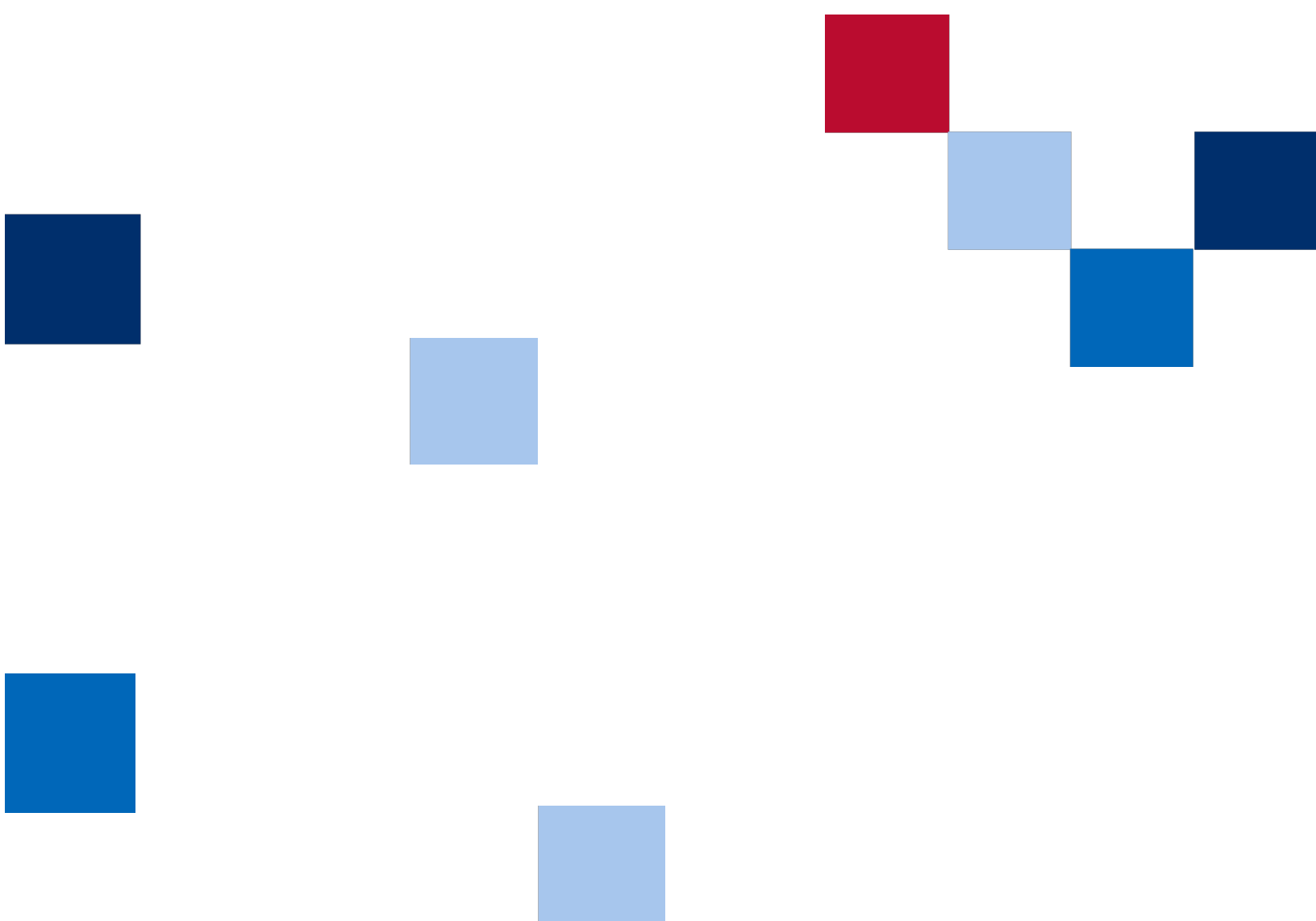




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Summary of Draft National Strategy for Epidemiological Surveillance, Control, and Prevention of COVID-19 – Uzbekistan



Local Health System Sustainability Project

The Local Health System Sustainability Project (LHSS) under the USAID Integrated Health Systems IDIQ helps low- and middle-income countries transition to sustainable, self-financed health systems as a means to support access to universal health coverage. The project works with partner countries and local stakeholders to reduce financial barriers to care and treatment, ensure equitable access to essential health services for all people, and improve the quality of health services. Led by Abt Associates, the five-year project will build local capacity to sustain strong health system performance, supporting countries on their journey to self-reliance and prosperity.

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Acronyms

CDC	U.S. Centers for Disease Control and Prevention
COVID-19	Coronavirus disease
GoU	Government of Uzbekistan
IPC	Infection prevention and control
LHSS	Local Health System Strengthening Project
M&E	Monitoring and evaluation
MoH	Ministry of Health
PCR	Polymerase chain reaction
PHC	Primary health care
PPE	Personal protective equipment
RES	Routine epidemiological surveillance
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2
SESW&PH	Service of Sanitary and Epidemiological Welfare and Public Health (formerly the Sanitary and Epidemiological Service)
SOP	Standard operating procedure
Strategy	National Epi-Surveillance Strategy and Three-Year Roadmap (draft)
WHO	World Health Organization
USAID	United States Agency for International Cooperation



Introduction

Uzbekistan adopted a policy of active containment of coronavirus disease 2019 (COVID-19) beginning with the official detection of the country's "patient zero" on March 15, 2020.¹

Countering the pandemic is an interdepartmental responsibility that requires coordination between the Ministry of Health (MoH) and other ministries, as COVID-19 affects public health, safety, and the economy. As in many other countries, Uzbekistan adopted public health and social well-being measures to reduce the spread of COVID-19. This includes preventive measures for domestic and international travel, public events, and individual safety, and other practices recommended by the World Health Organization (WHO).

