This document is a compilation of all questions, justifications, and sources used to determine the 2021 Global Health Security Index scores for Tajikistan. For a category and indicator-level summary, please see the Country Profile for Tajikistan.

**CATEGORY 1: PREVENTING THE EMERGENCE OR RELEASE OF PATHOGENS WITH POTENTIAL FOR INTERNATIONAL CONCERN**

1.1 Antimicrobial resistance (AMR)  
1.2 Zoonotic disease  
1.3 Biosecurity  
1.4 Biosafety  
1.5 Dual-use research and culture of responsible science  
1.6 Immunization

**CATEGORY 2: EARLY DETECTION AND REPORTING FOR EPIDEMICS OF POTENTIAL INTERNATIONAL CONCERN**

2.1 Laboratory systems strength and quality  
2.2 Laboratory supply chains  
2.3 Real-time surveillance and reporting  
2.4 Surveillance data accessibility and transparency  
2.5 Case-based investigation  
2.6 Epidemiology workforce

**CATEGORY 3: RAPID RESPONSE TO AND MITIGATION OF THE SPREAD OF AN EPIDEMIC**

3.1 Emergency preparedness and response planning  
3.2 Exercising response plans  
3.3 Emergency response operation  
3.4 Linking public health and security authorities  
3.5 Risk communications  
3.6 Access to communications infrastructure
3.7 Trade and travel restrictions

**CATEGORY 4: SUFFICIENT AND ROBUST HEALTH SECTOR TO TREAT THE SICK AND PROTECT HEALTH WORKERS**

4.1 Health capacity in clinics, hospitals, and community care centers
4.2 Supply chain for health system and healthcare workers
4.3 Medical countermeasures and personnel deployment
4.4 Healthcare access
4.5 Communications with healthcare workers during a public health emergency
4.6 Infection control practices and availability of equipment
4.7 Capacity to test and approve new medical countermeasures

**CATEGORY 5: COMMITMENTS TO IMPROVING NATIONAL CAPACITY, FINANCING PLANS TO ADDRESS GAPS, AND ADHERING TO GLOBAL NORMS**

5.1 International Health Regulations (IHR) reporting compliance and disaster risk reduction
5.2 Cross-border agreements on public health and animal health emergency response
5.3 International commitments
5.4 Joint External Evaluation (JEE) and Performance of Veterinary Services Pathway (PVS)
5.5 Financing
5.6 Commitment to sharing of genetic and biological data and specimens

**CATEGORY 6: OVERALL RISK ENVIRONMENT AND VULNERABILITY TO BIOLOGICAL THREATS**

6.1 Political and security risk
6.2 Socio-economic resilience
6.3 Infrastructure adequacy
6.4 Environmental risks
6.5 Public health vulnerabilities
Category 1: Preventing the emergence or release of pathogens with potential for international concern

1.1 ANTIMICROBIAL RESISTANCE (AMR)

1.1.1 AMR surveillance, detection, and reporting

1.1.1a Is there a national AMR plan for the surveillance, detection, and reporting of priority AMR pathogens?

Yes, there is evidence of an AMR plan, and it covers surveillance, detection, and reporting = 2, Yes, there is evidence of an AMR plan, but there is insufficient evidence that it covers surveillance, detection, and reporting = 1, No evidence of an AMR plan = 0

Current Year Score: 2

Tajikistan has an AMR plan covering surveillance, detection and reporting in place.

According to the World Health Organization (WHO), Tajikistan has a national action plan on AMR that was published in May 2018 [1]. Objectives 3, 4 and 5 of the plan cover surveillance, detection, and reporting, including the requirement to designate a national reference laboratory. Tajikistan’s National Reference Laboratory website includes "antibiotic sensitivity" as one of its research areas [2]. The Russian-language version of the same document indicates that the plan is not due to be updated until 2022.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019, and the priority actions from the JEE have been included in Tajikistan’s National Action Plan for Health Security (NAPHS). According to the JEE, Tajikistan has "effective multisectoral coordination on AMR" and does conduct surveillance of AMR. [3]

However, Tajikistan’s Ministry of Health and Social Protection does not currently include its national action plan on AMR among a list of National Programmes published on its website [4].

No subsequent references to Tajikistan’s national action plan on AMR, following its publication in May 2018, were found on the website of the Ministry of Healthcare. According to the Food and Agriculture Organisation of the United Nations (FAO) website, in July 2019 Tajikistan became the first country in the Europe and Central Asia region to begin pilot testing of the FAO’s Progressive Management Pathway (PMP) on AMR [5].

1.1.1b

Is there a national laboratory/laboratory system which tests for priority AMR pathogens?

All 7 + 1 priority pathogens = 2 , Yes, but not all 7+1 pathogens = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Tajikistan operates a national laboratory that tests for priority AMR pathogens. According to its official website, Tajikistan’s National Reference Laboratory was built in 2016 and is equipped with a Vitek 2 Compact, which allows it to test for gram-positive cocci, gram-negative baccilli, and yeasts. [1, 2] Tajikistan’s National Reference Laboratory does not provide a list of the pathogens it tests for, but it does state an ability to test for more than 450 taxonomic units. [1, 2] Tajikistan completed a Joint External Evaluation (JEE) in October 2019, and the priority actions from the JEE have been included in Tajikistan’s National Action Plan for Health Security (NAPHS). The JEE reports that Tajikistan has laboratory testing for detection of priority diseases, but notes that there are problems with the reference laboratory system, namely that neither the pathogens for which reference testing is conducted nor the core functions for reference laboratories are defined [3]. There is no indication from the JEE that Tajikistan is capable of testing for any of the priority AMR pathogens.

No evidence was found on the Ministry of Health website. [4]


1.1.1c

Does the government conduct environmental detection or surveillance activities (e.g., in soil, waterways) for antimicrobial residues or AMR organisms?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tajikistan’s government conducts environmental detection or surveillance activities for antimicrobial residues or AMR organisms. Tajikistan completed a Joint External Evaluation (JEE) in October 2019, and the priority actions from the JEE have been included in Tajikistan’s National Action Plan for Health Security (NAPHS). The JEE reports that Tajikistan does conduct AMR surveillance, but it also recommends that measures be taken to “improve the system for [...] reporting for AMR in both animal and human health sectors”. The same document also suggests that the program for AMR susceptibility testing should be expanded to hospitals throughout the Tajikistan [1].

Tajikistan’s JEE further states that the country’s National Reference Laboratory and four hospital-based laboratories conduct susceptibility testing for AMR. The report does, however, note four areas for improvement, namely the need to: introduce a laboratory quality assurance system for AMR; expand AMR surveillance across the animal health, food safety and
environment sectors; publish AMR data and use them to inform public policy; and monitor antimicrobial use in the health sector, as well as in agriculture [1].

No evidence of environmental testing conducted by this department was found on the Ministry of Health website [2].

1.1.2 Antimicrobial control

1.1.2a

Is there national legislation or regulation in place requiring prescriptions for antibiotic use for humans?

Yes = 2 , Yes, but there is evidence of gaps in enforcement = 1 , No = 0 

Current Year Score: 1

There is evidence that Tajikistan has legislation or regulations requiring prescriptions for antibiotic use for humans, but there are gaps in enforcement.

Media articles from 2014, 2018 and 2020 suggest that it is illegal to purchase antibiotics in Tajikistan without a prescription, but highlight significant gaps in enforcement. [1, 2, 3] The 2018 article reports the existence of a "National Action Plan to Combat Antibiotic Resistance in the Republic of Tajikistan for 2018-2022", and states that the country organized a "week of correct use of antibiotics" with the motto "consult a qualified healthcare specialist before taking antibiotics". [2] Tajikistan's Joint External Evaluation, completed in October 2019, reports that there is legislation banning sale of antimicrobials without prescription, but highlights a need for better enforcement. [4]

The 2001 Law on Medicine and Pharmaceutical Activities states that the Ministry of Healthcare and Social Protection of the Population maintains a list of medicines requiring prescriptions, but on the ministry's website and in Tajikistan's legislative database there is no evidence of such a list being publicly available, nor of any other regulations requiring prescriptions for antibiotic use for humans. [5, 6] There are no relevant provisions in the 2017 Healthcare Code. [7]

1.1.2b
Is there national legislation or regulation in place requiring prescriptions for antibiotic use for animals?
Yes = 2 , Yes, but there is evidence of gaps in enforcement = 1 , No = 0

Current Year Score: 0

There is no evidence that Tajikistan has national legislation or regulations in place requiring prescriptions for antibiotic use for animals. Searches of the official websites of both the Ministry of Health and Social Protection and the Ministry of Agriculture identified no reference to legislation in Tajikistan with regards to the need to have a prescription for antibiotic use for animals [1, 2]. Neither Tajikistan’s 2010 Law on Veterinary Medicine, nor the 2012 Law on Food Safety refer to a need for a prescription for antibiotic use for animals. [3, 4] The Ministry of Agriculture’s website refers to the existence of the Program of Agricultural Reform in Tajikistan, but does not include any details about the program’s contents, and there is no evidence of this program elsewhere online [2]. Tajikistan completed a Joint External Evaluation (JEE) in October 2019, and the priority actions from the JEE have been included in Tajikistan’s National Action Plan for Health Security (NAPHS). According to the JEE, there is a need to “develop and implement legislation that restricts the sale and use of antimicrobials by farmers and veterinarians” in Tajikistan. [5] The National Action Plan to Tackle Antimicrobial Resistance in the Republic of Tajikistan, which was published in May 2018, includes among its objectives the improvement of policies on use of antimicrobial agents for animals [3]. The steps described as necessary to achieve this objective include a review of the legal framework for use and prescription of antibiotics in animals for food production and actions to prohibit or substantially reduce the amount of antibiotics used for growth promotion. [6]

1.2 ZOONOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a
Is there national legislation, plans, or equivalent strategy documents on zoonotic disease?
Yes = 1 , No = 0

Current Year Score: 1

Tajikistan has national plans and legislation for zoonotic disease.

Tajikistan completed a Joint External Evaluation (JEE) in October 2019, according to which Tajikistan has a legal framework for zoonoses, regulated by Decision No. 487 of 2011, titled "Establishment of a fund for action on epizootic events and approval of its regulations" [1]. However, there is no evidence that Decision 487 is publicly available online. Furthermore, the JEE also notes that "no contingency plans exist beyond the instructions outlined" and that "these plans should be elaborated, compiled and peer-reviewed", as well as tested through simulated exercises [1].

Tajikistan’s 2010 Law on Veterinary Medicine contains legislation on "providing protection from dangerous animal diseases common to animal and humans and from food poisoning" and provides for the introduction of quarantines and obliges the owners of animals to destroy infected animals and vaccinate against diseases listed by the World Organisation for Animal Health [2].

The 2006 Law on Protecting the Population from Tuberculosis outlines measures for the surveillance and control of tuberculosis [3]. Among other provisions, the law mandates continuous monitoring of all farm animals, periodic examinations of people belonging to high-risk groups and mandatory clinical supervision of tuberculosis sufferers.

The National Health Strategy of the Republic of Tajikistan 2010-2020 (which has not yet been updated or replaced) includes commitments to fight tuberculosis and malaria (section 2, chapter 1), including improvements in therapy as well as an expansion of detection and treatment measures [4].

According to the World Organisation for Animal Health website, Tajikistan has not completed an PVS assessment [5].

In 2019, Tajikistan partnered with the British Ministry of Defence to create the "Comprehensive Rabies Control Programme" which is described as a contribution to the "improvement in the epidemiological surveillance of zoonotic diseases in the country" and was completed in July 2019. [6]

1.2.1b
Is there national legislation, plans or equivalent strategy document(s) which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans?
Yes = 1, No = 0
Current Year Score: 0

There is no evidence of national legislation, plans or equivalent strategy documents in Tajikistan that include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans.

Tajikistan completed a Joint External Evaluation (JEE) in October 2019, and the priority actions from the JEE have been included in Tajikistan's National Action Plan for Health Security (NAPHS). According to the JEE (page 16), there are "no contingency plans" or equivalent strategy documents that include measures for risk identification and reduction of zoonotic disease spillover from animals to humans. The report goes on to note that "funding for anti-epizootic measures is limited" in Tajikistan and that an adequate compensation regime does not exist, which undermines incentives for farmers to report suspected diseases [1].

The JEE also states, on page 2, that there is a need to raise awareness among the rural population in Tajikistan about infectious diseases in animals and the importance that the Ministry of Agriculture is notified if/when they appear and that vaccinations are provided. The report recommends that, following the restructuring of the surveillance system in the animal and human health sectors, measures should be taken to revise and implement a comprehensive joint action plan for the prevention and control of the priority zoonotic diseases [1].

Neither the legislation published by the Ministry of Agriculture, nor that published by the Ministry of Healthcare and Social Protection of the Population, includes any reference to a specific strategy with measures for risk identification or the reduction for zoonotic disease spillover events from animals to humans, including the 2010 Law on Veterinary Medicine, the 2006 Law on Protecting the Population for Tuberculosis, and the National Health Strategy of the Republic of Tajikistan 2010-2020. [2, 3, 4, 5, 6]

There has been one study undertaken in partnership with the British Ministry of Defence, the "Comprehensive Rabies Control Program in the Republic of Tajikistan", but this is not national legislation [7].

1.2.1c

Is there national legislation, plans, or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern?

Yes = 1, No = 0

Current Year Score: 1

There are national plans, guidelines and laws that account for the surveillance and control of multiple zoonotic pathogens of public health concern.

Chapter 6 of the 2010 Law on Veterinary Medicine deals with "providing protection from dangerous animal diseases common to animals and humans and from food poisoning" [1]. This chapter provides for the introduction of quarantines, obliges owners to destroy infected animals, mandates vaccinations against diseases listed by the World Organisation for Animal Health, and also guarantees animal owners access to diagnostic testing, but does not create any mandatory testing or surveillance system.

The 2006 Law on Protecting the Population from Tuberculosis outlines measures for the surveillance and control of tuberculosis [2]. Among other provisions, the law mandates continuous monitoring of all farm animals, periodic examinations of people belonging to high-risk groups and mandatory clinical supervision of tuberculosis sufferers.

Section 2 of chapter 1 of the National Health Strategy of the Republic of Tajikistan 2010-2020 includes commitments to continue fighting tuberculosis and malaria, with the stated goal of making Tajikistan malaria-free by 2015 [3]. Measures mentioned to combat tuberculosis include quality improvement of Short Course Directly Observed Therapy, expansion of detection and treatment measures and organization of scientific research.

