

Kazakhstan Health Security and Health System Brief

Overview of the needs identified¹

Kazakhstan's HS needs some support for its labs, one health, health services, HRH, procurement & supply, and health financing. It needs minimal support for its surveillance, rapid response teams, cross border collaboration and governance.

E-SPAR 2021 IHR Country Average of all Capacities /Global Average of all Capacity scores: 88%/65%.²
The 2021 GHS Index Country Profile: 46.1 Index Score; 55/195 Rank.³

Laboratory systems

Around 157 labs can conduct PCR analysis in the country. There is a functioning specimen referral and transportation system established from PHC and hospitals to the labs. The country considers similar requirements for specimens' referral and transportation for influenza virus infection. The Scientific-Practical Center of Sanitary-Epidemiological Expertise (SSECC) has been appointed as a reference lab to serve as an external quality assessment body for COVID-19 samples, and takes part in international cooperation with WHO, CDC, UNICEF, etc.

The SSECC collaborates with two WHO centers to ensure the quality of COVID-19 lab tests: (1) Respiratory Virus Unit, Public Health England; and (2) Institute of Virology of Charite University Medical Center, Berlin. The country needs to establish COVID-19 virus genome sequencing facility/consortium to monitor the variability of the virus. The reference lab needs to be certified in line with the respective latest ISO standards.

Real time surveillance and reporting

The Electronic Integrated Disease Surveillance System (EIDSS) is successfully implemented in Kazakhstan. Electronic Health Records (Electronic Health Passports, EHPs) are available to all stakeholders from any medical organization in which the patient receives services, with the

patient's consent. International Classification of Disease (ICD)-10 coding has been used by all facilities, including ICD categories for COVID-19. The rules and guidelines for carrying out epidemiological surveillance are clear and well described. The COVID-19 data is disaggregated by gender, age, and comorbidity.

Data integration/One Health

Several state bodies are involved into the surveillance for detection of animal diseases that may spread to humans (i.e., mainly the Ministries of Health, Agriculture and Environment). The government wants to improve the coordination between human and animal health sectors (One Health).

The roadmap for implementation of measures to contain antimicrobial resistance (AMR) for 2019-2022 has been approved and started. There is a need to improve mechanisms at the relevant ministries responsible for animal, human and environment surveillance to share data.

Rapid response teams/ systems

The Operative Center for Emergency Public Health Situations was established in April 2019 to ensure timely responses to emergencies in the sphere of public health. The Center has played the primary role in coordinating the country's response to COVID-19. The government has formed the Inter-Governmental Commission (IGC) under the leadership of the prime minister and vice prime minister for the COVID-19 response.

The response teams have been formed under the local executive authorities. Each region has its Regional/Oblast Plan similar to the version of the National Health Plan. There is no information available on the number of response teams. The MoH has conducted quality control and coordination over the implementation of the

¹ The majority of information in this brief is based on national assessments conducted between Jan and Oct 2021 under TA6535 and has not been updated unless otherwise specified.

² <https://extranet.who.int/e-spar>

³ <https://www.ghsindex.org/country/kazakhstan/>

National Plan. The result of this quality control system is still unpublished.

Health service delivery

The health system is characterized by a well-developed network of PHC organizations, as well as an extensive network of organizations providing secondary and tertiary health care. The interest of the private sector in the provision of PHC services is growing. In 2019, the share of private providers in PHC services was 36%. The country has demonstrated the capacity to expand its ability to isolate patients in the wake of COVID-19 and increased the hospital bed capacity. As of January 2021, 19,089 infectious disease beds were deployed throughout the country.

The total number of hospital beds in Kazakhstan is 605.7 and the number of ICU beds is 21.3 per 100.000 population. The percentage of ICU beds of total hospital beds is 3.5, which is lower than the recommended 6%. For the timely provision of medical care to patients with COVID-19, 3,676 mobile teams have been deployed at the PHC level. The country has system(s) in place to regularly improve the quality-of-service provision at healthcare facilities, for example the internal audit system and work of the committee of infection control.