Specific to COVID-19 epidemiological surveillance, Uzbekistan has set the following objectives:

- Prompt identification, isolation, testing, and management of suspected cases
- Detection and containment of COVID-19 clusters/outbreaks, including among vulnerable groups such as hospital patients, medical staff, and people living in nursing homes, social hostels, and the penitentiary system
- Contact tracing and monitoring
- Implementing targeted control measures while ensuring safe resumption of economic and social activities
- Assessing the impact of the pandemic on the wider health system
- Monitoring long-term epidemiological trends and the evolution of COVID-19
- Studying the co-circulation of viruses, including COVID-19, influenza, and other viruses that cause respiratory infections

Role of the Local Health System Sustainability Project

The Local Health System Sustainability Project (LHSS) initiated interventions in Uzbekistan in April 2020 in response to a request USAID received from the Ministry of Investment and Foreign Trade on behalf of the MoH. In February 2021, LHSS completed an assessment of Uzbekistan's epidemiological surveillance system, including the country's capacity to forecast/plan, its laboratory efficiency, and its communication infrastructure across different areas of the health system.² LHSS also reviewed pertinent regulations and international donor coordination during the pandemic.

Findings revealed low human resource capacity, unclear communication pathways and processes for sharing responsibilities, an absence of predictive analytics, unclear or inefficient standard operating procedures (SOPs), and an inefficient system for monitoring and quality assurance.

Drawing from the assessment findings, LHSS worked with GoU counterparts and implementing partners to develop the draft National Strategy for Epidemiological Surveillance, Control, and Prevention of COVID-19 and Three-Year Roadmap (hereafter referred to as the "Strategy"). The Strategy provides recommendations to strengthen the surveillance and rapid response system

¹ The first case of coronavirus infection has been identified in Uzbekistan (Interfax.ru, 15 March 2020) <https://www.interfax.ru/world/699172>

² Study of the Current State COVID-19 Epidemiologic Surveillance System in the Republic of Uzbekistan (LHSS)



and enhance the GoU's ability to advance best practices and high-quality infectious disease surveillance strategies.

Developing the Strategy included consultations with MoH staff and regional epidemiologists and was conducted in coordination with the U.S. Centers for Disease Control and Prevention (CDC), the MoH's Service of Sanitary and Epidemiological Welfare and Public Health (SESW&PH), WHO, and USAID Uzbekistan to avoid duplication of efforts and ensure MoH ownership of the activity. The MoH approved the Strategy in July 2021.

Document Purpose

This document summarizes the Strategy's recommendations for the epidemiological surveillance, control, and prevention of COVID-19 in Uzbekistan for 2021–2023, aligned with the pillars in the WHO COVID-19 Monitoring and Evaluation (M&E) Framework. A full-length version of the MOH-approved Strategy will be available on the SESW&PH website.³

³ See <http://www.sanepid.uz/ru/category/xalqaro-loyihalar>. At this time, publication of the Strategy is still pending written permission from the Minister of Health.



Summary of the Strategy

The Strategy aims to provide foundational evidence for organizing GoU initiatives to counter the pandemic and aligns with the country's goals: "To achieve a reduction in the transmission of SARS-CoV-2 [severe acute respiratory syndrome coronavirus], thereby limiting morbidity and mortality, and to ensure the sustainable functioning of the economic and social activities of the Republic."

This Strategy offers a multisectoral approach and recommendations that aim to reduce the spread of COVID-19, strengthen coordination and leadership during the COVID-19 pandemic and for future, emerging pandemics, and improve the GoU's ability to conduct sentinel epidemiological surveillance. The recommendations were developed for consideration by the Special Republican Commission, the entity responsible for Strategy implementation.

To ensure alignment with WHO-established global best practices, Strategy creation was consultative process with partner organizations, including the WHO; the CDC; the International Federation of the Red Cross under the Sustainable Technical and Analytical Resources Project, known as "STAR"; and GoU ministries and departments.

Roles and Responsibilities for Strategy Implementation

As mentioned above, the COVID-19 response requires an interdepartmental response, close coordination, and optimal access to data for informed decision-making. The LHSS assessment identified a need to enhance coordination, monitoring, and supervision among key GoU ministries⁴ involved in COVID-19 efforts. To address this need, the Strategy outlines roles and responsibilities for the following institutions:

- The Special Republican Commission, headed by the Prime Minister, is responsible for coordinating implementation of recommendations with SESW&PH and other ministries. This Commission was established by presidential decree on January 29, 2020, to prepare a program for preventive measures to address the spread of COVID-19.⁵ While preventative measures were developed, there have been challenges with developing a unified strategy.
- Monitoring and supervision of the Strategy's implementation lies with a specialized commission within SSEW&PH's Headquarters, headed by the Chief State Sanitary Doctor.
- The Central Office of the SESW&PH is responsible for organizing epidemiological surveillance, collecting and analyzing epidemiological data, developing regulatory documents on epidemiological surveillance, and issuing recommendations for decision makers.
- The SESW&PH also shares policies with other agencies and ministries,⁶ who are engaged in specialized epidemiological surveillance for boarding schools, nursing

⁴ Study of the Current State of the COVID-19 Epidemiologic Surveillance System in the Republic of Uzbekistan (LHSS) diagrams 2 and 3.