According to a scientific article published in 2017, the National Centre for Veterinary Diagnostics (which is within the Ministry of Agriculture) monitors wild and domestic animals for rabies and maintains statistics on its prevalence [4]. Furthermore, in October 2017 news media reported that local authorities in Dushanbe were conducting a massive campaign to vaccinate pets against rabies [5].

According to a scientific article published in 2017, the National Centre for Veterinary Diagnostics, the Main Directorate of the Veterinary Department of the Ministry of Agriculture and the State Sanitary-Epidemiological Surveillance Service monitor the epidemiological situation of brucellosis among humans and farm animals [6].

During 2014’s ebola outbreak, Tajikistan’s government took numerous measures to prevent the disease reaching the country, including heightened airport controls [7, 8].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the JEE (page 16), there are "no contingency plans" or equivalent strategy documents which include measures for risk identification and reduction of
zoonotic disease spillover from animals to humans. The report goes on to note that "funding for anti-epizootic measures is limited" in Tajikistan and that an adequate compensation regime does not exist, which undermines incentives for farmers to report suspected diseases [9]. The JEE also states, on page 2, that there is a need to raise awareness among the rural population in Tajikistan about infectious diseases in animals and the importance that the Ministry of Agriculture is notified if/when they appear and that vaccinations are provided. The report recommends that, following the restructuring of the surveillance system in the animal and human health sectors, measures should be taken to revise and implement a comprehensive joint action plan for the prevention and control of the priority zoonotic diseases [9].


1.2.1d

Is there a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries?
Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a department, agency or similar unit dedicated to zoonotic disease that functions across ministries.

According to Tajikistan’s Joint External Evaluation (JEE), which was completed in October 2019, Tajikistan’s Food Security Committee (FSC) conducts epidemiological surveillance of the animal population in the country, while zoonotic diseases in the human population is the responsibility of the Department for Sanitary and Epidemiological Security, Emergency
Situations and Emergency Medical Care within the Ministry of Healthcare and Social Protection of the Population (MoHSPP).

[1] The Intersectoral Coordination Committee (ICC) under the MoHSPP coordinates the implementation of surveillance and response policies and functions across ministries, but is not dedicated solely to zoonotic disease, as it is also responsible for developing Tajikistan’s policy on antimicrobial resistance. [1]

The official structures outlined on the Ministry of Health website do not include a department that is dedicated to zoonotic diseases [2].

Within the Ministry of Agriculture, the institution responsible for animal health is the State Veterinary Surveillance Service (SVSS) [3, 4]. Within the SVSS there are several bodies with spheres of competence that touch upon zoonotic diseases: the Department for Veterinary-Sanitary Surveillance, the Department for Anti-Epizootic Surveillance, the National Center for Veterinary Diagnostics and the Republican Anti-epizootic Center [5]. However, there is no evidence of any unit under the SVSS or elsewhere in the Ministry of Agriculture specifically dedicated to zoonotic diseases [6].

The 1993 Law on Veterinary Medicine describes the Main Department of Veterinary Management and the State Veterinary Inspectorate as the departments responsible for the control of zoonotic disease in Tajikistan [7]. There is no evidence that this body lies within the Department for Livestock, Poultry, Fish and Beekeeping of the Ministry of Agriculture, and it is not clear from official documents whether or not these bodies function across ministries. An evaluation of FAO Activities in Tajikistan, published in 2009, described how the FAO had worked in partnership with Tajikistan’s State Veterinary Inspectorate to develop a programme to control the spread of brucellosis among sheep and goats in the country. [8]

According to the World Organisation for Animal Health website, Tajikistan has not completed a PVS assessment. [9]


1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

Does the country have a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of a national mechanism in Tajikistan for owners of livestock to conduct and report on disease surveillance to a central government agency. According to the Tajikistan’s Joint External Evaluation (JEE), which was completed in October 2019, there is a need to establish an operational electronic disease surveillance system in the animal health sector. [1] The JEE also notes that funding for anti-zootic measures is limited and that an adequate compensation regime does not exist, which undermines incentives for farmers to report suspected diseases [1]. Neither the official website of the Ministry of Healthcare and Social Protection of the Population nor the Ministry of Agriculture include any reference to a mechanism for livestock owners wishing to report the presence of disease in their animals [2, 3]. The 2010 Law on Veterinary Medicine outlines the rights and responsibilities of livestock owners in the event of a zoonotic episode, stating that they must comply with laws relating to quarantine and the seizure of animals, carry out veterinary and sanitary measures to reduce infection, and hand over relevant equipment used to process infected livestock. [4] The law does not mention any reporting requirements. [4]


1.2.2b

Is there legislation and/or regulations that safeguard the confidentiality of information generated through surveillance activities for animals (for owners)?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of legislation or regulations that safeguard the confidentiality of information generated through surveillance activities for animals.

There is no evidence of such legislation or regulations on the official websites of either the Ministry of Healthcare and Social Protection or the Ministry of Agriculture [1, 2].

A general data privacy law was passed in Tajikistan in August 2018, Law on the Protection of Personal Data, but this law does not make any direct reference to the confidentiality of information obtained from animal owners [3]. Instead, the law refers
more generally to the collection of personal data, as well as the rights of individuals to have their personal data deleted in specific situations.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. Although the report outlines the need to improve surveillance of animals in various ways, it does not refer to the safeguarding of confidentiality of the information generated by this surveillance, nor does it refer to relevant legislation or regulations [4].

The 2002 Law on Information Protection does not include any clause safeguarding the confidentiality of any kind of information collected from citizens by the state, instead focusing on preventing unauthorized theft, destruction, copying and editing of information [5]. The law does not mention information about livestock or property in general.


1.2.2c

**Does the country conduct surveillance of zoonotic disease in wildlife (e.g., wild animals, insects, other disease vectors)?**
Yes = 1, No = 0

**Current Year Score: 1**

Tajikistan conducts surveillance of zoonotic diseases in wildlife.

According to a 2017 scientific article titled "Epizootic situation of rabies in the Republic of Tajikistan 2014-2015", the National Center for Veterinary Diagnostics (which is within the Ministry of Agriculture) monitors wild, stray and domestic animals including dogs, horses, cats and wolves for rabies and maintains statistics on its prevalence [1].

According to an national "Monitoring and Early Warning Report" published in May 2015, the State Veterinary Supervision Service is responsible for monitoring zoonotic diseases and pathogens; the report refers specifically to brucellosis and rabies [2].

No further evidence of Tajikistan conducting surveillance of zoonotic diseases was found on the official websites of the Ministry of Healthcare and Social Protection of the Population or the Ministry of Agriculture [3, 4].

1.2.3 International reporting of animal disease outbreaks

1.2.3a
Has the country submitted a report to OIE on the incidence of human cases of zoonotic disease for the last calendar year?
Yes = 1, No = 0

Current Year Score: 0

2019

OIE WAHIS database

1.2.4 Animal health workforce

1.2.4a
Number of veterinarians per 100,000 people
Input number

Current Year Score: -

No data available

OIE WAHIS database

1.2.4b
Number of veterinary para-professionals per 100,000 people
Input number

Current Year Score: -

No data available

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a
Does the national plan on zoonotic disease or other legislation, regulations, or plans include mechanisms for working with the private sector in controlling or responding to zoonoses?
Yes = 1, No = 0
There is no evidence of any mechanisms for working with the private sector in controlling or responding to zoonoses in Tajikistan.

The 2010 Law on Veterinary Medicine outlines the rights and responsibilities of livestock owners in the event of a zoonotic episode, but does not outline a structured mechanism of cooperation between the state and the private sector [1].

There is no reference to any mechanisms for working with the private sector in controlling or responding to zoonoses on either of the websites of the Ministry of Healthcare and Social Protection of the Population or the Ministry of Agriculture [2, 3].


1.3 BIOSECURITY

1.3.1 Whole-of-government biosecurity systems

1.3.1a

Does the country have in place a record, updated within the past five years, of the facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of those facilities?
Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tajikistan has in place a record, updated within the past five years, of the facilities in which especially dangerous pathogens and toxins are stored or processed. The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. Page 24 of the JEE recommends as a priority action the creation of a centralized inventory of dangerous pathogens and toxins and to conduct monitoring activities of designated facilities. The JEE also notes (page 22) that “there is a lack of records and protocols for biosafety and biosecurity issues” [1]. No reference to a record of facilities that store dangerous pathogens or toxins was identified, nor was there evidence that any such record had been updated in the past five years on the websites of the Ministry of Defense, the Ministry of Health, or the Ministry of Agriculture [2, 3, 4]. The Biological Weapons Convention’s official website shows that Tajikistan has not submitted a Confidence-Building Measures report in any of the previous five years [5]. There is no further information in the database of legislation on biological weapons maintained by the Verification Research, Training and Information Centre (VERTIC). [6]

1.3.1b

Does the country have in place legislation and/or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems, and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tajikistan has biosecurity legislation or regulations that address requirements such as physical containment, operation practices, failure reporting systems, or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. There is no evidence of any such legislation or regulations on the websites of the Ministry of Health and Social Protection of the Population, the Ministry of Agriculture or the Ministry of Defense, or in the database of legislation on biological weapons maintained by the Verification Research, Training and Information Centre (VERTIC) [1, 2, 3, 4]. Project 53, a European Union programme designed to promote greater awareness of biosafety and biosecurity in Central Asian countries, was concluded in December 2019, with its findings published at the same time [5]. Project 53’s Work Package 1 (WP1) was set up to facilitate national implementation of international instruments on biosafety and biosecurity. According to Project 53’s findings, “considerable domestic legislation will need to be amended or adopted to ensure full and effective implementation of the requisite international instruments” [5]. Despite its name, Tajikistan’s 2005 Law on Biological Security (also translateable as Law on Biological Safety) has nothing to do with security at facilities storing or handling dangerous pathogens or toxins, but instead relates to genetically modified organisms [6]. Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the "Confidence Building Measure Return" reporting mechanism since 2011 [7].

1.3.1c

Is there an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of an established agency responsible for enforcing biosecurity regulations. There is no evidence that Tajikistan has biosecurity legislation or regulations that address requirements such as physical containment, operation practices, failure reporting systems and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed, including on the official websites of the Ministry of Healthcare and Social Protection of the Population, the Ministry of Agriculture, the Ministry of Defense, and the database of legislation maintained by the Verification Research, Training and Information Centre (VERTIC) [1, 2, 3, 4].

In August 2018, Tajikistan's Head of Licensing and Control Sector of Nuclear and Radiation Safety, Supervisor of the Working Group for Legislation, A. Sufiev, published a report entitled "Harmonization of the legislation of the Republic of Tajikistan within the framework of P 53 Project", which describes how the government of Tajikistan "created a working group for the development and harmonization of normative-legal acts" in accordance with international standards, comprising of "representatives from all stakeholder ministries and state entities". [5] However, there is no evidence that this project has resulted in concrete steps to introduce the normative-legal acts that it outlines as necessary.

Tajikistan's Joint External Evaluation (JEE), completed in October 2019, does not refer to any specific established agency that is responsible for the enforcement of biosecurity legislation and regulations. Instead, the report recommends that measures be taken to "strengthen the multisectoral body that coordinates biosafety and biosecurity activities" [6].

However, there is a evidence state body with responsibility for overseeing biosecurity (though not for enforcing any regulations). According to article 220 of the 2017 Healthcare Code, the "authorized body of state sanitary-epidemiological surveillance" monitors "biological security and bioprotection" in microbiological, sanitary-chemical and biochemical laboratories [7]. The law does not define the terms "biological security" (also translatable as "biological safety") or "bioprotection".

The authorized body of state sanitary-epidemiological surveillance is the State Sanitary-Epidemiological Surveillance Service, which is under the Ministry of Healthcare and Social Protection of the Population [8]. However, the Ministry's website does not provide any information about this body's work [1].

Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the "Confidence Building Measure Return" reporting mechanism since 2011 [9].

1.3.1d

Is there public evidence that shows that the country has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that demonstrates the relevant authorities in Tajikistan has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities on the websites of the Ministry of Healthcare and Social Protection of the Population (HoHSPP), Ministry of Agriculture, or the Ministry of Defense. Similarly, there is no evidence that Tajikistan has taken action to consolidate its inventories of especially dangerous pathogens and toxins on the websites of Verification Research, Training and Information Centre (VERTIC) or the UN Biological Weapons Convention [1, 2, 3, 4, 5].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the JEE (page 22), Tajikistan does not have designated facilities for the collection of dangerous pathogens and toxins and, in addition, there is a lack of records and protocols for biosafety and biosecurity issues. The report recommends that a policy to keep dangerous pathogens and toxins should be developed and facilities be designated for the purpose [6].

Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the "Confidence Building Measure Return" reporting mechanism since 2011 [7].

1.3.1e

Is there public evidence of in-country capacity to conduct Polymerase Chain Reaction (PCR)–based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen?
Yes = 1, No = 0

Current Year Score: 1

There is public evidence that Tajikistan has capacity to conduct PCR-based diagnostic testing for anthrax, but no evidence of capacity to conduct PCR testing for ebola. In 2008, the Tajik State Medical University and Central Asian Foot-and-Mouth Disease Institute, both located in Dushanbe, published a paper entitled, "Antibiotic Sensitivity, Biotype and Genetic Characteristics of Bacillus Anthracis Isolated in Different Regions of Tajikistan". Although the details of the paper are not publicly available, the description of the paper clearly indicates that PCR-based diagnostic testing for anthrax is available in Tajikistan [1]. In 2020, the United Nations published a report titled "Response to the Impact of the COVID-19 Pandemic in Tajikistan", in which it noted that "there is limited testing capacity with only a few laboratories certified to conduct polymerase chain reaction (PCR) tests in the country". While the paper does confirm that Tajikistan is capable of conducting PCR tests for coronavirus, it does not state specifically that it is capable of conducting PCR tests for anthrax or ebola [2]. Searches of the official websites of Tajikistan’s Ministries of Health, Defence and Agriculture identified no reference to the country’s capacity to perform PCR-based diagnostic testing [3, 4, 5]. The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the JEE (page 3) Tajikistan does have laboratory testing for the detection of priority diseases. The report does not, however, confirm that Tajikistan has capacity to conduct PCR-based testing for anthrax or ebola [6].


1.3.2 Biosecurity training and practices

1.3.2a

Does the country require biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential?
Yes = 1, No = 0

Current Year Score: 0
There is no evidence that personnel working in facilities that house or work with dangerous pathogens, toxins, or biological materials with pandemic potential are required to undergo biosecurity training using a standardized approach.