Human Resources for Health

The country has an HRH strategy. With about 61,800 physicians in Kazakhstan, there are about 3.25 doctors per 1000 inhabitants (worldwide this standard is 1.50 physicians per 1,000 inhabitants and in the EU is 3.57). The greatest shortage of doctors is observed in primary health care in the following regions: Atyrau, Mangistau, Turkestan, Karaganda, East Kazakhstan, Kostanay, North Kazakhstan, Aktobe, and West Kazakhstan regions and Nur-Sultan city. To solve the problem of understaffing, the MoH has formed a single database of all engaged medical personnel. To improve retention of medical staff the MOH increased salaries – e.g., the average salary for doctors has been increased by 30% and for nurses

by 20%. Around 40 thousand specialists provide counseling and practical assistance to the neediest regions. Additionally, the MoH has already attracted the support of more than 60% of specialists in the private sector to provide a certain amount of free care. There is a need to improve human resources forecasting and planning, as well as the availability and distribution of healthcare workers.

Cross-Border Coordination Mechanisms

A joint plan is in place between the country's public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of a public health emergency. The meetings and exchange of information on cross-border collaboration are done within the SCOS, EAEU, Turkic Council, and CIS countries. Both Kazakhstan and Kyrgyzstan conducted a WHO-sponsored cross-border preparedness in 2020.

The Procurement and Supply Chain

There is a national procurement protocol in place, which can be used by the MoH for the acquisition of both laboratory supplies and medical supplies. The government has created the company "SK-Pharmacy" (Single Distributor) in the structure of the National Welfare Fund. The Single Distributor system provides medicines to the population within the guaranteed volume of free medical care during the pandemic. The SK-Pharmacy facilitates a rapid procurement and distribution process.

Health Financing

Health expenditure in Kazakhstan is low compared to OECD-countries (2.8% of GDP compared to average 8.8% of GDP in OECD-countries). Total expenditure on health is among the lowest in the WHO European Region. At the same time, out-of-pocket expenditures was 33.9% (26.8% in OECD countries).

According to Global Health Security Index data, there is no publicly available evidence on any

publicly identified special emergency public financing mechanism and funds, which the country can access in a public health emergency

Governance

The MoH plays the mainstreaming role in implementing the Road Map for implementation of the International Health Regulations (IHR) and Global Health Protection (GHP) Program in the Republic of Kazakhstan for 2019-2023. There are 10 key national strategies to impose the quality of health services and response to the COVID-19 pandemic. Major gap is that Kazakhstan has not undergone an exercise of COVID-19 intra- or after-action reviews to identify a list of gaps and best practices.

Regional health cooperation

Priority areas⁴

- Streamline and enact the certification of specialists, and confirmation of the validity of certificates of a healthcare specialist in the region.
- Support for rapid response teams.
- Harmonize national lists of notifiable diseases for information exchange and align with IHR notifiable diseases.
- Initiate cross-border data exchange based on the IHR and following agreed data standards and selected priority diseases through MOUs.

Active regional initiatives

- Common GOST and SNIPs construction standards and recognition of skills, under CIS.
- Group purchasing of essential medicines and technologies under ABEC.
- Cooperation of the member states of the Eurasian Economic Community in the sphere of medicines and medical products.
- CAREC sanitary and phytosanitary standards modernize project.

- Emergency Health Operations Centre to implement the IHR and the Global Health Program.

Policy documents with regional cooperation mentions

- The Law (code) on public health and healthcare system of the Republic of Kazakhstan (2009/2020)
- Kazakhstan became a Party to WHO Framework Convention on Tobacco Control on April 22, 2007
- The Statement on the National Coordination Council on Healthcare Protection under the Government of the Republic of Kazakhstan (2016/ 2019).

National institutes responsible for or involved in the regional cooperation

- National Coordination Council on Healthcare Protection under the Government of the Rep. of Kazakhstan
- Department of International Cooperation and Integration, the Ministry of Health of the Rep. of Kazakhstan
- Sanitary and Epidemiological Control Committee, the Ministry of Health of the Rep. of Kazakhstan
- Ministry of Agriculture, Veterinary Supervision and Control Committee of Rep. of Kazakhstan.

⁴ Defined based on results of the national assessment as well as outcomes of the CAREC workshop conducted in Tbilisi in October 2022, which are in line with the Regional Investment Framework.