⁵ Decree of the President of the Republic of Uzbekistan No. R-5537, dated 29 January 2020, "On the formation of a special republican commission but preparing a program of measures to prevent the import and spread of a new type of coronavirus in the Republic of Uzbekistan."

⁶ Study of the Current State COVID-19 Epidemiologic Surveillance System in the Republic of Uzbekistan (LHSS), diagrams 2 and 3.



homes, military contingents, the penitentiary system, and surveillance where large numbers of people may congregate (public events, mass transport, workplaces, and educational institutions).

Sustainability

Improving Uzbekistan’s epidemiological surveillance system has support at the highest levels of government, including the President.⁷ According to established practice, the Central Office of the SESW&PH determines key issues related to epidemiological surveillance and COVID-19 prevention, which are shared with the MoH and, through the ministry, with the Special Republican Commission. The Commission's decisions are binding on all ministries and departments.⁸ However, recommendations need to be funded, planned for, implemented and monitored in order to be sustainable.

Alignment with the WHO COVID-19 M&E Framework

The Strategy aligns with the WHO COVID-19 M&E Framework, used to assess performance and support the analysis of progress against the WHO COVID-19 Strategic Preparedness and Response Plan. The M&E Framework is organized around three dimensions:

- Geographical scope;
- Planning and monitoring needs; and
- Pillars, representing thematic areas under which indicators or activities can be grouped

The pillars of the M&E Framework serve as the structure for organizing the Strategy’s proposed activities. The table below lists the nine WHO pillars and associated activity areas, followed by recommendations in the Strategy, organized around the relevant pillars.

WHO Pillar	Activity Areas
1. Country-level coordination, planning, and monitoring	<ul style="list-style-type: none"> • Responsible organizations’ powers and coordination • Legal and regulatory framework for the national epidemiological surveillance system • Procedures for data collection and epidemiological analysis • Monitoring and supervision of strategy implementation
2. Risk communication and community engagement	<ul style="list-style-type: none"> • COVID-19 prevention among the general population

⁷ Presidential Decree No. 4649, dated March 26, 2020, “On additional measures to prevent the widespread spread of coronavirus infection in the Republic of Uzbekistan”; and Presidential Decree No. 4790, dated July 27, 2020, “On measures to organize the activities of the service for sanitary and epidemiological welfare and public health of the Republic of Uzbekistan.”

⁸ Regulations on the Service for Sanitary and Epidemiological Welfare and Public Health (Appendix N3 PP-4790)



WHO Pillar	Activity Areas
3. Surveillance, rapid response teams, and case investigation	<ul style="list-style-type: none">• Stages of emergency and spread of new respiratory pathogens• Strengthening Uzbekistan's COVID-19 epidemiological surveillance system• Procedures for detecting and registering new COVID-19 cases• Contact tracing
4. Points of entry, international travel, and transport	<ul style="list-style-type: none">• Points of entry, international travel, and transport <i>*CDC and SSEW&PH have developed and are implementing activities related to travel, transport, and cross border control.*</i>
5. National laboratories	<ul style="list-style-type: none">• Organization of laboratory diagnostics to strengthen epidemiological surveillance
6. Infection prevention and control	<ul style="list-style-type: none">• Ensuring safe and efficient flow of patients• Prevention of COVID-19 among health workers, EC and UMO in hospitals
7. Case management	<ul style="list-style-type: none">• <i>No associated activities. Case management is not a focus area for the Strategy.</i>
8. Operational support and logistics	<ul style="list-style-type: none">• Assessment of the readiness of hospitals to work with COVID-19
9. Maintaining essential health services and systems	<ul style="list-style-type: none">• Strengthening human resources• Financing• Managing risks and threats to strategy implementation



Recommendations by Pillar

Pillar 1: Country-Level Coordination, Planning, and Monitoring

Recommendations under Pillar 1 seek to strengthen Uzbekistan's ability to effectively coordinate, plan, and monitor COVID-19 to improve the country's response efforts.

Responsible Organizations' Powers and Coordination

The Special Republican Commission has broad powers and includes representatives from key ministries. The Commission's composition and powers were approved by presidential decree in January 2020.⁹

Leading specialists from the SESW&PH Central Office are responsible for developing MoH orders and resolutions on preventing the spread of COVID-19 for the Chief State Sanitary Doctor. These preventive measures must be carried out by all medical organizations.

The SESW&PH is responsible for setting goals; leading forecasting, planning, and programming epidemiological well-being measures during epidemics; and leading and monitoring the implementation of surveillance. Its subdivisions carry out similar tasks in the country's regions and districts.

Recommendations

- Develop and approve normative legal acts of the powers of organizations involved in countering the pandemic and the system of their interaction, with functions, responsibilities, and operational processes for the exchange and provision of information. This includes identifying indicators, reporting frequency, reporting tools, functions, and responsibilities.

Legal and Regulatory Framework for the National Epidemiological Surveillance System

A sound legal and regulatory framework is needed to improve epidemiological surveillance across the GoU. Because the fight against COVID-19 is a cross-sectoral issue, key regulatory documents are designed to strengthen coordination among GoU institutions and their activities. The MoH is developing normative legal acts to regulate health care services, including COVID-19 measures.

The main strategic direction for epidemiological surveillance of COVID-19 were formulated in Presidential Decree No. UP-6023, dated July 25, 2020.¹⁰ The Special Republican Commission issues decrees that are implemented by different ministries and departments. However, there is a need to strengthen the regulatory framework to improve intersectoral coordination between ministries and other local and regional entities such as laboratory networks and primary health care centers that are working to counter the COVID-19 epidemic.¹¹

Currently, COVID-19 prevention measures are carried out under the framework of (1) the law "On the Sanitary and Epidemiological Well-Being of the Population" and (2) the law "On the

⁹ Decree No. R-5537 of the President of the Republic of Uzbekistan, dated January 29, 2020, "On the formation of a special republican commission but preparing a program of measures to prevent the import and spread of a new type of coronavirus in the Republic of Uzbekistan."

¹⁰ Decree No. 6035 of the President of the Republic of Uzbekistan, dated July 25, 2020, «On measures to mitigate the coronavirus pandemic, fundamentally improve the system of sanitary and epidemiological welfare and public health protection»

¹¹ Study of the Current State COVID-19 Epidemiologic Surveillance System in the Republic of Uzbekistan (LHSS)



Protection of the Population and Territory from Natural and Technogenic Emergencies.” Other regulations and decrees to address emerging needs were developed as the pandemic evolved.

Countering COVID-19 requires the participation of a broad government coalition, which is coordinated by the Special Republican Commission, headed by the Prime Minister. The main executive agency is the MoH.¹² Participating entities include the following:

- *Academies:* Academy of Sciences
- *Agencies:* Agency for the Development of the Pharmaceutical Industry; Agency for Information and Mass Communications under The President of the Republic of Uzbekistan
- *Armed forces and security:* Border troops; State Security Service
- *Media Outlets:* National Television and Radio Company of Uzbekistan
- *State committees:* State Customs Committee; State Committee for Tourism Development; State Committee for Ecology and Environmental Protection; State Committee for Ecology and Environmental Protection
- *Government ministries:* Ministry of Internal Affairs; Ministry of Finance; Ministry of Foreign Affairs; Ministry for Veterinary Medicine and Livestock Development; Ministry of Innovative Development; Ministry of Investments; Ministry of Economy and Industry; Ministry of Preschool Education; Ministry of Public Education; Ministry of Higher and Secondary Specialized Education
- *Travel-related institutions:* Uzbekistan’s main airports

Recommendations

- Normative acts should detail oversight of how the Special Republican Commission’s decisions are implemented at all levels.
- Develop and approve processes, steps, and positions responsible for information sharing (indicators and frequency of information provision) between the MoH and other ministries, departments, local authorities, and organizations involved in countering the pandemic.
- Develop and approve rapid response plans for all four infection-transmission scenarios (pandemic Phase 4) at the national and regional levels.
- Develop and approve regulatory acts to strengthen the epidemiological surveillance system for COVID-19 and other new acute respiratory infections that could develop into pandemics.
- Create a department within the SESW&PH with responsibility for ongoing epidemiological analysis, including forecasting, planning, monitoring, and management of epidemiological surveillance activities.

Data Collection and Epidemiological Analysis Procedures

The organization of data collection and analysis procedures is a critical aspect of epidemiological surveillance and is the responsibility of the SESW&PH. For COVID-19, information collection is carried out within the framework of the existing system for recording

¹² Decree No. R-5537 of the President of the Republic of Uzbekistan.



and reporting on infectious diseases. Uzbekistan uses two case registration systems: routine epidemiological surveillance and sentinel surveillance. Due to the country's context, it is more convenient to conduct routine surveillance for COVID-19, but this would be best aided by an electronic tool for registering cases.¹⁴

Previously, Uzbekistan used an electronic system to collect epidemiological data on infectious diseases. In 2019, the unified electronic database was suspended due to underfunding; as of November 2021, it still was not fully operational. The lack of an electronic system for data capture and management—and the resulting reliance on manual processes—has had a significant impact on Uzbekistan's COVID-19 surveillance progress and processes.¹³

For completeness of the information collected, all cases of COVID-19 should be recorded daily. All cases identified among international visitors to Uzbekistan, and their contact persons, should also be recorded.

Data from points of departure, medical institutions, and laboratories are transmitted daily via telephone to the SESW&PH regional divisions. Data is then transmitted to the SESW&PH Central Office for analysis. Epidemiological analysis is currently limited to descriptive methodology. To strengthen Uzbekistan's epidemiological surveillance system, the SESW&PH requires capacity development in the use of modern methods (such as diagnostic analytics, predictive analytics, and prescriptive analytics). Similarly, the Central Office would benefit from the creation of a specific department for epidemiological analysis that could inform measures to address SARS-CoV-2 and other new pathogens.¹⁴

The full-length Strategy, referenced earlier, contains a detailed diagram of epidemiological analysis procedures.

Recommendations

- Develop regulatory documents on digitizing data collection and analysis, ensuring information collection, and disseminating analysis results, with an approved action plan and deadlines for implementing these activities.
- Strengthen and modernize existing electronic tracking information systems for routine and sentinel epidemiological surveillance of infectious diseases, including COVID-19.
- Develop standard forms for registration and reporting that can be digitized and serve as the basis for new epidemiological surveillance software.
- Strengthen the capacity of SESW&PH by training personnel on epidemiological analytics, including epidemiological diagnostics, forecasting, and prescriptive analytics.
- Organize and formalize communication pathways within the SESW&PH and with other GoU ministries and departments.

Monitoring Uzbekistan's Epidemiological Situation

A comprehensive analysis of the epidemiological situation in Uzbekistan requires clarifying basic epidemiological concepts and their definitions at the service level, including working definitions for what is considered a case of COVID-19, strategies for identifying new cases and contacts, and testing strategies that consider the status of the pandemic.

The quality of COVID-19 surveillance data should be monitored using performance indicators such as timeliness and completeness. To ensure the quality of monitoring, accurate definitions

¹³ Study of the Current State COVID-19 Epidemiologic Surveillance System in the Republic of Uzbekistan (LHSS)



of indicators and proven data collection techniques are needed. Each indicator should have a written description, including collection methods and calculation formulas.

Uzbekistan, as a WHO Member State, participates in the global surveillance system and reports daily cases of illness and death as well as weekly cumulative cases and deaths. As part of the implementation of the new Strategy, the following indicators should be included in the country's reporting to ensure alignment with WHO recommendations:

- Number of confirmed infections
- Number of likely infections
- Number of deaths from confirmed infection
- Number of deaths from probable infection
- Number of hospitalized (confirmed and probable cases)
- Number of discharged/recovered (confirmed and probable cases)
- Number of infected healthcare workers
- Number of healthcare workers who died from carbon monoxide
- Number of individuals tested
- Number of people who underwent polymerase chain reaction (PCR) tests (positive and negative results)

Additional indicators from the WHO's COVID-19 surveillance questionnaire, used to measure areas such as national level coordination, goals and objectives of the country's surveillance policy, and microbiological and laboratory support would ideally be included in reporting. Optimally, indicator data would be collected weekly and analyzed by region, gender, and age.

The main criterion for confirming an epidemic is under control is the effective reproduction number, R_t . This is the number of secondary cases per infection. An R_t value below 1 for at least two weeks confirms that the epidemic is under control and is on the decline.

Additional epidemiological criteria confirming the controllability of the epidemic:

- Within a three-week period since the last peak of incidence, a continuous decrease in the observed number of probable and confirmed cases by 50 percent or more is recorded
- Less than 5 percent of tests for COVID-19 are positive within at least two weeks, subject to systematic identification and testing of suspected cases.
- At least 80 percent of cases are detected among previously identified and registered contacts.
- For more than three weeks, the number of deaths among people with a confirmed and probable diagnosis of COVID-19 has been decreasing.
- Over the past two weeks, the proportion of hospitalizations and intensive care placements among people with a confirmed and probable diagnosis of COVID-19 has been continuously decreasing.



- Reduction in age-distributed excess mortality from pneumonia.¹⁴

Recommendations

- Ensure consistent epidemiological analysis workflows and the completeness and quality of data provided for global COVID-19 surveillance, which are critical to national and local risk assessments and risk management responses.
- Apply USAID's data quality dimensions (validity, reliability, timeliness, precision, and integrity) where possible.
- Approve the list of national indicators and their use to confirm the controllability of the epidemiological situation for COVID-19.
- Develop and approve relevant guidelines for analytical and predictive epidemiology, including indicators and formulas for their calculation, and how indicators can be used to inform decision-making processes.
- Provide regular training to GoU epidemiologists on epidemiological analysis methods.

Pillar 2: Risk Communication and Community Engagement

Preventing COVID-19

Preventive measures against the spread of COVID-19 include wearing masks, proper handwashing hygiene, social distancing, vaccination, and revaccination. Media campaigns grounded in correct information should be conducted on a regular basis. Promoting vaccination is essential, as vaccination will reduce the spread of COVID-19 and thereby reduce morbidity and mortality.

Recommendations

- Develop and implement a COVID-19 mass media communication strategy on risk communication and safe behaviors, with a focus on addressing false information.
- Regularly analyzing behavioral drivers of the pandemic and developing risk communication approaches in accordance with the country's epidemiological status.
- Develop and approve a national COVID-19 vaccination plan, including information on the procurement of vaccines and related consumables.

Pillar 3: Surveillance, Rapid Response Teams, and Case Investigation

Stages of Emergence and Spread of New Respiratory Pathogens

According to WHO classification, there are four phases of epidemiological development for new pathogens with pandemic potential, which include COVID-19:

- Phase 1 – No reported cases (including both zero transmission and no identified and reported cases)
- Phase 2 – Single cases
- Phase 3 – Clusters of cases (several cases of diseases related to each other)

¹⁴ *Draft Strategy for Epidemiological Surveillance, Control and Prevention of COVID-19*, working version dated March 30, 2021, Chapter 7, "Monitoring and control of the implementation of the strategy."



- Phase 4 – Mass distribution (MR). This phase of mass spread is further subdivided into four levels, from low transmission (MP1) to very high transmission (MP4).

As a WHO Member State, Uzbekistan must assess the epidemiological situation based on transmission activity. As the epidemic continues, classification of COVID-19 transmission scenarios may worsen or improve. When moving from one scenario to another, WHO recommends the following:

- Changes to the degradation script function should be reported at any time.
- If the assessment of the transmission scenario improves, it should be monitored for a 28-day period before confirming a decrease in the transmission rate.
- Development partners are consulted to consider how the surveillance and testing strategy has affected the epidemic before reclassifying the transmission scenario for improvement.

Recommendations

- Develop and approve operational response plans per the identified transmission scenarios at the national level and in departmental and regional plans. Operational response plans should be harmonized with each other. The national plan is drawn up by the MoH and approved by the Cabinet of Ministers.¹⁵
- Develop and approve measures to increase the capacity of the national epidemiological surveillance system to rapidly assess transmission scenarios. The plan is developed by the Central Office of the SESW&PH, approved by the MoH, and agreed on with the Ministry of Finance.
- Make data informed, high-level political decisions to mitigate the social and economic impact of the epidemic under various transmission scenarios.
- Develop and approve of social and behavior change campaigns led by media companies to prevent the spread of infections among the population.

Procedures for Detecting and Registering New COVID-19 Cases

To prevent and slow the transmission of COVID-19, it is necessary to promptly identify, isolate and treat cases. Patients with confirmed and suspected cases of COVID-19 are identified by clinical and epidemiological signs. New cases can be detected when patients test at primary health centers or mobile testing units. Testing for COVID-19 is also available at airports, railway and bus stations, medical institutions, polyclinics, specialized COVID-19 hospitals, and other medical institutions.

At present information about identified cases is transmitted to the SESW&PH. All information about detected cases is recorded by epidemiologists. In Uzbekistan, suspected and confirmed COVID-19 cases are documented manually. All information about detected cases is recorded by epidemiologists. For each detected case, a district-level (city-level) epidemiologist fills out an epidemiological card. Based on these cards, consolidated reports are generated and transmitted to the national and republican levels. The SESW&PH Central Office compiles a general daily report. Confirmed cases are reported to the MoH.

¹⁵ The full version of the WHO classification is presented in the full length LHSS assessment report and in Annex 3 of the full-length Strategy document.



Recommendations

- Revitalize the electronic system for collecting and analyzing data (attached to Pillar 1).
- Develop and obtain MoH approval for SOPs related to the detection and registration of new cases of COVID-19 (including when detecting outbreaks).
- Train epidemiologists and strengthen health workers' knowledge and skills related to the basics of COVID-19 case detection and reporting.
- Develop SOPs and implement regular training (virtual and in-person) on the SOPs for MoH and other departmental personnel.
- Obtain MoH approval for SOPs related to collecting information and monitoring deaths from COVID-19, including the calculation of excess total mortality, and identify responsible parties for collecting and monitoring data within SESW&PH. SESW&PH departments should provide aggregated mortality data, including gender and age, at least once a week.

Contact Tracing

Identification, registration, and monitoring of patient contacts is a key measure for preventing transmission of COVID-19. Contact tracing is conducted daily for 14 days from the point of contact with an infected person, which enables the timely identification of individuals at high risk of infection.

Contact tracing in Uzbekistan is complicated by the lack of an accepted definition for a “close contact.” There is no information about registered contacts, broken down by whether (1) there is an identified source or (2) the circumstances of the infection have been established, but the source has not been identified.

The process for informing and monitoring contacts and controlling the flow of information between the multiple entities responsible for treating COVID-19 cases and identifying and following up with contacts exists but needs to be formalized.

Recommendations

- SESW&PH should develop SOPs related to identification, registration, and daily monitoring of persons who have been in contact with COVID-19-positive patients.
- SOPs should be mandatory for all medical organizations, regardless of departmental affiliation and form of ownership (public/private).
- Train epidemiologists and strengthen health workers' knowledge and skills in the basics of COVID-19 contact tracing.
- Create a database for contact tracing and use the data in mathematical modeling to enable the SESW&PH to create short-term and long-term forecasts, determine pathogen transmissibility, and identify preventive measures.

Pillar 4: Points of Entry, International Travel, and Transport

Points of Entry, International Travel, and Transport

Measures to reduce public health risks associated with domestic and international travel are informed by the WHO's International Health Regulations. In accordance with MoH Order No.



9,¹⁶ technical working groups with subject-matter experts have been formed for the implementation of the WHO regulations and COVID-19 infection prevention measures have been established, including rules for the operation of sanitary-quarantine points, registration of persons arriving from abroad, and isolation of active cases. In this summary document, Pillar 4 relates closely to Pillar 1 and 3.

All cases identified among foreign travelers and their contacts are registered. There are periods when foreign travelers are required to self-isolate at home or in a hotel at their own expense. Beginning in December 2021, foreign travelers must present a valid negative PCR certificate issued within the last 72 hours. Arriving passengers without a negative PCR test prior to travel may be subject to a rapid screening test at the point of entry. If a traveler at a point of entry is suspected of being ill, checkpoint staff will alert the health authorities for additional guidance.

Recommendations

- Develop and apply SOPs for the rapid detection of imported cases caused by new strains of SARS-CoV-2.
- Create an electronic database to collect data on travelers and COVID-19 status and analyze the circulation of new strains of SARS-CoV-2.
- Link the electronic database to national surveillance efforts (links to Pillar 3).

Pillar 5: National Laboratories

Organization of Laboratory Diagnostics to Strengthen Epidemiological Surveillance

According to the Special Republican Commission, reverse-transcription PCR is the method used to diagnose COVID-19. Enzyme-Linked Immunosorbent Assay (ELISA) and rapid testing methods have also been introduced.

The accuracy of laboratory results is important, and the risk remains that testing capacity will not match testing needs. Depending on transmissibility, the number of cases, laboratory testing capacity, and the rapid deployment of additional capabilities, testing may need to be prioritized according to the epidemiological situation.

An external assessment of Uzbekistan's laboratory quality was carried out by the WHO. WHO consultants identified issues with the collection and transportation of samples and their quality. Laboratory testing of individuals with suspected COVID-19 is fragmented in the National COVID-19 Guidelines. As practice shows, it is better to formalize these procedures in the form of SOPs that detail each step based on WHO recommendations.

Recommendations

- Create an electronic laboratory system linked to the electronic tracking system for COVID-19.
- SESW&PH specialists should develop and include a COVID-19 testing policy in operational response plans, in accordance with identified transmission scenarios at national, departmental, and regional levels.

¹⁶ MoH Order No. 9, "Improving the mechanism for the implementation of International Health Regulations in the health care system."



- Develop and obtain MoH approval for SOPs related to laboratory diagnosis of viral infections, including COVID-19. Adherence to SOPs should be binding on all laboratories, regardless of departmental affiliation or ownership (public or private).
- Conduct a sero-epidemiological study to assess population immunity, with the involvement of scientific institutions that are part of the SESW&PH.
- Develop and approve SOPs on biosafety for laboratory personnel, regardless of departmental affiliation and form of ownership (public or private).
- Procure laboratory equipment to monitor long-term epidemiological trends and the evolution of COVID-19.
- Develop and implement a program for the use of PCR diagnostic panels to study the co-circulation of significant respiratory viruses, including SARS-CoV-2, MERS-CoV, SARS-CoV, seasonal coronaviruses, and acute respiratory infections. This will help provide a reliable epidemiological picture for these viruses.

Pillar 6: Infection Prevention and Control

Ensuring Safe and Efficient Flow of Patients

Due to exposure risks, developing and implementing COVID-19 infection prevention and control (IPC) measures at health care facilities is essential. This is especially important at primary health centers, clinics, and hospital emergency departments. Adherence to standard precautions for all patients and should be strengthened and include environmental disinfection, such as cleaning and disinfecting health care facility surfaces.

To ensure a safe and effective flow of patients in health facilities, IPC requirements should be met, including appropriate screening, triage of patients, and targeted referral of patients.

Recommendations

- Ensure strict observance of MoH-approved IPC procedures for the screening, triage, and targeted referral of patients with probable and confirmed COVID-19 diagnoses, regardless of departmental affiliation and form of ownership (public or private).
- Develop and obtain MoH approval for SOPs for organizing the mobile teams, comprised of a general practitioner and several nurses responsible for diagnosing, treating, and referring cases of COVID-19.
- Develop and implement virtual training for health workers to reinforce appropriate prevention measures and patient screening, triage, and targeted referrals.

Preventing COVID-19 in the General Population

Enacting preventive public health measures against COVID-19 is an essential component of IPC. This includes wearing masks, practicing hand hygiene, airing and cleaning the premises, and maintaining physical distance. Media campaigns (e.g., radio, television, newspapers) with correct, approved information and messages to promote social and behavior change should be conducted regularly to prevent the spread of infections among the population.

Recommendations

- Regularly assess the country's epidemiological situation and revise mass media campaigns to deliver messages about current risks and behaviors. The Special Republican Commission should ensure campaigns are accurate and conducted



regularly. The Commission includes the head of National Television and Radio, which facilitates coordination.

- Implement the COVID-19 vaccination plan: informed choice of vaccines, assessment of the cold chain, procurement of missing equipment, SOP approval and updating, identification of high-risk groups and criteria for their free vaccination, determination of pricing criteria for paid vaccination, training of personnel, and procurement of vaccines and supplies.

Preventing COVID-19 among Health Care Workers: Infection Control and Health Care Waste Management in Hospitals

Tracking COVID-19 incidence among health care workers is of primary importance for Uzbekistan's public health system. Health care workers and other employees of medical institutions are at high risk of infection due to their occupational exposure to COVID-19.

Prevention of COVID-19 among health care workers requires an integrated, multidisciplinary approach that includes health and safety measures, vaccination, identification of infection risks, compliance with IPC rules, provision of personal protective equipment (PPE), and appropriate collection and disposal of medical waste.

Recommendations

- The MoH should develop and implement protocols to ensure health workers' safety and prevent their exposure to COVID-19 in the workplace.
- In accordance with updated data from WHO and CDC, MoH experts should revise the technical specifications for PPE, especially for personal respiratory protection (mandatory fit tests with individual selection of respirators).
- The MoH should update recommendations on IPC, integrating experience to date in preventing COVID-19 infection in health facilities.
- Conduct a health worker survey using one of the three WHO-recommended protocols to assess potential risk factors for the spread of COVID-19. For this survey, draw on the capacity of scientific institutions that are part of the SESW&PH structure.

Pillar 7: Case Management

No associated activities. Case management is not a focus area for the Strategy.

Pillar 8: Operational Support and Logistics

Assessment of Hospitals' Readiness to Address COVID-19

Preparing for and responding to COVID-19 while supporting the provision of other health care services is challenging. Key decisions and actions to reduce health system disruptions must be supported by accurate and timely data from ongoing monitoring of health service delivery and use throughout the pandemic. An initial step would be assessing the capacity of hospitals using WHO and CDC recommendations. Evaluations should be carried out on the instructions of the MoH, with the results provided to the MoH to enable timely decisions to improve services to Uzbekistan's population.

Recommendations

- Develop and implement checklists to assess in-patient medical institutions' capacity and preparedness to manage cases of COVID-19.



- Develop and implement checklists to assess the continuity of essential health services provision in the context of the COVID-19 pandemic.
- Conduct regular assessments before expected and projected increases in incidence.

Pillar 9: Maintaining Essential Health Services and Systems

Strengthening Human Resources

As a result of the ongoing reorganization of the Sanitary and Epidemiological Service, the number of specialists—including professional epidemiologists—decreased during 2019. To implement an effective supervision system, more attention should be paid to training potential SESW&PH personnel. These personnel should include specialists who are highly qualified in COVID-19 surveillance and have the skills to conduct high-quality routine surveillance and analytical epidemiology methods (descriptive, diagnostic, prognostic and prescriptive).

At PHC and medical institution levels, there should be highly qualified specialists who have the skills to organize COVID-19 surveillance and prevention in medical institutions and to maintain IPC systems and waste management. Program should be overseen and coordinated by the MoH with active involvement from postgraduate institutes for the development of curricula.

Recommendations

- Develop and approve training programs and distance learning modules in postgraduation institutes, harmonized with the guidelines, instructions, algorithms, SOPs, and other MoH-approved regulations for COVID-19 epidemiological surveillance.
- Develop and approve the surveillance and analytical epidemiology curriculum and training for sentinel epidemiological surveillance staff.
- Develop a training module on predicting infectious diseases and training epidemiologists.
- Ensure PHC and health care facility staff are trained on epidemiological surveillance and prevention of COVID-19, as well as the organization of IPC and medical waste management.

Financing

The COVID-19 response is funded through the national budget and other sources, including international and domestic donor funds. Implementation of the response is ensured through the coordinated actions of national and local authorities, GoU ministries and departments, and scientific and educational organizations. However, funding information is considered sensitive by the GoU and is not shared externally.

Recommendation

- Ensure transparency and availability of financial support measures used to manage the COVID-19 response. This can be completed by consolidating all relevant COVID-19 response resources in the national budget and coordinating co-financing from development partners.



Managing Risks and Threats to Strategy Implementation

Experts from the World Economic Forum warn that the consequences of the COVID-19 pandemic could threaten the global economy for three to five years.¹⁷ In addition, social inequality may increase, and geopolitical stability may weaken, which poses a risk to social, economic, and psychological wellbeing.

The stated goals of the GoU's response to the pandemic are to protect public health, ensure timely economic recovery, protect household welfare, and accelerate the resumption of normal social life.

Recommendations

- Prioritize immediate investments in the health care system to strengthen its capacity to test for COVID-19 infection, provide care to those who are ill, and track and isolate contacts. Such investments are needed to better manage the impact of the pandemic and to prevent significant damage to the integrity of Uzbekistan's public health system.
- Facilitate digitalization to improve access to e-health. This includes digitizing health information systems, medical records, telemedicine, and other components of the health system.
- Closely link health aspects of regional development with the COVID-19 response by (1) creating "red zone" maps that identify unfavorable epidemiological trends in administrative areas with high socio-economic vulnerability; (2) actively monitoring epidemiological trends, including anonymous clinical data, case fatality rates, and data on high-risk groups for laboratory and epidemiological services; (3) planning ongoing training for health care providers, and (4) equipping mobile teams with everything they need to conduct timely investigations of COVID-19 cases and clusters.
- Organize a senior management team or department to develop risk mitigation and support, both budgetary and extra-budgetary, to manage the COVID-19 response.
- Integrate Uzbekistan into relevant international programs to combat the pandemic, for the implementation of appropriate testing methods, necessary materials, training programs, and treatment protocols for COVID-19.
- Supporting sustainable interactions with international organizations and bilateral donors.

¹⁷ "Coronavirus, WEF: Pandemic could become a threat to the global economy for 5 years"
<https://www.dw.com/ru/pandemija-mozhet-5-let-ugrozhat-mirovoj-jekonomike/a-56273291>