According to the Tajikistan’s Joint External Evaluation (JEE), which was completed in October 2019, Tajikistan has conducted a comprehensive needs assessment for biosafety and biosecurity training, on the basis of which a National Training Center was established in 2014. [1] The JEE reports that this center has become a “training base” for both Tajikistan and neighboring countries, but it does not mention that a standardized curriculum is required for personnel at facilities that house or work with dangerous pathogens. Furthermore, the JEE reports that there is no train-the-trainer programme in laboratories, and it recommends that one be developed [1].

There is no evidence of relevant requirements on the websites of the Ministry of Health and Social Protection of the Population, the Ministry of Agriculture or the Ministry of Defense, or in the database of legislation on biological weapons maintained by the Verification Research, Training and Information Centre (VERTIC) [2, 3, 4, 5].

In February 2017 the European Union launched a 3-year project to raise the standards of biosecurity and biosafety training in Central Asian countries, including Tajikistan [6, 7]. As part of this project, in October 2017 in Dushanbe international experts trained local biosecurity/biosafety trainers, who then between June and October 2018 delivered 7 different training courses to a total of 68 specialists from across Tajikistan, including employees of surveillance and laboratory services, medical centres and research institutes [8, 9, 10, 11]. This training improved the ability of participants to organize biosafety and biosecurity systems in public health laboratories and to identify and control risks to biosafety and biosecurity in scientific and biological medical laboratories [8]. Specific topics covered included handling genetic material, experiment controls, solution stock management, PCR methods, laboratory technology, contamination control, use of equipment and practical skills in laboratory diagnostics [9, 10].

In August 2018, Tajikistan’s Head of Licensing and Control Sector of Nuclear and Radiation Safety, Supervisor of the Working Group for Legislation, A. Sufiev, published a report titled “Harmonization of the legislation of the Republic of Tajikistan within the framework of P 53 Project”, which included an overview of the country's Draft Law on Biological Safety and Biological Security. [12] According to this presentation, article 18 of the Law covers “Vocational training of managers and responsible persons for biological safety and biological protection”. There is no evidence that concrete steps have been taken to introduce the normative-legal acts outlined as necessary within the framework of P 53 Project. [12]

Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the “Confidence Building Measure Return” reporting mechanism since 2011 [13].

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

Do regulations or licensing conditions specify that security and other personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential are subject to the following checks: drug testing, background checks, and psychological or mental fitness checks?

Personnel are subject to all three of these checks = 3, Personnel are subject to two of these checks = 2, Personnel are subject to one of these checks = 1, Personnel are not subject to any of these checks = 0

Current Year Score: 0

There is no evidence that regulations or licensing conditions specify that personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential are subject to any kinds of checks. The official websites of Tajikistan’s Ministry of Health, Ministry of Defence, and Ministry of Agriculture do not refer to any regulations or licensing conditions of this nature [1, 2, 3] The European Union-led Project 53, a programme designed to promote greater awareness of biosafety and biosecurity in Central Asian countries, was concluded in December 2019, with its findings published at the same time [4]. The focus of the findings with regards to Tajikistan were gaps in current legislation and the passing of a Draft Law on Biological Safety and Biological Security. In August 2018, however, Tajikistan’s Head of Licensing and Control Sector of Nuclear and Radiation Safety, Supervisor of the Working Group for Legislation, A. Sufiev, published a report titled "Harmonization of the legislation of the Republic of Tajikistan within the framework of P 53 Project", which included an overview of the country's Draft Law on Biological Safety and Biological Security. [5] According to this presentation, article 13...
covers "Requirements for physical protection of biologically hazardous objects", which may include regulations regarding the vetting of individuals with access to sensitive locations. There is no evidence that concrete steps have been taken to introduce the normative-legal acts outlined as necessary within the framework of P 53 Project. Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the "Confidence Building Measure Return" reporting mechanism since 2011 [6]. There is no further information on the database of legislation on biological weapons maintained by the Verification Research, Training and Information Centre (VERTIC). [7]


1.3.4 Transportation security

1.3.4a

Does the country have publicly available information on national regulations on the safe and secure transport of infectious substances (specifically including Categories A and B)?

Yes = 1, No = 0

Current Year Score: 1

Tajikistan has publicly available information on regulations on the safe and secure transport of infectious substances, which include specific references to categories A and B.

Tajikistan is party to the European Agreement Concerning the International Carriage of Dangerous Goods by Road, which contains detailed regulations for road transport of numerous categories of dangerous goods, including infectious substances (categories A and B), and is publicly available online [1].

Furthermore, Tajikistan’s 2009 Road Transport Charter states that there is a special permit system for transporting dangerous cargo, which is explicitly defined as including "infectious substances containing pathogens" listed by the Ministry of Healthcare and Social Protection of the Population [2]. Similarly, article 31 of the 2017 Healthcare Code states that, on the basis of scientific research, the state organs of the sanitary-epidemiological service should issue regulations on the transport of "toxic, radioactive and biological substances" [3]. These regulations appear to be contained within the 2003 Rules for Transport of Dangerous Cargo by Motor Vehicle, but the full text of this document is not publicly accessible without payment [4].
Tajikistan is also subject to the Commonwealth of Independent States' (CIS) 1996 Rules for Rail Transport of Dangerous Cargo, which contains detailed regulations for the safe rail transport of infectious substances and is publicly available online [5].

The 2003 Law on Transport states that transport companies have to take necessary measures to protect the environment and natural resources from any harmful effects, but it does not provide any more details, or specifically mention infectious substances [6].


1.3.5 Cross-border transfer and end-user screening

1.3.5a

Is there legislation and/or regulations in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan has legislation or regulations in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, or pathogens with pandemic potential.

According to Tajikistan’s Law on Export Control (December 2014), there are regulations in place to oversee the cross-border transfer of especially dangerous biological substances” defined in the law as “biological weapons”. The same law does not, however, make reference to regulations regarding the end-user and whether or not the receiver is recognised as trustworthy [1]. The law states that in order to export dual-use goods (which is explicitly defined to include materials that could be used to make bacteriological/biological weapons) it is necessary to apply for permission. The application should include an explanation of the goods’ intended end use and a guarantee that they will not be used to make weapons of mass destruction or for other terrorist purposes. The law further states that Tajikistan’s government has the right to introduce additional requirements in order to verify the end use of the goods. [1]

The VERTIC database contains Tajikistan’s Laws on Biological Safety, Law on the State Border, and Law on Transport. [2, 3, 4] However, none of these laws refer to the need to check or otherwise certify who biological substances are being shipped to. Searches of the official websites of the Ministry of Health, Ministry of Defense, and Ministry of Agriculture found no
reference to legislation relating to end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential [5, 6, 7].

Tajikistan's 2019 Joint External Evaluation (JEE) refers to a regulations to oversee the cross-border transfer of biological hazards â€“ namely the 2010 Order on Approval of the National Border Management Strategy and the Plan for its Implementation but the details of this regulation are not publicly available and the JEE makes no reference to the regulation covering end-user screening [8].


1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

Does the country have in place national biosafety legislation and/or regulations?
Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan has in place biosafety legislation or regulations.

The 2009 Law on Labour Protection, which governs workplace health and safety standards, includes some relevant provisions, but does not explicitly address biosafety [1]. In particular, this law's fourth article states that employers have full responsibility for ensuring healthy and safe working conditions and that they must fully investigate any workplace accident or case of illness contracted at work, while articles 10, 12 and 13 protect the rights of people who work in dangerous conditions, or who contract an illness through their work, to compensation and medical care from their employers. Article 15 states that other laws and regulations should establish specific rules and procedures to protect workplace health and safety.

However, on the websites of the Ministry of Agriculture, the Ministry of Labour,Migration and Employment of the Population and the Ministry of Healthcare and Social Protection of the Population there is no evidence of any such specific legislation or regulations pertaining to work with dangerous biological substances [2, 3, 4]. Similarly, there is no evidence of
any such legislation or regulation in the database of legislation on biological weapons maintained by the Verification Research, Training and Information Centre (VERTIC) [5].

Article 24 of the 2003 Law on Ensuring the Sanitary-Epidemiological Safety of the Population (which included various provisions to protect people from infectious diseases) stated that work with biological substances, with biological and microbiological organisms and their toxins and with pathogens of infectious diseases is only permitted after it has been assessed that working conditions do not risk having a harmful effect on humans [6]. However, in May 2017 this law ceased to be in effect, as it was superceded by the Healthcare Code, which does not include any such provision [7].

Tajikistan's Joint External Evaluation (JEE), from October 2019, states that national legislation exists in the area of biosafety, and names the “2005 Law on Biosafety” [8]. No such law is existed in Tajikistan’s legislative database, but there is a 2005 law called the Law on Biological Safety (also translateable as Law on Biological Security). [9] Despite its name, this law has nothing to do with biosafety, but is instead related to genetically modified organisms [9].

Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the “Confidence Building Measure Return” reporting mechanism since 2011 [10].

The European Union-led Project 53, a programme designed to promote greater awareness of biosafety and biosecurity in Central Asian countries, was concluded in December 2019, with its findings published at the same time [11]. The focus of the findings with regards to Tajikistan were gaps in current legislation and the passing of a Draft Law on Biological Safety and Biological Security. In August 2018, however, Tajikistan’s Head of Licensing and Control Sector of Nuclear and Radiation Safety, Supervisor of the Working Group for Legislation, A. Sufiev, published a report entitled “Harmonization of the legislation of the Republic of Tajikistan within the framework of P 53 Project”, which included an overview of the country’s Draft Law on Biological Safety and Biological Security. [12] According to this report, once this draft law is passed, Tajikistan will have bridged the gap that currently exists with regards to the country’s national biosafety legislation.

1.4.1b

Is there an established agency responsible for the enforcement of biosafety legislation and regulations?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of an established agency that is responsible for the enforcement of biosafety legislation and regulations.

Tajikistan's Joint External Evaluation (JEE), which was completed in October 2019, outlines a series of recommendations for priority actions for biosafety and biosecurity (page 24), but does not mention a body responsible for the enforcement of biosafety legislation and regulations [1].

The websites of the Ministries of Health, Defense, and Agriculture contain no reference to an established agency that is responsible for the enforcement of biosafety regulatoin [2, 3, 4]. Similarly, there is no evidence of such an agency on the VERTIC database [5].

The European Union-led Project 53, a programme designed to promote greater awareness of biosafety and biosecurity in Central Asian countries, was concluded in December 2019 with its findings published at the same time [6]. The focus of the findings with regards to Tajikistan were gaps in current legislation and the passing of a Draft Law on Biological Safety and Biological Security. In August 2018, however, Tajikistan's Head of Licensing and Control Sector of Nuclear and Radiation Safety, Supervisor of the Working Group for Legislation, A. Sufiev, published a report entitled "Harmonization of the legislation of the Republic of Tajikistan within the framework of P 53 Project", which included an overview of the country's Draft Law on Biological Safety and Biological Security. Article 8 of the Draft Law concerns "Competence of the authorized state bodies for ensuring biological safety and biological security". [7] There is no evidence that concrete steps have been taken to introduce the normative-legal acts outlined as necessary within the framework of P 53 Project.

According to article 220 of the Healthcare Code (a wide-ranging law regulating diverse facets of healthcare, which was adopted in 2017), the "authorized body of state sanitary-epidemiological surveillance" monitors "biological security and bioprotection" in microbiological, sanitary-chemical and biochemical laboratories [8]. The law does not define the terms "biological security" (also translatable as "biological safety") or "bioprotection".

The authorized body of state sanitary-epidemiological surveillance is the State Sanitary-Epidemiological Surveillance Service, which is under the Ministry of Healthcare and Social Protection of the Population [9]. However, the Ministry's website does not provide any information about this body's work [2].

Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the "Confidence Building Measure Return" reporting mechanism since 2011 [10].
1.4.2 Biosafety training and practices

1.4.2a Does the country require biosafety training, using a standardized, required approach, such as through a common curriculum or a trainthe-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that personnel working in facilities housing and working with especially dangerous pathogens, toxins, or biological materials with pandemic potential are required to undergo standardized biosafety training.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. The JEE (page 22) recommended that "a training-of-trainers and a biosafety and biosecurity training should be conducted in all laboratories of all sectors", thus implying that a standardized programme does not yet exist in Tajikistan [1]. The JEE notes explicitly that "varying levels of biosafety" are found in different parts of Tajikistan, including facilities with Biosafety level (BSL) 2 and 3 facilities at some laboratories, and others with insufficient safety practices [1]. There is no indication that Tajikistan has adopted a biosafety protocol from the evaluation.

Searches of the official websites of the Ministries of Health, Defence, and Agriculture found no reference to legislation specific to biosafety training [2, 3, 4]. Similarly, the VERTIC database only includes a reference to the Law on Biosafety mentioned above [5].
The EU-led Project 53, a programme designed to promote greater awareness of bio-safety and bio-security in Central Asian countries, was concluded in December 2019 with its findings published at the same time [6]. The focus of the findings with regards to Tajikistan were gaps in current legislation and the passing of a Draft Law on Biological Safety and Biological Security. In August 2018, however, Tajikistan’s Head of Licensing and Control Sector of Nuclear and Radiation Safety, Supervisor of the Working Group for Legislation, A. Sufiev, published a report entitled “Harmonization of the legislation of the Republic of Tajikistan within the framework of P 53 Project” [7] which included an overview of the country’s Draft Law on Biological Safety and Biological Security. Article 18 of the Draft Law is concerned with “Vocational training of managers and responsible persons for biological safety and biological protection” but the details of the draft legislation are not yet publicly available [7].

Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the “Confidence Building Measure Return” reporting mechanism since 2011 [8].


1.5 DUAL-USE RESEARCH AND CULTURE OF RESPONSIBLE SCIENCE

1.5.1 Oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research

1.5.1a

Is there publicly available evidence that the country has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential, and/or other dual-use research. Tajikistan completed a Joint External Evaluation (JEE) in October 2019 and the report recommends - on page 23 - that "biosecurity and
dual use research of concern must be included into the new law”; this is the Draft Law on Biological Safety and Biological Security, which is under development [1]. There is no evidence of such an assessment on the websites of the Ministry of Healthcare and Social Protection of the Population, the Ministry of Defence or the Ministry of Agriculture [2, 3, 4]. Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the “Confidence Building Measure Return” reporting mechanism since 2011 [5]. The EU-led Project 53, a programme designed to promote greater awareness of bio-safety and bio-security in Central Asian countries, was concluded in December 2019 with its findings published at the same time [6]. The focus of the findings with regards to Tajikistan were gaps in current legislation and the passing of a Draft Law on Biological Safety and Biological Security. There is no evidence that Tajikistan has carried out an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research [7]. There is no further evidence in the database of legislation on biological weapons maintained by the Verification Research, Training and Information Centre (VERTIC). [8]


**1.5.1b**

Is there legislation and/or regulation requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan has implemented legislation or regulations requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential, and/or other dual-use research. The Joint External Evaluation (JEE) completed by Tajikistan in October 2019 noted - on page 23 - that "biosecurity and dual use research of concern must be included into the new law"; this is the Draft Law on Biological Safety and Biological Security, which is under development [1]. There is no evidence of such legislation or regulations on the websites of the Ministry of Healthcare and Social Protection of the Population, the Ministry of Defence or the Ministry of Agriculture [2, 3, 4]. Although party to the
Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the "Confidence Building Measure Return" reporting mechanism since 2011 [5]. The EU-led Project 53, a programme designed to promote greater awareness of bio-safety and bio-security in Central Asian countries, was concluded in December 2019 with its findings published at the same time [6]. The focus of the findings with regards to Tajikistan were gaps in current legislation and the passing of a Draft Law on Biological Safety and Biological Security. In August 2018, however, Tajikistan’s Head of Licensing and Control Sector of Nuclear and Radiation Safety, Supervisor of the Working Group for Legislation, A. Sufiev, published a report entitled "Harmonization of the legislation of the Republic of Tajikistan within the framework of P 53 Project" [7] which included an overview of the country’s Draft Law on Biological Safety and Biological Security. Articles 12 and 13 are concerned with "State registration of biological agents and hazardous objects" and "Requirements for physical protection of biologically hazardous objects" but the details of these articles have not yet been published and, as such, it is not possible to determine whether or not these articles include regulations regarding oversight of research with especially dangerous biological substances [7]. According to the 2004 Law on Licensing Certain Types of Activity (which includes provisions related to numerous diverse activities that require a state-issued licence, from railway maintenance to currency exchange), the 2007 Regulations on the Specifics of Licensing Certain Types of Activity (which expands on the 2004 law) and the 2004 Order of Procedural Formalities, Registration and Issue of Sanitary-Epidemiological Certificates (which details the procedure for sanitary-epidemiological approval of buildings and businesses), enterprises, facilities and organizations wishing to conduct any work with infectious agents must apply for a permit or a licence from the State Sanitary-Epidemiological Surveillance Service of the Ministry of Healthcare and Social Protection of the Population [8, 9, 10]. The 2004 law lists the types of activities that require licences and permits, while the other two documents provide details on the technicalities of the licensing process. Permits and licences are different documents with different administrative requirements, though the exact differences are somewhat arcane [11, 12]. Permits are required for "use of chemical and biological substances, biological and microbiological organisms and toxins", while licences are required for "use of infectious pathogens". In order to apply for a licence, a facility must submit its incorporation documents, certificates of state registration as a legal entity, certificate of registration with the tax authority and information about the qualifications of employees [6]. The criteria for obtaining a permit are only accessible on a website that charges a subscription fee. There is no further evidence in the database of legislation on biological weapons maintained by the Verification Research, Training and Information Centre (VERTIC). [13]

1.5.1c
Is there an agency responsible for oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of an agency specifically responsible for oversight of dual-use research. However, there is an agency responsible for oversight of research with dangerous pathogens: the State Sanitary-Epidemiological Surveillance Service, which is under the Ministry of Healthcare and Social Protection of the Population. There is no evidence of an agency specifically responsible for oversight of dual-use research on the websites of the Ministry of Healthcare and Social Protection of the Population, the Ministry of Defence or the Ministry of Agriculture [1, 2, 3]. Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the "Confidence Building Measure Return" reporting mechanism since 2011 [4]. According to the 2004 Law on Licensing Certain Types of Activity (which includes provisions related to numerous diverse activities that require a state-issued licence, from railway maintenance to currency exchange), the 2007 Regulations on the Specifics of Licensing Certain Types of Activity (which expands on the 2004 law) and the 2004 Order of Procedural Formalities, Registration and Issue of Sanitary-Epidemiological Certificates (which details the procedure for sanitary-epidemiological approval of buildings and businesses), the State Sanitary-Epidemiological Surveillance Service of the Ministry of Healthcare and Social Protection of the Population issues permits and licences to conduct dual-use research with dangerous pathogens [5, 6, 7]. Permits and licences are different documents with different administrative requirements, though the exact differences are somewhat arcane [8, 9]. Permits are required for "use of chemical and biological substances, biological and microbiological organisms and toxins", while licences are required for "use of infectious pathogens" [7, 5]. In order to apply for a licence, a facility must submit its incorporation documents, certificates of state registration as a legal entity, certificate of registration with the tax authority and information about the qualifications of employees [6]. The criteria for obtaining a permit are only accessible on a website that charges a subscription fee [7]. Tajikistan completed a Joint External Evaluation (JEE) in October 2019. Although the report does include a number of agencies that are involved in the process of regulating dangerous pathogens, namely the Biological Safety Institute and various reference laboratories in the country, there is no mention of a specific agency that is responsible for oversight of research with especially dangerous pathogens, toxins etc. [10]. There is no further evidence in the database of
1.5.2 Screening guidance for providers of genetic material

1.5.2a

Is there legislation and/or regulation requiring the screening of synthesized DNA (deoxyribonucleic acid) against lists of known pathogens and toxins before it is sold?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of any legislation, regulation, policy, or other guidance requiring the screening of synthesized DNA before it is sold. The 2005 Law on Biological Security (also translatable as Law on Biological Safety) is Tajikistan’s main piece of legislation on genetically modified organisms (GMOs). It states that before any GMO â€“ or product derived therefrom â€“ can be sold, its prospective seller must obtain a permit [1]. The application for said permit must contain an assessment of risks posed by the product to human health and the environment. The Law on Biological Security defines GMOs to include microorganisms, but makes no mention of DNA. The 2010 Law on Veterinary Medicine and the 2012 Law on Food Safety both have clauses requiring screening of GMOs before sale, but these only relate to their use in food products for animals.
and humans respectively [2, 3]. There is no evidence of other relevant regulations on the websites of the Ministry of Healthcare and Social Protection of the Population, Ministry of Agriculture, Ministry of Defence or Ministry of Transport [4, 5, 6, 7]. Although party to the Biological Weapons Convention, Tajikistan has not submitted any reports to the United Nations Office in Geneva for the "Confidence Building Measure Return" reporting mechanism since 2011 [8]. The EU-led Project 53, a programme designed to promote greater awareness of bio-safety and bio-security in Central Asian countries, was concluded in December 2019 with its findings published at the same time [9]. The focus of the findings with regards to Tajikistan were gaps in current legislation and the passing of a Draft Law on Biological Safety and Biological Security [9]. No evidence that concrete steps have been taken to introduce the normative-legal acts outlined as necessary within the framework of P 53 Project was found on the website of the Ministry of Healthcare and Social Protection of the Population [4]. Tajikistan completed a Joint External Evaluation (JEE) in October 2019. The report does not make any reference to legislation and/or regulation requiring the screening of synthesized DNA against a list of known pathogens and toxins before it is sold [10]. There is no further evidence in the database of legislation on biological weapons maintained by the Verification Research, Training and Information Centre (VERTIC). [11]


1.6 IMMUNIZATION

1.6.1 Vaccination rates

1.6.1a

Immunization rate (measles/ MCV2)

Immunization rate (measles/ MCV2), 95% or greater = 2, 80-94.9% = 1, Less than 80%, or no data = 0

Current Year Score: 2
2019
World Health Organization

1.6.1b
Are official foot-and-mouth disease (FMD) vaccination figures for livestock publicly available through the OIE database?
Yes = 1 , No = 0

Current Year Score: 0

2020

OIE WAHIS database

Category 2: Early detection and reporting for epidemics of potential international concern

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a
Does the national laboratory system have the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests?
Evidence they can conduct 5 of the 10 core tests and these tests are named = 2, Evidence they can conduct 5 of the 10 core tests and the tests are not named = 1, No evidence they can conduct 5 of the 10 core tests = 0

Current Year Score: 0

There is only clear evidence that Tajikistan's national laboratory system has the capacity to conduct diagnostic tests for 2 of the 10 core tests defined by the World Health Organization (WHO).

According to a 2015 academic paper titled "External Quality Assessment of Sputum Smear Microscopy in Tuberculosis Laboratories in Sughd, Tajikistan", Tajikistan's laboratory system has the capacity to conduct microscopy for tuberculosis [1]. According to a 2016 academic paper titled "HIV and STIs among MSM in Tajikistan: Laboratory-Confirmed Diagnoses and Self-Reported Testing Behaviors", there is a serology laboratory for HIV testing at the Dushanbe City AIDS Centre [2]. The WHO's 2013 assessment of Tajikistan's health-system crisis preparedness says that the laboratory system has polymerase chain reaction (PCR) diagnostic capacities, but it does not specify for which diseases [3]. Tajikistan's laboratory system also has the capacity to test for salmonella and polio, but it is not clear whether this is with the types of testing specified by the WHO's list of core tests [4].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019 [5]. According to the JEE (page 28), Tajikistan has a three-tiered system which consists of laboratories located at district, regional and national levels, which cover...
services for three networks: the network of sanitary and epidemiological laboratories (SEL) and two separate networks of HIV and TB laboratories. The JEE also notes that Tajikistan has three reference laboratories for TB, HIV, and malaria as well as a laboratory for influenza. It states that more than 10 diseases are prioritized in the national list of high threat pathogens but that there is no capacity to conduct polio diagnostics which is done by a laboratory in Russia. Page 29 of the JEE concludes that the national laboratory system in Tajikistan can cover diagnostics of 10 priority diseases, although four were not specified during the JEE mission, and the JEE document does not detail which diseases these are or the types of test used [5]. The JEE also establishes definition of four specific priority diseases as an objective, showing that the country had not done so in October 2019 [5]. No further information on the specific diseases or types of test available in Tajikistan, or that the country has publicly defined four country-specific tests, was found on the website of the Ministry of Healthcare and Social Protection of the Population [6].


2.1.1b
Is there a national plan, strategy or similar document for conducting testing during a public health emergency, which includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing?
Yes, there is evidence of a plan, and it includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing = 2, Yes, there is evidence of a plan, but there is insufficient evidence that it includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing = 1, No evidence of a plan = 0

Current Year Score: 0

There is no evidence that Tajikistan has a national plan for conducting testing during a public health emergency.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the JEE (page 40), Tajikistan has a national plan for emergency preparedness (updated every five years) [1]. However, the JEE does not name this document, nor does it state whether the plan covers or is specifically limited to public health emergencies, or for conducting testing during a public health emergency [1]. The JEE does recommend, however, that policies and plans should be developed for the potential use of all medical care facilities, their personnel and equipment, as national resources for surge capacity [1]. This indicates that the national plan for emergency preparedness does not take into consideration the
potential need to scale capacity. The JEE does not refer to either the testing of novel pathogens, nor the requirement to define goals for testing [1].

Tajikistan’s Ministry of Health website has published several documents outlining strategies to limit the impact of the COVID-19 pandemic. The Environment and Social Management Framework (ESMF) is part of a broader national response and includes an Infection Control and Waste Management Plan (ICWMP). The ESMF states that “given the potential lack of testing availability in some areas of Tajikistan, ICWMP protocols for individual healthcare facilities will be implemented on the assumption that the COVID-19 pathogen is present and that all healthcare workers and patients are potential carriers” [2]. There is no evidence of a national plan or strategy to conduct testing for COVID-19 on the website of the Ministry of Health and Social Protection of the Population [3].

There is no evidence of other national plans or strategies for conducting testing of any other pathogens during a public health emergency on the official websites of Tajikistan’s ministries of health, defence, or Agriculture [3, 4, 5].


2.1.2 Laboratory quality systems

2.1.2a

Is there a national laboratory that serves as a reference facility which is accredited (e.g., International Organization for Standardization [ISO] 15189:2003, U.S. Clinical Laboratory Improvement Amendments [CLIA])?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan operates a national laboratory that serves as a reference facility that is accredited. There is no evidence that the National Reference Laboratory (Tajikistan’s main national reference facility), or any laboratory under its jurisdiction, has any form of accreditation. The website of the Ministry of Healthcare and Social Protection of the Population (MoHSPP) states that the National Reference Laboratory is fully equipped and able to conduct accurate diagnostics that meet international standards, but the webpage describing the National Reference Laboratory does not specifically refer to accreditation. [1] There is no evidence of the National Reference Laboratory having accreditation elsewhere on the MoHSPP website, or on the website of the Ministry of Agriculture. [2, 3] Tajikistan’s Joint External Evaluation (JEE), which was conducted in October 2019, does not mention whether the NRL has accreditation, but it does note (on page 23) that the National Center for Food Security Diagnosis (NCFSD) is accredited according to ISO 17025 [1]. However, there is no evidence that the NCFSD serves as a reference facility. Furthermore, the JEE recommends that
Tajikistan make efforts to ensure that more laboratories in the country receive accreditation [1].


2.1.2b

Is there a national laboratory that serves as a reference facility which is subject to external quality assurance review?

Yes = 1, No = 0

Current Year Score: 1

There is evidence that Tajikistan operates a national laboratory that serves as a reference facility which is subject to external quality review.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the JEE (page 29), reference laboratories for HIV, TB and malaria and a laboratory for influenza participate in EQA programmes together with food safety laboratories. In addition, the TB laboratory was known to be organising a national EQA programme in October 2019 [1]. The JEE does also note, however, that there is a lack of national EQA programmes for priority diseases, except HIV and TB.

According to the official website of Tajikistan's National Reference Laboratory (NRL), the organisation is accredited, having completed an external quality assessment [2]. However, the details of the accreditation are not provided, and the NRL website does not provide any evidence that the laboratory is subject to regular EQA [2, 3].

The website of the Ministry of Healthcare and Social Protection of the Population states that the National Reference Laboratory is subject to external quality review and that it has an external quality assessment certificate [3].


2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a Is there a nationwide specimen transport system?
Yes = 1 , No = 0

Current Year Score: 0

Tajikistan has a specimen transport system, but its coverage is limited.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the JEE (page 30), there are national guidelines for the transport of all types of laboratory samples but the transportation system needs to be strengthened. The JEE notes that in more than 90% of cases, patients travel from remote areas to bring samples to healthcare institutions. The JEE also recommends that sustainable funding for a transport system should be ensured and that other means of transport beyond vehicles should be considered and they should include appropriate packaging (no examples of other means are provided) [1].

A 2018 World Health Organization (WHO) report on specimen transport in Tajikistan and Kyrgyzstan notes that in both countries specimen transport systems exist between laboratories, but that they do not provide full coverage, meaning that in many cases patients have to deliver samples themselves [2]. The report further notes a lack of guidelines for specimen transportation and reports that not all laboratories check specimen quality and temperature upon receipt.

The WHO’s 2013 Assessment of Health System Crisis Preparedness in Tajikistan reports a shortage of transportation kits that meet international requirements for sending samples to reference laboratories [3].

There is no evidence that the coverage has improved since the 2018 WHO report on the websites of the Ministry of Healthcare and Social Protection of the Population or the Ministry of Agriculture [4, 5].

2.2.2 Laboratory cooperation and coordination

2.2.2a
Is there a plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak?
Yes = 2, Yes, but there is evidence of gaps in implementation = 1, No = 0

Current Year Score: 0

There is no evidence of a plan to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak. No evidence of such a plan is available on the official websites of Tajikistan's ministries of health, defence, or Agriculture [1, 2, 3]. Tajikistan's JEE, completed in October 2019, does not refer to any plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale up testing during an outbreak. In the Emergency Response Coordination section of the JEE (page 42), it was noted that the Republic of Tajikistan has a comprehensive action plan including an emergency alert system and a list of operating procedures for emergency response at national, regional and local levels. The report does not, however, refer specifically to a plan to rapidly authorise laboratories to increase testing capacity [4]. Tajikistan's Covid-19 Emergency Response plan does not refer explicitly to a plan to rapidly authorize or license laboratories to supplement capacity of the national public health system to scale-up testing [5]. Priority Area 6 of Tajikistan's COVID-19 Country Preparedness and Response Plan, page 11, includes directions to support the national laboratory system, but not include measures to rapidly authorise or license laboratories. [6]


2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a
Is there evidence that the country is conducting ongoing event-based surveillance and analysis for infectious disease?
Yes, there is evidence of ongoing event-based surveillance and evidence that the data is being analyzed on a daily basis = 2, Yes, there is evidence of ongoing event-based surveillance, but no evidence that the data are being analyzed on a daily basis = 1, No = 0
There is no evidence of ongoing event-based surveillance conducted by Tajikistan's government.

There is no evidence of such a event-based surveillance-focused unit on the websites of the Ministry of Healthcare and Social Protection of the Population, the Ministry of Agriculture or the Governmental Committee on Emergency Situations [1, 2, 3]. According to the Governmental Committee on Emergency Situations' official website, Tajikistan is in the process of building an Emergency Crisis Management Centre which will "increase opportunities for risk assessment and rapid response to emergencies", due to be completed in February 2022 [4]. However, there is no evidence that the centre will conduct ongoing event-based surveillance and analysis for infectious diseases [4].

The Governmental Committee on Emergency Situations and Civil Defence is the primary body of executive power responsible for disaster prevention and response actions [5]. Within the Committee there is a Crisis Management Centre, which maintains 24/7 contact with all of Tajikistan's oblasts (top-level administrative units) [5, 6].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 3), while Tajikistan does have surveillance systems in place, there is a need to systematically introduce event-based surveillance (EBS) at all administrative levels [7].


2.3.1b
Is there publicly available evidence that the country reported a potential public health emergency of international concern (PHEIC) to the WHO within the last two years?
Yes = 1 , No = 0

Current Year Score: 0
There is no publicly available evidence that the country has reported a potential public health emergency of international concern to the World Health Organization (WHO) within the last two years including Covid-19. There is no evidence of such reporting within the past year on the website of the WHO, including the organisation's Disease Outbreak News page, or that of Tajikistan's Ministry of Healthcare and Social Protection of the Population [1, 2]. The only record in the WHO's archive of Tajikistan reporting a potential public health emergency of international concern is from 2010, when a polio outbreak was reported [3, 4]. The WHO declared Tajikistan polio-free in January 2012 [5].


2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a Does the government operate an electronic reporting surveillance system at both the national and the sub-national level?
Yes = 1 , No = 0

Current Year Score: 1

Tajikistan has an electronic reporting surveillance system at both the national and sub-national level.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 3), Tajikistan does use electronic tools as part of its surveillance system but it was noted that there is a need to "strengthen electronic reporting, ensuring functionality at district level, interoperability with both public and private Library Information Systems (LIS) and coverage of all surveillance needs." The JEE also noted that the District Health Information System (version 2) (DHIS2) functions well at a national level but it could be improved at district level to overcome challenges related to Internet connection problems [1].

According to article 113 of the 2017 Healthcare Code (which covers diverse aspects of healthcare), all cases of infectious diseases must be registered with the State Sanitary-Epidemiological Service [2].

In 2013 the World Health Organization reported that there was only an electronic reporting system at the central level and that reports of notifiable diseases were submitted by telephone from the local level to the rayon (mid-level administrative unit), from the rayon to the oblast (top-level administrative unit) and then from the oblast to the central level, where they were entered electronically [3].

Furthermore, since January 2015 Tajikistan has used the District Health Information System (version 2), an open-source, web-based health management information platform that allows the submission of data on disease outbreaks [4, 5].
2.3.2b

Does the electronic reporting surveillance system collect ongoing or real-time laboratory data?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan's electronic reporting surveillance system collects ongoing/real time laboratory data.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. The JEE does not refer to whether or not the electronic reporting surveillance system in Tajikistan collects ongoing or real-time laboratory data, instead noting that case reporting is conducted on a weekly, monthly, quarterly, and annual basis. The report states (page 31) that Tajikistan's electronic reporting system and database, DHIS2, is "only used for aggregate reporting" and that "case-based reporting is still paper-based and data are entered on Excel sheets at national level for most diseases" [1].

There is no evidence of this on the websites of the Ministry of Healthcare and Social Protection of the Population or the District Health Information System [2, 3].

Tajikistan uses the District Health Information System (version 2), an open-source, web-based health management information platform that allows the submission of data on disease outbreaks [3, 4].

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

Electronic health records are commonly in use = 2, Electronic health records are not commonly in use, but there is evidence they are used = 1, No evidence electronic health records are in use = 0
Electronic health records are not commonly in use. According to the World Health Organization’s 2015 Atlas of eHealth Country Profiles, Tajikistan has a national electronic health records system, but as of 2015 electronic health records were used in less than a quarter of primary, secondary and tertiary healthcare facilities [1]. Since 2007 the Aga Khan Development Network and the French Medical Institute for Mothers and Children have been running a project to bring the benefits of "e-health" to remote rural communities in Tajikistan [2, 3, 4]. However, the associated websites do not mention electronic health records, instead focusing on teleconsultations and e-learning. There is no evidence on the website of the Ministry of Healthcare and Social Protection of the Population to suggest that electronic health records have become more widely used since 2015 [5].


2.4.1b

Does the national public health system have access to electronic health records of individuals in their country?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan’s public health system has access to electronic health records of individuals.

Moreover, there is no evidence that electronic health records are commonly in use.

According to the World Health Organization’s 2015 Atlas of eHealth Country Profiles, Tajikistan has a national electronic health records system, but as of 2015 electronic health records were used in less than a quarter of primary, secondary and tertiary healthcare facilities [2].

Since 2007 the Aga Khan Development Network and the French Medical Institute for Mothers and Children have been running a project to bring the benefits of "e-health" to remote rural communities in Tajikistan [3, 4, 5]. However, the associated websites do not mention electronic health records, instead focusing on teleconsultations and e-learning.

There is no evidence on the website of the Ministry of Healthcare and Social Protection of the Population to suggest that electronic health records have become more widely used since 2015 [6].
The Republic of Tajikistan completed a Joint External Evaluation in October 2019. The report does not refer to the country's health system having access to electronic health records of its citizens [7].


2.4.1c
Are there data standards to ensure data is comparable (e.g., ISO standards)?
Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tajikistan's public health records use data standards to ensure data is comparable.

There is no evidence of this on the Ministry of Healthcare and Social Protection of the Population [1].

According to the World Health Organization's 2015 Atlas of eHealth Country Profiles, Tajikistan has a national electronic health records system, but as of 2015 electronic health records were used in less than a quarter of primary, secondary and tertiary healthcare facilities [2].

Since 2007 the Aga Khan Development Network and the French Medical Institute for Mothers and Children have been running a project to bring the benefits of "e-health" to remote rural communities in Tajikistan [3, 4, 5]. However, the associated websites do not mention electronic health records, instead focusing on teleconsultations and e-learning.

There is no evidence on the website of the Ministry of Healthcare and Social Protection of the Population to suggest that electronic health records have become more widely used since 2015 [6].

The Republic of Tajikistan completed a Joint External Evaluation in October 2019. The report does not refer to the country's health system having access to electronic health records of its citizens [7].

2.4.2 Data integration between human, animal, and environmental health sectors

2.4.2a

Is there evidence of established mechanisms at the relevant ministries responsible for animal, human, and wildlife surveillance to share data (e.g., through mosquito surveillance, brucellosis surveillance)?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of established mechanisms at the relevant ministries responsible for animal, human and wildlife surveillance to share data.

The institution responsible for animal health is the State Veterinary Surveillance Service (SVSS), which is within the Ministry of Agriculture [1, 2]. The institution responsible for human health is the Ministry of Healthcare and Social Protection of the Population [2, 3].

Article 34 of the 2010 Law on Veterinary Medicine states that the authorities responsible for animal and human health and those responsible for emergency situations and civil defence should be in continuous contact, organizing and conducting activities to protect the population from zoonotic diseases [4]. However, this law does not include any details on a mechanism or protocol, and there is no evidence of any established mechanism on the websites of the Ministry of Healthcare and Social Protection of the Population, the Ministry of Agriculture or the Committee on Environmental Protection [5, 6].

The Republic of Tajikistan completed a Joint External Evaluation in October 2019. The report did not refer to established mechanisms to share data on surveillance but did recommend that measures be taken to increase capacity for analysis of surveillance data by conducting training in field epidemiology.


2.4.3 Transparency of surveillance data

2.4.3a

*Does the country make de-identified health surveillance data on infectious diseases publicly available via reports (or other format) on government websites (such as the Ministry of Health, Ministry of Agriculture, or similar)?*

Yes = 1, No = 0

**Current Year Score: 0**

Tajikistan does not make de-identified health surveillance data on disease outbreaks publicly available via reports on government websites.

The website of the Ministry of Economic Development and Trade has a page containing monthly reports from the Early Warning and Monitoring System [1]. These reports contain statistics on the numbers of recorded cases of ten infectious diseases, including brucellosis, anthrax, tuberculosis and influenza. However, the most recent report on this webpage is from August 2014 [1]. The website of the United Nations office in Tajikistan hosts more recent reports in the same format, up to and including September 2017 [2]. The official website of Tajikistan’s Centre of Medical Statistics and Information is not currently available [3]. According to the WHO Coronavirus Disease (COVID-19) Dashboard, in Tajikistan there have been 13,714 confirmed cases of COVID-19 with 91 deaths [4]. According to the UN’s "COVID"19 Tajikistan Situation Report #19, 22 December 2020", these statistics come from Tajikistan’s Ministry of Healthcare and Social Protection [5].

Neither the Ministry of Agriculture nor the Ministry of Healthcare and Social Protection of the Population posts news updates about outbreaks on its website [6, 7].

However, there is evidence of the authorities providing the media with information about anthrax outbreaks in August 2018 [8].

The Republic of Tajikistan completed a Joint External Evaluation in October 2019. The report did not mention whether or not Tajikistan makes de-identified health surveillance data on disease outbreaks publicly available via reports [9].
2.4.3b

Does the country make de-identified COVID-19 surveillance data (including details such as daily case count, mortality rate, etc) available via daily reports (or other formats) on government websites (such as the Ministry of Health, or similar)?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan makes de-identified COVID-19 surveillance data available on government websites. Tajikistan has made de-identified COVID-19 surveillance data publicly available via the WHO and the organisation’s Coronavirus Disease (COVID-19) Dashboard [1]. There is no evidence, however, of daily reports being made available on government websites, including those of the Ministry of Healthcare and Social Protection and the National Reference Laboratory [2, 3].

The official website of Tajikistan’s Centre of Medical Statistics and Information is not currently available [4].

2.4.4 Ethical considerations during surveillance

2.4.4a

Is there legislation and/or regulations that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities?

Yes = 1, No = 0

Current Year Score: 1

There is evidence of legislation that safeguards the confidentiality of identifiable information for individuals.

In August 2018 a Law on Protecting Personal Data was adopted, which states specifically, in Article 17, that "information pertaining to the physiological and biological characteristics of a person, on the basis of which it is possible to establish the subject's identity (biometric personal data), and which is used by the operator to establish the identity of the subject of personal data, can be processed only with the written consent of the subject of the personal data" [1]. As outlined in the second part of Article 17, it is only in exceptional circumstances, namely in cases that involve criminal prosecution and national security, when physiological and/or biological data may be used without the subject's written consent.

There is no further evidence of other relevant laws, regulations or guidelines on the website of the Ministry of Healthcare and Social Protection of the Population [2].

The Republic of Tajikistan completed a Joint External Evaluation in October 2019. The report does not refer to legislation and/or regulations that safeguard confidentiality of identifiable health information of individuals [3].


2.4.4b

Is there legislation and/or regulations safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, include mention of protections from cyber attacks (e.g., ransomware)?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of laws, regulations or guidelines that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, include mention of protections from cyber attacks (e.g., ransomware). Article 23 of Tajikistan’s 1994 constitution forbids the collection, storage, use or distribution of information about a person’s personal life without his or her permission [1]. The 2002 Law on Information Protection focuses on preventing unauthorized theft, destruction, copying and editing of information. [2] In August 2018 a Law on Protecting Personal Data was adopted, which states specifically, in article 17, that "information pertaining to the physiological and biological characteristics of a person, on the basis of which it is possible to establish the subject’s identity (biometric personal data), and which is used by the operator to establish the identity of the subject of personal data, can be processed only with
the written consent of the subject of the personal data” [3]. The law does not specifically refer to cybersecurity, but article 24 lists “technical measures” as one of several groups of measures to be taken in order to protect personal data [3]. There is no evidence of other relevant laws, regulations or guidelines on the website of the Ministry of Healthcare and Social Protection of the Population [4]. However, the Law on Information Protection calls for the use of adequate hardware and software to protect information, while chapter 28 of the 1998 Criminal Code stipulates penalties for cyber crimes such as unauthorized access to computer systems, distribution of malware and unauthorized amendment, destruction, blocking and copying of information [2, 5].


2.4.5 International data sharing

2.4.5a Has the government made a commitment via public statements, legislation and/or a cooperative agreement to share surveillance data during a public health emergency with other countries in the region?

Yes, commitments have been made to share data for more than one disease = 2, Yes, commitments have been made to share data only for one disease = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Tajikistan has made a commitment via public statements, legislation and/or a cooperative agreement to share surveillance data during a public health emergency with other countries in the region for one or more diseases.

As a member of the Commonwealth of Independent States (CIS), Tajikistan is committed to share information on emergencies with other CIS members [1]. However, this information sharing pertains to emergencies in general and the treaty governing it – the 1993 Agreement on Exchanging Information about Natural and Manmade Emergencies, on Information Co-operation while Eliminating their Consequences and Assisting the Affected Population – does not specifically mention public health emergencies or health surveillance information.

As a member of the Central Asian and Eastern European Surveillance of Antimicrobial Resistance (CAESAR) network, Tajikistan is committed to report surveillance data on antimicrobial resistance once it has developed the capacity to do so [2]. According to the CAESAR 2020 Annual Report, AMR routine diagnostics surveillance projects have been temporarily put on hold “due to disruption of routine activities and services at several project sites, as well as repurposing of clinical staff, due to COVID-19” [3]. The same document also states, in Chapter 3, that Tajikistan does not submit AMR data to CAESAR [3].

As a member of the World Health Organization’s European Measles and Rubella Laboratory Network, Tajikistan shares epidemiological data on measles and rubella, but this data sharing is not specific to emergencies [4, 5].
There is no evidence of any other relevant data sharing commitment or mechanism on the website of the Ministry of Healthcare and Social Protection of the Population or that of the Ministry of Foreign Affairs [6, 7].


2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a Is there a national system in place to provide support at the sub-national level (e.g. training, metrics standardization and/or financial resources) to conduct contact tracing in the event of a public health emergency?

Yes, there is evidence that the national government supports sub-national systems to prepare for future public health emergencies = 2, Yes, there is evidence that the national government supports sub-national systems, but only in response to active public health emergencies = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Tajikistan has a national system in place to provide support at the sub-national level to conduct contact tracing in the event of an active or future public health emergency.

On 19th March 2020, the Ministry of Health and Social Protection announced Tajikistan’s COVID-19 Country Preparedness and Response Plan, which noted that isolation facilities had been “designated all over the country”, that a surveillance system was being implemented and that a rapid response team were being trained for COVID-19 case investigation, contact tracing and containment activities” [1]. The plan does not, however, detail a national system to provide support at the sub-national level to expand contact tracing in the event of a public health emergency. According to the United Nations’ Integrated Socioeconomic Response Framework to Covid-19 (ISEF) for Tajikistan, substantial vulnerabilities in Tajikistan’s healthcare
system raise questions as to the country's ability to implement its covid-19 response effectively [2]. There is no further relevant evidence on the website of the Ministry of Healthcare and Social Protection. [3]


2.5.1b

Does the country provide wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended, particularly economic support (paycheck, job security) and medical attention?

Yes, both economic support and medical attention are provided = 2, Yes, but only economic support or medical attention is provided = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan offers wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended.

Article 220 of the Healthcare Code of the Republic of Tajikistan states that the State Sanitary and Epidemiological Service is responsible for ensuring the isolation of citizens with infectious diseases, introducing broader quarantines for people that are at risk etc., but does not mention wraparound services to enable voluntary self-isolation for citizens [1].

The Ministry of Healthcare and Social Protection of the Republic of Tajikistan published its "Emergency COVID-19 Project Stakeholder Engagement Plan (SEP)" in January 2021. Table 2 of this document details the "specific needs" of various groups of "stakeholders" in Tajikistan affected by the COVID-19 outbreak [2]. Individuals infected with Covid-19 are to be provided with "Medical examination and treatment in hospitals, ad-hoc financial support to low-income households with infected family member(s)". People under COVID-19 quarantine are to be given "favorable conditions to stay in quarantine facilities" but the focus is largely to raise awareness of measures that can be taken to prevent the spread of the virus. The plan also includes "economic support" for single mothers with underage children, low-income families, and the unemployed [2]. While support measures are outlined, these are specific to the COVID-19 outbreak.

There is no further evidence of the government of Tajikistan offering wraparound services that encourage people carrying, or suspected of carrying, an infectious disease on the official website of the Ministry of Healthcare and Social Protection [3].

2.5.1c
Does the country make de-identified data on contact tracing efforts for COVID-19 (including the percentage of new cases from identified contacts) available via daily reports (or other format) on government websites (such as the Ministry of Health, or similar)?
Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tajikistan makes de-identified data on contact tracing efforts for COVID-19 available on government websites.

The Ministry of Healthcare and Social Protection does not list any data on contact tracing efforts [1]. The website of Tajikistan’s Centre of Medical Statistics and Information is not currently available [2].


2.5.2 Point of entry management

2.5.2a
Is there a joint plan or cooperative agreement between the 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?
Yes, plan(s)/agreement(s) are in place to prepare for future public health emergencies = 2, Yes, but plan(s)/agreement(s) are in place only in response to active public health emergencies = 1, No = 0

Current Year Score: 0

There is no evidence of a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts for an active or future public health emergency.

Tajikistan’s Law on the State Border, passed in 1997, states that measures must be taken at the border to avoid an epidemiological threat to the country [1]. Article 11 of the law details the “passing of persons, vehicles, cargo, goods and animals across the State Border” and states that Tajikistan’s border control authorities have the right to establish certain types of control, including “sanitary and quarantine”, in order to detect individuals that are violating rules. The law also refers to “regulatory acts” between Tajikistan’s border authority and the ministries of Justice, Healthcare and other executive authorities but does not provide further detail. The law does not mention any specific joint plan or cooperative agreement between the public health system and border control authorities to monitor suspected and potential cases in the event of a public health emergency.

There is no evidence of a joint plan or cooperative agreement between the public health system and the border authorities on the Ministry of Healthcare and Social Protection or the Ministry of Foreign Affairs websites [2, 3]. Tajikistan’s border authority, the Border and Territorial Settlement Unit, is part of the country’s Ministry of Foreign Affairs.
According to Tajikistan’s "COVID-19 Country Preparedness and Response Plan", published in March 2020, Priority Area 4 deals with "Points of Entry" directly, stating that it was necessary for the establishment of an online data management system for incoming passengers to trace possible suspected cases." [4]. Although this indicates that there is a degree of cooperation between Tajikistan’s public health system and the border control authorities, there is no evidence of a formal joint plan or cooperative agreement.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. The report does not mention any plan or agreement to monitor suspected and potential cases for international travelers in the event of a public health emergency [5]. While the JEE did describe cooperation between the public health system and the border control authorities, it did not refer to any joint plan or cooperative agreement, stating instead that the "national health authorities of the Republic of Tajikistan are in close contact with law enforcement institutions, including customs authorities, border police services and the State Committee for National Security with regards to suspected or confirmed cases.

In addition, the JEE referred to the National Disaster Risk Reduction Strategy of the Republic of Tajikistan for 2019-2030 as "the overarching formal cooperation agreement between the public health and security authorities" but examination of this document found no evidence of cooperation between Tajikistan’s public health system and the border control authorities [6].


2.6 EPIDEMIOLOGY WORKFORCE

2.6.1 Applied epidemiology training program, such as the field epidemiology training program, for public health professionals and veterinarians (e.g., Field Epidemiology Training Program [FETP] and Field Epidemiology Training Program for Veterinarians [FETPV])

2.6.1a

Does the country meet one of the following criteria?
- Applied epidemiology training program (such as FETP) is available in country
- Resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs (such as FETP)

Needs to meet at least one of the criteria to be scored a 1 on this measure. Yes for both = 1, Yes for one = 1, No for both = 0
There is inconclusive evidence that an applied epidemiology training programme is available in Tajikistan or that the country provides resources to send citizens of Tajikistan to another country to participate in applied epidemiology training programmes.

According to a regional summary published by the Centres for Disease Control and Prevention (CDC) in Central Asia, Tajikistan was previously involved in a Field Epidemiology Training Programme (FETP) but has since "ceased active participation". [1]

After several years of preparation, the Afghanistan-Tajikistan Field Epidemiology Training Programme was launched in August 2014 [2]. The training was taking place in Dushanbe [3]. The programme's first cohort consisted of 7 participants from Tajikistan (6 physicians and 1 veterinarian) and 7 from Afghanistan (6 physicians and 1 veterinarian) [2]. Its second cohort consisted of 7 from Tajikistan (6 physicians and 1 veterinarian) and 6 from Afghanistan (all physicians) [2]. Each cohort undertook 5 training modules, which introduce the basic concepts of critical thinking, epidemiology and interventional thinking [2]. The programme has been a member of TEPHINET (the Training Programs in Epidemiology and Public Health Intervention Network) since 2016, but TEPHINET does not accredit it [4]. According to the TEPHINET website, the Afghanistan-Tajikistan Field Epidemiology Training Programme is currently registered as "inactive", although Tajikistan is still a registered member of TEPHINET, having first become a member in 2016. The official webpage of the Afghanistan-Tajikistan FETP is no longer available on Afghanistan's Ministry of Public Health [5].

An EMPHNET (Eastern Mediterranean Public Health Network) newsletter from November 2012 reports that, at that time, every year a small number of people from Tajikistan participated in the Central Asia Regional Field Epidemiology Training Programme in Almaty, Kazakhstan [4]. It is not clear whether these participants received funding from the government of Tajikistan [6]. The EMPHNET website also confirms that the Afghan-Tajik FETP is no longer in operation [7].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 4), Tajikistan has a FETP "or other applied training programme in place" but also recommended that measures be taken to "provide modules of the FETP to medical doctors, epidemiologists and other health workers as part of the continuing professional education programme and enrol non-medical health professionals in the existing FETP." [8]. The report also noted (page 33) that "a number of epidemiologists have been trained in Tajikistan in FETPs in the past in collaboration with the United States Centers for Disease Control and Prevention (US CDC), however this programme has now been discontinued" (as described above). Finally, page 37 of the JEE stated that a "five- to six- year academic specialization programme in epidemiology is available in the Republic of Tajikistan" and that, as part of the programme, a FETP is in place whose curricula is aligned with the FETP conducted by the US CDC. Page 38 of the JEE also provided the recommendation that "sustainable funding sources should be made available to prevent the interruption of the Tajik FETP and ensure its continuation in the future", thus implying that the future of the programme was not secure at the time.

2.6.1b
Are the available field epidemiology training programs explicitly inclusive of animal health professionals or is there a specific animal health field epidemiology training program offered (such as FETPV)?

Yes = 1, No = 0

Current Year Score: 0

There is inconclusive evidence that an applied epidemiology training programme is available in Tajikistan that is inclusive of animal health professionals or that there is a specific animal health FETP training programme offered. An applied epidemiology training programme was available in Tajikistan that specifically included training programmes for animal health professionals but there is evidence that it has been withdrawn. There is no evidence of resources being provided by Tajikistan to send citizens abroad to participate in applied epidemiology training programmes. According to a regional summary published by the Centres for Disease Control and Prevention (CDC) in Central Asia, Tajikistan was previously involved in a Field Epidemiology Training Programme (FETP) but has since "ceased active participation". [1] After several years of preparation, the Afghanistan-Tajikistan Field Epidemiology Training Programme was launched in August 2014 [2]. The training was taking place in Dushanbe [3]. The programme's first cohort consisted of 7 participants from Tajikistan (6 physicians and 1 veterinarian) and 7 from Afghanistan (6 physicians and 1 veterinarian) [2]. Its second cohort consisted of 7 from Tajikistan (6 physicians and 1 veterinarian) and 6 from Afghanistan (all physicians) [2]. Each cohort undertook 5 training modules, which introduce the basic concepts of critical thinking, epidemiology and interventional thinking [2]. The programme has been a member of TEPHINET (the Training Programs in Epidemiology and Public Health Intervention Network) since 2016, but TEPHINET does not accredit it [4]. According to the TEPHINET website, the Afghanistan-Tajikistan Field Epidemiology Training Programme is currently registered as "inactive", although Tajikistan is still a registered member of TEPHINET, having first become a member in 2016. The official webpage of the Afghanistan-Tajikistan FETP is no longer available on Afghanistan's Ministry of Public Health [5] An EMPHNET (Eastern Mediterranean Public Health Network) newsletter from November 2012 reports that, at that time, every year a small number of people from Tajikistan participated in the Central Asia Regional Field Epidemiology Training Programme in Almaty, Kazakhstan [4]. It is not clear whether these participants received funding from the government of Tajikistan [6]. The EMPHNET website also confirms that the Afghan-Tajik FETP is no longer in operation [7]. The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 38), it was recommended that Tajikistan's FETP "should be opened for the enrolment of non-medical professionals, such as those from the animal health sector" [8].

2.6.2 Epidemiology workforce capacity

2.6.2a

Is there public evidence that the country has at least 1 trained field epidemiologist per 200,000 people?

Yes = 1, No = 0

Current Year Score: 0

2020

Completed JEE assessments; Economist Impact analyst qualitative assessment based on official national sources, which vary by country

Category 3: Rapid response to and mitigation of the spread of an epidemic

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

Does the country have an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential?

Evidence that there is a plan in place, and the plan is publicly available = 2, Evidence that the plan is in place, but the plan is not publicly available OR, Disease-specific plans are in place, but there is no evidence of an overarching plan = 1, No evidence that such a plan or plans are in place = 0

Current Year Score: 0

There is no evidence that Tajikistan has an overarching national public health emergency response plan that addresses planning for multiple communicable diseases with pandemic potential. There is no evidence of a national public health
emergency response plan - other than the COVID-19 Emergency Response Plan, which addresses planning for COVID-19 only - on the website of the Ministry of Healthcare and Social Protection of the Population or the Governmental Committee on Emergencies and Civil Defence [1, 2, 3]. The Ministry of Healthcare and Social Protection of the Republic of Tajikistan published its "Emergency COVID-19 Project Stakeholder Engagement Plan (SEP) in January 2021. Table 2 of this document details the "specific needs" of various groups of "stakeholders" in Tajikistan affected by the COVID-19 outbreak [4]. Individuals infected with Covid-19 are to be provided with "Medical examination and treatment in hospitals, ad-hoc financial support to low-income households with infected family member(s)". People under COVID-19 quarantine are to be given "favorable conditions to stay in quarantine facilities" but the focus is largely to raise awareness of measures that can be taken to prevent the spread of the virus. The plan also includes "economic support" for single mothers with underage children, low-income families, and the unemployed [4]. The 2004 Law on Protecting the Population and Territory from Natural and Industrial Disasters (which regulates state activities to prevent and respond to various types of disasters) does not make any mention of epidemics or infectious diseases, though its definition of disasters ("a situation caused by an accident, a dangerous natural phenomenon, a catastrophe or a natural disaster, which has caused or might cause human deaths, harm to human health, environmental damage, material losses or a deterioration in living conditions") implicitly includes epidemics [5]. The National Disaster Risk Management Strategy of the Republic of Tajikistan for 2019-2030 focuses on risk management in the context of the more common natural disasters in Tajikistan, namely mudflows and avalanches, and other risks that are specific to Tajikistan. The 2019-30 Strategy explicitly includes pandemics within the scope of its understanding of disasters but does not include any specific strategy to deal with pandemics or infectious diseases. [6]. The 2004 Law on Civil Defence, which mostly focuses on protecting Tajikistan during war, explicitly includes epidemics within its scope, but does not include any specific measures for dealing with outbreaks [5]. Its only measures specifically targeted at infectious diseases pertain to monitoring and surveillance. A 2018 report by the Verification Research Training and Information Centre states that Tajikistan adopted a pandemic influenza management plan in 2009, but the plan itself does not appear to be available online [7]. The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. The report did not refer to any overarching national public health emergency response plan which addresses multiple diseases [8].

3.1.1b
If an overarching plan is in place, has it been updated in the last 3 years?
Yes = 1 , No /no plan in place= 0
Current Year Score: 0

There is no evidence that Tajikistan has an overarching national public health emergency response plan that addresses planning for multiple communicable diseases with pandemic potential. There is no evidence of a national public health emergency response plan - other than the COVID-19 Emergency Response Plan - on the website of the Ministry of Healthcare and Social Protection of the Population of the Republic of Tajikistan. The Ministry of Healthcare and Social Protection of the Republic of Tajikistan published its "Emergency COVID-19 Project Stakeholder Engagement Plan (SEP) in January 2021. Table 2 of this document details the "specific needs" of various groups of "stakeholders" in Tajikistan affected by the COVID-19 outbreak [4]. Individuals infected with Covid-19 are to be provided with "Medical examination and treatment in hospitals, ad-hoc financial support to low-income households with infected family member(s)". People under COVID-19 quarantine are to be given "favorable conditions to stay in quarantine facilities" but the focus is largely to raise awareness of measures that can be taken to prevent the spread of the virus. The plan also includes "economic support" for single mothers with underage children, low-income families, and the unemployed [4]. The 2004 Law on Protecting the Population and Territory from Natural and Industrial Disasters (which regulates state activities to prevent and respond to various types of disasters) does not make any mention of epidemics or infectious diseases, though its definition of disasters ("a situation caused by an accident, a dangerous natural phenomenon, a catastrophe or a natural disaster, which has caused or might cause human deaths, harm to human health, environmental damage, material losses or a deterioration in living conditions") implicitly includes epidemics [5]. The National Disaster Risk Management Strategy of the Republic of Tajikistan for 2019-2030 focuses on risk management in the context of the more common natural disasters in Tajikistan, namely mudflows and avalanches, and other risks that are specific to Tajikistan. The 2019-30 Strategy explicitly includes pandemics within the scope of its understanding of disasters but does not include any specific strategy to deal with pandemics or infectious diseases. [6]. The 2004 Law on Civil Defence, which mostly focuses on protecting Tajikistan during war, explicitly includes epidemics within its scope, but does not include any specific measures for dealing with outbreaks [5]. Its only measures specifically targeted at infectious diseases pertain to monitoring and surveillance. A 2018 report by the Verification Research Training and Information Centre states that Tajikistan adopted a pandemic influenza management plan in 2009, but the plan itself does not appear to be available online [7]. The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. The report did not refer to any overarching national public health emergency response plan which addresses multiple diseases [8].

If an overarching plan is in place, does it include considerations for pediatric and/or other vulnerable populations?

Yes = 1, No / no plan in place = 0

Current Year Score: 0

There is no evidence that Tajikistan has an overarching national public health emergency response plan that addresses planning for multiple communicable diseases with pandemic potential. There is no evidence of a national public health emergency response plan - other than the COVID-19 Emergency Response Plan - on the website of the Ministry of Healthcare and Social Protection of the Population or the Governmental Committee on Emergencies and Civil Defence [1, 2, 3]. The Ministry of Healthcare and Social Protection of the Republic of Tajikistan published its "Emergency COVID-19 Project Stakeholder Engagement Plan (SEP) in January 2021. Table 2 of this document details the "specific needs" of various groups of "stakeholders" in Tajikistan affected by the COVID-19 outbreak [4]. Individuals infected with Covid-19 are to be provided with "Medical examination and treatment in hospitals, ad-hoc financial support to low-income households with infected family member(s)". People under COVID-19 quarantine are to be given "favorable conditions to stay in quarantine facilities" but the focus is largely to raise awareness of measures that can be taken to prevent the spread of the virus. The plan also includes "economic support" for single mothers with underage children, low-income families, and the unemployed [4]. The 2004 Law on Protecting the Population and Territory from Natural and Industrial Disasters (which regulates state activities to prevent and respond to various types of disasters) does not make any mention of epidemics or infectious diseases, though its definition of disasters ("a situation caused by an accident, a dangerous natural phenomenon, a catastrophe or a natural disaster, which has caused or might cause human deaths, harm to human health, environmental damage, material losses or a deterioration in living conditions") implicitly includes epidemics [5]. The National Disaster Risk Management Strategy of the Republic of Tajikistan for 2019-2030 focuses on risk management in the context of the more common natural disasters in Tajikistan, namely mudflows and avalanches, and other risks that are specific to Tajikistan. The 2019-30 Strategy explicitly includes pandemics within the scope of its understanding of disasters but does not include any specific strategy to deal with pandemics or infectious diseases. [6]. The 2004 Law on Civil Defence, which mostly focuses on protecting Tajikistan during war, explicitly includes epidemics within its scope, but does not include any specific measures for dealing with outbreaks [5]. Its only measures specifically targeted at infectious diseases pertain to monitoring and surveillance. A 2018 report by the Verification Research Training and Information Centre states that Tajikistan adopted a pandemic influenza management plan in 2009, but the plan itself does not appear to be available online [7]. The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. The report did not refer to any overarching national public health emergency response plan which addresses multiple diseases [8].


3.1.1d Does the country have a publicly available plan in place specifically for pandemic influenza preparedness that has been updated since 2009?
Yes = 1, No = 0

Current Year Score: 0

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

3.1.2 Private sector involvement in response planning

3.1.2a Does the country have a specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response?
Yes = 1, No = 0

Current Year Score: 1

Tajikistan has a specific mechanism for engaging with the private sector to assist with emergency response.

The Private Sector Recovery Assistance Coordination Desk, founded by the Ministry of Foreign Affairs, the Ministry of Economic Development and Trade and the Chamber of Commerce and Industry, provides, in Chapter 12, the private sector with one-stop access to emergency response plans and assists in matching private sector assistance with relevant projects [1]. In addition, the Chamber of Commerce and Industry maintains a focal point for the mobilization and management of private sector assistance during and after emergencies [1]. It should be noted that these mechanisms are for all forms of
emergency, not only outbreaks of infectious diseases, and public health emergencies are not explicitly mentioned [1]. There is no evidence on the websites of the Ministry of Foreign Affairs, the Ministry of Economic Development and Trade, the Chamber of Commerce and Industry or the Ministry of Healthcare and Social Protection of the Population that this mechanism has ever been used in response to a public health emergency [2, 3, 4, 5]. However, recovery assistance is defined as including "basic assistance in the areas of food, water, energy, health care and other basic support to affected populations" [1]. It is also worth noting that Tajikistan's official definition of disasters, as found in the 2004 Law on Protecting the Population and Territory from Natural and Industrial Disasters ("a situation caused by an accident, a dangerous natural phenomenon, a catastrophe or a natural disaster, which has caused or might cause human deaths, harm to human health, environmental damage, material losses or a deterioration in living conditions") implicitly includes infectious disease outbreaks and other public health emergencies [6].

The National Disaster Risk Reduction Strategy of the Republic of Tajikistan for 2019-2030 also includes, in Chapter 2, a strategy to "intensify a dialogue between public authorities and the private sector, civil society, and local communities regarding participation in disaster risk management" [7].


### 3.1.3 Non-pharmaceutical interventions planning

#### 3.1.3a

Does the country have a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic?

Yes, a policy, plan and/or guidelines are in place for more than one disease = 2, Yes, but the policy, plan and/or guidelines exist only for one disease = 1, No = 0

Current Year Score: 1

There is some evidence of a policy, plan and/or guidelines in place in Tajikistan to implement non-pharmaceutical interventions (NPIs) for one disease.

Tajikistan's "COVID-19 Emergency Response Plan", updated in January 2021, does include non-pharmaceutical interventions - namely quarantine / self-isolation and hand hygiene - the plan is written specifically for COVID-19 and does not state that
such measures could/should be used in other public health emergencies [1]. Other COVID-19 related policies/plans also include non-pharmaceutical interventions but they, too, are specific to that particular disease and do not mention the appropriateness of such measures for anything other than COVID-19 [2, 3].

There is no evidence of any other plan in place in Tajikistan to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic on the official websites of the ministries of Healthcare and Social Protection, the Committee of Emergency Situations and Civil Defence, nor in the wording of the Law on Protecting the Population and Territory from Natural and Industrial Disasters [4, 5, 6].

The Republic of Tajikistan completed a Joint External Evaluation in October 2019. The report did not refer to non-pharmaceutical interventions during an epidemic or pandemic [7].


3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a Does the country meet one of the following criteria?
- Is there evidence that the country has activated their national emergency response plan for an infectious disease outbreak in the past year?
- Is there evidence that the country has completed a national-level biological threat-focused exercise (either with WHO or separately) in the past year?
In the past year, Tajikistan has completed a national-level biological threat-focused exercise. According to the World Health Organization (WHO) Strategic Partnership for IHR and Health Security (SPH) website, Tajikistan completed a Simulation Exercise assessing the country's "plans, procedures and capabilities to manage an imported case of COVID-19" in March 2020 [1]. The country reported its first case of the virus on 30 April 2020 [2]. However, according to an evaluation on the SPH portal, Tajikistan scored 0 in the exercise which, according to the key, means that it was not possible to perform the exercise [1]. The WHO completed a mission to Tajikistan evaluating capacity to manage COVID-19 in May 2020. According to an interview with Bakhtygul Karreyeva, acting head of the WHO Country Office in Tajikistan, and Oleg Storozhenko from the WHO Europe Office, the WHO mission conducted in May 2020 recommended that Tajikistan increase the number of tests being carried out per day from 1,000 to between 3,000-4,000 tests per day. Other recommendations related to the number of laboratories in Tajikistan, more staff training as well as the development of an appropriate reporting mechanism [2, 3]. According to Tajikistan’s Ministry of Healthcare and Social Protection, the country activated its national emergency response plan on 19th March 2020 in response to the COVID-19 pandemic although there is no evidence that it was based on the activation of an national emergency response plan for an infectious disease outbreak [4].


3.2.1b
Is there evidence that the country in the past year has identified a list of gaps and best practices in response (either through an infectious disease response or a biological-threat focused exercise) and developed a plan to improve response capabilities?

Yes, the country has developed and published a plan to improve response capacity = 2 , Yes, the country has developed a plan to improve response capacity, but has not published the plan = 1 , No = 0

Current Year Score: 0

There is no evidence that the country in the past year has identified a list of gaps and best practices in response (either through an infectious disease response or a biological-threat-focused exercise) and developed a plan to improve response capabilities. There is no evidence of an after-action review (AAR) published on the WHO extranet, nor is there evidence of such a document on the webpage of the WHO Country Office in Tajikistan [1, 2]. Since the completion of the WHO technical mission in Tajikistan in May 2020, Tajikistan's Ministry of Healthcare and Social Protection has not published an AAR, or similar document, that demonstrates the country has developed a plan to improve its infectious disease response with regards to gaps and best practices identified by the WHO [3]. No evidence of such a review was identified on the official
website of Tajikistan's Ministry of Healthcare and Social Protection, nor on the official website of the Committee for Emergency Situations and Civil Defence [4, 5]. However, in a 6 June 2020 article published in Asia-Plus, Bakhtygul Karryeva, the Acting Head of the WHO Country Office in Tajikistan noted that "some recommendations [from the May 2020 WHO technical mission] have already been implemented with the support of WHO", e.g. emergency medical teams sent to Tajikistan and support received from the Global Network for Alert and Response to Disease Outbreaks (GOARN) [6].


3.2.2 Private sector engagement in exercises

3.2.2a

Is there evidence that the country in the past year has undergone a national-level biological threat-focused exercise that has included private sector representatives?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tajikistan has undergone a national-level biological threat-focused exercise that has included private sector representatives.

Tajikistan completed a a national-level biological threat focused exercise with the WHO in May 2020 but there is no evidence that this exercise included representatives from the private sector [1].

There is no evidence of a that a national-level biological threat-focused exercise including private sector representatives has been carried out in Tajikistan on either of the official websites for the Ministry of Healthcare and Social Protection of the Population or the Governmental Committee on Emergencies and Civil Defence [2, 3].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 4), there is a need to increase the level and complexity of exercises on emergency management. Page 40 of the report noted that "policies and plans should be developed for the potential use of all medical care facilities (i.e. both public and private facilities), their personnel and equipment" but, again, there is no suggestion that a national-level biological threat exercise including private sector representatives has been conducted [4].
3.3 EMERGENCY RESPONSE OPERATION

3.3.1 Emergency response operation

3.3.1a Does the country have in place an Emergency Operations Center (EOC)?
Yes = 1, No = 0

Current Year Score: 1

Tajikistan does have in place an Emergency Operations Centre (EOC), and there is evidence that it covers public health emergencies among others.

According to the National Disaster Risk Management Strategy of the Republic of Tajikistan for 2010-2015 (since updated for the period 2019-2030), the Governmental Committee on Emergency Situations and Civil Defence is the primary executive body responsible for disaster prevention and response actions [1]. The National Disaster Risk Management Strategy 2010-2015 explicitly includes epidemics under a list of possible disasters in section 1c [1]. While the updated Tajikistan’s National Disaster Risk Management Strategy for the period 2019-2030 does not reference pandemics or epidemics, focusing instead on mudflows and earthquakes, the Committee on Emergency Situations and Civil Defence’s Short Terminological Dictionary for Disasters includes numerous terms related to public health emergencies (e.g. epidemic, pandemic, disinfection) [2, 3].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 43), Tajikistan does operate an Emergency operations centre (EOC) and has relevant procedures and plans in place. The JEE mission states that an “EOC exists and is available 24/7 at national and sub-national levels” in Tajikistan and that it “can be activated within 2 hours after an early warning of an emergency has been received. The JEE notes that the activation plans and functions of the EOC had been tested at the national level in the past two years (between October 2017 and October 2019) [4]. However, it is unclear whether the EOC has been tested with a public health scenario; the JEE does not specifically state that the EOC covers public health emergencies [4].

According to the 2010-2015 National Disaster Risk Management Strategy, local-level offices of the Governmental Committee on Emergency Situations and Civil Defence implement disaster management at the regional and district levels, with duties including management of emergency operations in the disaster-affected areas, requests for urgent financial and material support and coordination of external disaster aid [1]. According to its website, the Committee contains a division or department called the Crisis Management Centre [5]. The World Health Organization’s 2013 report on Tajikistan’s health-system crisis preparedness states that this crisis management centre maintains 24/7 contact with all of Tajikistan’s oblasts.
(top-level administrative units) [6].

The National Disaster Risk Management Strategy 2010-2015 also mentions another body â€“ the State Commission of Emergency Situations â€“ which is described as consisting of “key ministries and agencies” and managing disaster risk management activities [1]. The Strategy states that this Commission is the primary body that implements disaster response measures. According to the World Health Organization’s 2013 report on Tajikistan’s health-system crisis preparedness, this Commission consists of all government ministers, plus representatives of institutions relevant to the emergency at hand [6].


3.3.1b

Is the Emergency Operations Center (EOC) required to conduct a drill for a public health emergency scenario at least once per year or is there evidence that they conduct a drill at least once per year?

Yes = 1 , No = 0

Current Year Score: 0

There is no conclusive evidence that Tajikistan’s Emergency Operations Centre (EOC) is required toconduct or that it conducts a drill for a public health emergency scenario at least once per year.

There is no evidence of such a requirement on the websites of the Ministry of Healthcare and Social Protection of the Population or the Governmental Committee on Emergency Situations and Civil Defence [1, 2].

The Governmental Committee on Emergency Situations and Civil Defence is the primary body of executive power responsible for disaster prevention and response actions [4]. Within the Committee there is a Crisis Management Centre, which maintains 24/7 contact with all of Tajikistan’s oblasts (top-level administrative units) [3, 4].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019 which stated that tests are carried out to test emergency response capabilities, but this document provides no evidence these tests specifically consider publichealth emergencies [5]. According to the report (page 42), several exercises are conducted in involving Tajikistan’s EOC at least annually to test the country’s emergency response capacities at the national level and with the involvement of sub-
3.3.1c

Is there public evidence to show that the Emergency Operations Center (EOC) has conducted within the last year a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence to show that the Emergency Operations Center has conducted within the last year a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. The Joint External Evaluation (JEE) completed in October 2019 noted that the EOC “can be activated within 2 hours after an early warning of an emergency has been received” but did not refer as to whether or not the EOC had conducted within that year (i.e. October 2018 - October 2019) a coordinated emergency response exercise [1].

There is no evidence of such a coordinated emergency response on either the website of the Ministry of Healthcare and Social Protection of the Population or the Governmental Committee on Emergency Situations and Civil Defence [2, 3].


3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

3.4.1 Public health and security authorities are linked for rapid response during a biological event

3.4.1a

Does the country meet one of the following criteria?

- Is there public evidence that public health and national security authorities have carried out an exercise to respond to a
potential deliberate biological event (i.e., bioterrorism attack)?
- Are there publicly available standard operating procedures, guidelines, memorandums of understanding (MOUs), or other agreements between the public health and security authorities to respond to a potential deliberate biological event (i.e., bioterrorism attack)?
Needs to meet at least one of the criteria to be scored a 1 on this measure., Yes for both = 1, Yes for one = 1, No for both = 0
Current Year Score: 0

There is no evidence that public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event or that there are standard operating procedures, guidelines, MOUs or other agreements between the public health and security authorities to respond to a potential deliberate biological event.

There is no evidence of this on the website of the Ministry of Healthcare and Social Protection of the Population, the Governmental Committee on Emergency Situations and Civil Defence or the Ministry of Justice [1, 2, 3].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 43), the JEE mission recommended that, while training and exercises in Tajikistan focus on biological threats and natural disasters, human-made emergencies should also be covered, thus indicating that public health and national security authorities have not carried out exercises to respond to a potential deliberate biological event [4]. In its description of the strengths and best practices of Tajikistan's EOC, the JEE also noted that "a response guide is available including description of all activities, levels of alert, standard operating procedures, etc.". It was not specified, however, that deliberate biological events are covered in the response guide.


3.5 RISK COMMUNICATIONS

3.5.1 Public communication

3.5.1b
Does the risk communication plan (or other legislation, regulation or strategy document used to guide national public health response) outline how messages will reach populations and sectors with different communications needs (e.g., different languages, location within the country, media reach)?
Yes = 1, No = 0
Current Year Score: 0

There is no evidence of a risk communication plan that is specifically intended for use during a public health emergency.

There is no evidence of such a plan on the website of the Ministry of Healthcare and Social Protection of the Population, the Ministry of Economic Development and Trade or the Governmental Committee on Emergency Situations and Civil Defence [1, 2, 3].
In 2010 the a Monitoring and Early Warning System was founded at the Ministry of Economic Development and Trade [5]. This body’s main purpose is to notify rapid response services, the public and international humanitarian organizations of potential risks, including public health risks such as infectious diseases [4]. There is no evidence on the Ministry of Economic Development and Trade website of a relevant risk communication plan that is specifically intended for use during a public health emergency [2].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 50), in the event of a large-scale public health emergency, operational processes to handle information in an efficient and centralized fashion had not been fully defined and tested [6].


### 3.5.1 Risk communication planning

#### 3.5.1a

Does the country have in place, either in the national public health emergency response plan or in other legislation, regulation, or strategy documents, a section detailing a risk communication plan that is specifically intended for use during a public health emergency?

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence of a risk communication plan that is specifically intended for use during a public health emergency.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 50), in the event of a large-scale public health emergency, operational processes to handle information in an efficient and centralized fashion had not been fully defined and tested [1]. The JEE also noted that the Ministry of Healthcare and Social Protection of the Population (MoHSPP) has a proven ability to produce health messages for the public, giving an example from 2016 when it produced 330 videos, 6000 targeted messages and 401 articles on emergencies.

There is no evidence of such a plan on the website of the Ministry of Healthcare and Social Protection of the Population, the Ministry of Economic Development and Trade or the Governmental Committee on Emergency Situations and Civil Defence [2, 3, 4].
In 2010 the Monitoring and Early Warning System was founded at the Ministry of Economic Development and Trade [6]. This body's main purpose is to notify rapid response services, the public and international humanitarian organizations of potential risks, including public health risks such as infectious diseases [5]. However, there is no evidence of a relevant risk communication plan on the Ministry of Economic Development and Trade website [3].


### 3.5.1c

**Does the risk communication plan (or other legislation, regulation or strategy document used to guide national public health response) designate a specific position within the government to serve as the primary spokesperson to the public during a public health emergency?**

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence of a risk communication plan that is specifically intended for use during a public health emergency and, thus, there is not plan which designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency.

There is no evidence of such a plan on the website of the Ministry of Healthcare and Social Protection of the Population, the Ministry of Economic Development and Trade or the Governmental Committee on Emergency Situations and Civil Defence [1, 2, 3].

In 2010 the a Monitoring and Early Warning System was founded at the Ministry of Economic Development and Trade [5]. This body's main purpose is to notify rapid response services, the public and international humanitarian organizations of potential risks, including public health risks such as infectious diseases [4]. There is no evidence on the Ministry of Economic Development and Trade website of a relevant risk communication plan that is specifically intended for use during a public health emergency [2].

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 50), in the event of a large-scale public health emergency, operational processes to handle information in an efficient and centralized fashion had not been fully defined and tested [6].
3.5.2 Public communication

3.5.2a

In the past year, is there evidence that the public health system has actively shared messages via online media platforms (e.g., social media, website) to inform the public about ongoing public health concerns and/or dispel rumors, misinformation or disinformation?

Public health system regularly shares information on health concerns = 2, Public health system shares information only during active emergencies, but does not regularly utilize online media platforms = 1, Public health system does not regularly utilize online media platforms, either during emergencies or otherwise = 0

Current Year Score: 1

There is evidence in the past year that the public health system of Tajikistan has actively shared messages via online media platforms to inform the public about ongoing public health concerns. No evidence was found that online media platforms had been used to dispel misinformation.

The Ministry of Healthcare and Social Protection of the Population of Tajikistan (MoHSPP) has published information on its official website [1] on the development of the COVID-19 pandemic - notably the announcement on 26 January 2021 that the number of COVID-19 cases in Tajikistan had fallen to zero [2]. Prior to this, however, there is evidence that the MoHSPP used its website to inform the public about the ongoing COVID-19 health emergency [3].

The Ministry of Healthcare and Social Protection of the Population of Tajikistan (MoHSPP) operates a Facebook page that is updated regularly but it does not share information during active emergencies. Instead, the page is dedicated to updates regarding meetings, health-related construction projects etc. There is no evidence that the Ministry of Healthcare’s Facebook page is being used to update the public about ongoing emergencies nor to dispel rumours, misinformation or disinformation [5]. There is no evidence that Tajikistan’s Ministry of Healthcare and Social Protection operates a Twitter account that might be used to update the public during health emergencies.

The Governmental Committee on Emergency Situations and Civil Defense also operates a channel on the messaging app Telegram, although there is no evidence that the service is used to update the public about ongoing emergencies nor to dispel rumours or misinformation [6].
Tajikistan's National Reference Laboratory also operates a Facebook page. This page was last updated in September 2018 [7].


3.5.2b

Is there evidence that senior leaders (president or ministers) have shared misinformation or disinformation on infectious diseases in the past two years?

No = 1, Yes = 0

Current Year Score: 1

There is insufficient evidence that senior leaders in Tajikistan have shared misinformation or disinformation on infectious diseases. Local media have reported on an internet-based portal that contained an "alternative list" of people that had died as a result of complications linked to COVID-19 was made unavailable in Tajikistan. The article, published by Radio Ozodi in May 2020, stated that an alternative list of COVID-19 victims had been created by a group of Dushanbe residents as a response to the belief that the Government of Tajikistan was holding back accurate figures about the spread of the COVID-19 virus. The "alternative list" contained information about where the victim worked, the date they had died and the date they were buried. It was reported that the idea of creating the alternative list had appeared after experts and social media users began to question the information provided by the Ministry of Healthcare and Social Protection of the Population (MoHSPP), believing that the number of people in Tajikistan infected with COVID-19 much higher than official statistics [1]. The article also stated that the "authors of the alternative list received a warning of responsibility for "disinformation and panic over the coronavirus". According to a 18 February 2021 article, Tajikistan's Health Minister Jamoliddin Abdullozoda ("Abdullozoda") has been accused of lying when he told journalists on 12 February 2021 that the Government of Tajikistan had provided "completely free healthcare" for patients with COVID-19. The article states that patients were not charged for a hospital bed, but most had to pay relatively high fees for treatment [2]. However, there is no evidence of misinformation about the infectious disease from senior leaders.


3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a
Percentage of households with Internet
Input number
Current Year Score: 21.96

2019
International Telecommunication Union (ITU)

3.6.2 Mobile subscribers

3.6.2a
Mobile-cellular telephone subscriptions per 100 inhabitants
Input number
Current Year Score: 111.53

2019
International Telecommunication Union (ITU)

3.6.3 Female access to a mobile phone

3.6.3a
Percentage point gap between males and females whose home has access to a mobile phone
Input number
Current Year Score: 18.0

2019
Gallup; Economist Impact calculation

3.6.4 Female access to the Internet

3.6.4a
Percentage point gap between males and females whose home has access to the Internet
Input number
3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a
In the past year, has the country issued a restriction, without international/bilateral support, on the export/import of medical goods (e.g. medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak?
Yes = 0 , No = 1

There is no evidence that Tajikistan has issued a restriction on the export / import of medical goods due to an infectious disease outbreak. Searches of the official websites of the Ministry of Healthcare and Social Protection of the Population (MoHSP), the Ministry of Agriculture, and the Ministry of Economic Development and Trade found no reference to any restrictions of this kind [1, 2, 3].

Similarly, searches of relevant news outlets found no reference to a trade restriction of this nature.


3.7.1b
In the past year, has the country issued a restriction, without international/bilateral support, on the export/import of non-medical goods (e.g. food, textiles, etc) due to an infectious disease outbreak?
Yes = 0 , No = 1

There is evidence that Tajikistan announced a temporary export ban on food products in the past year without international support.

The Republic of Tajikistan's COVID-19 Task Force announced a temporary export ban on agricultural products - including all grains, pulses, wheat and flour, rice, eggs, potatoes and all types of meat - in April 2020 "to protect public health and the safety of the population [1]. There is no evidence that the ban has since been lifted.

Searches of the official websites of the Ministry of Healthcare and Social Protection of the Population (MoHSP), the Ministry of Agriculture, and the Ministry of Economic Development and Trade found no further references to any restrictions of this kind [2, 3, 4].
3.7.2 Travel restrictions

3.7.2a
In the past year, has the country implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak?
Yes = 0, No = 1

Current Year Score: 0

There is evidence within the past year that Tajikistan has implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious diseases outbreak.

Tajikistan implemented a ban on travelers arriving to the country owing to fears surrounding the spread of COVID-19. On 10th April 2020, Tajikistan’s Ministry of Foreign Affairs announced temporary restrictions on the arrival and departure of foreign citizens [1].

The restriction outlined above was reported on by regional news outlets [2].

On 8 February 2020 Tajikistan completely closed all crossing points on its border with China, to people and to goods. [3]

On 2 March 2020 Tajikistan introduced a temporary ban on citizens of 35 states from entering the country, including for transit. [4]

On 3 March 2020 Tajikistan’s Ministry of Foreign Affairs officially advised citizens not to visit South Korea, Iran, