrobial consumption (AMC) and monitors AMC using import records provided by the drug agency. It participates in relevant networks set up by the WHO Regional Office for Europe, but its monitoring systems for antimicrobial consumption (AMC) and resistance (AMR) are still at an early stage of development. Kyrgyzstan has one of the lowest rates of officially recorded antibacterial consumption in the WHO European Region. However, a large share of antibiotics falls into the Watch category that should only be used for a specific, limited number of indications (Fig. 15), indicating that stronger antimicrobial stewardship efforts are needed. Kyrgyzstan did not meet the WHO national monitoring target of at least 60% of total antibiotic consumption being from the Access category in 2018.

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. 12
Fewer people are dying prematurely from noncommunicable diseases

Deaths per 100,000 population

Note: NCD: noncommunicable disease.

Source: WHO, 2022b.
Rates of antimicrobial resistance are largely unknown

There are limited studies on AMR in Kyrgyzstan, so despite being a member of the Central Asian and European Surveillance of Antimicrobial Resistance (CAESAR) network, the country is not reporting data into the network (ICARS, 2022). Rates of antimicrobial resistance are largely unknown and data on the rate of bloodstream infections due to Methicillin-resistant \textit{Staphylococcus aureus} (MRSA) in Kyrgyzstan are not yet routinely collected and reported.

Kyrgyzstan has undertaken steps to combat AMR

In Kyrgyzstan, an interagency programme and an action plan to contain AMR have been developed, but these were still under discussion at the time of writing (May 2022). While the Ministry of Health is committed to AMR mitigation by supporting rational antibiotic use, lack of resources and evidence-based research mean that many issues are not currently being addressed (ICARS, 2022). Training on AMR has been included in both pre-service and in-service training for health professionals and ad hoc training courses on AMR have been introduced for veterinary professionals, but there are still large gaps in the training of doctors, nurses and pharmacists on rational prescription of antibiotics. Furthermore, there is scope to strengthen a One Health approach, as there are currently no laws or regulations on the prescription and sale of antimicrobials for animal use, or on the use of antimicrobials for growth promotion.
There are gaps in policies on the prescription and sale of antibiotics and in their implementation

Guidelines for appropriate use of antimicrobials are available and practices to assure appropriate antimicrobial use are being implemented in some healthcare facilities. However, there are still major gaps in implementing national policies for optimizing the use of antimicrobials in human health. As the case for any country with regulatory and implementation challenges, for rates of antibiotic consumption and resistance to decline, there is a need for effective high-impact policies and measures, including infection prevention and control programmes, ending the over-prescription of antibiotics, rapid testing for patients to determine whether they have bacterial or viral infections, delayed antibiotic prescriptions and mass media campaigns.

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, operationalization of a public health emergency operations centre, surveillance and contact tracing, 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 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 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.

From 2019 to 2022, WHO provided technical support in piloting the Health Promoting Schools (HPS) approach under the framework of the Regional Schools Project and a COVID-19 Vaccine Communication Plan.
The initiative was jointly coordinated by the Ministry of Education and Science and the Ministry of Health. The government aims to scale up the approach nationally.

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) regional 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. The first National HBSC survey is currently being conducted after successful completion of the pilot study in 2019.

**Fig. 15**

Recorded consumption of antibacterials in Kyrgyzstan in 2018 was comparatively low, but the share of first- and second-choice antibiotics was very small.

Notes:
- DDD: daily defined dose
- EEA: European Economic Area
- EU: European Union
- Access, Watch and Reserve (AWaRe) traffic light system of antimicrobials (WHO, 2019b)

Data as follows:
- **Access**: First- and second-choice antibiotics that should be widely available in all countries
- **Watch**: Antibiotics that should only be used for a specific, limited number of indications
- **Reserve**: Last-resort antibiotics for cases where other antibiotics have failed or for infections of multi-resistant bacteria
- **Unclassified**: Antibiotics which are not yet classified

*Countries for which hospital sector data were not included.*

Source:
European Centre for Disease Prevention and Control, WHO Regional Office for Europe, personal communications, 2022.
## COUNTRY DATA SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>Kyrgyzstan</th>
<th>Central Asia</th>
<th>WHO European Region</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at birth (years), both sexes combined(^a)</td>
<td>73.0 (2016)</td>
<td>73.0 (2015)</td>
<td>78.3 (2017)</td>
<td>80.9 (2016)</td>
</tr>
<tr>
<td>Estimated maternal mortality per 100 000 live births (2017)</td>
<td>60.0</td>
<td>23.6</td>
<td>12.7</td>
<td>6.3</td>
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<tr>
<td>Estimated infant mortality per 1 000 live births (2019)</td>
<td>16.4</td>
<td>17.7</td>
<td>7.0</td>
<td>3.4</td>
</tr>
<tr>
<td>Population size, in millions (2020)</td>
<td>6.5</td>
<td>72.6</td>
<td>928.0</td>
<td>512.1</td>
</tr>
<tr>
<td>GDP per capita, PPP(^b) (2020)</td>
<td>4,965</td>
<td>12,326</td>
<td>35,340</td>
<td>44,421</td>
</tr>
<tr>
<td>Poverty rate at national poverty lines(^a) (2018)</td>
<td>22.4</td>
<td>14.1</td>
<td>14.9</td>
<td>17.0</td>
</tr>
</tbody>
</table>

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

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


## References


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.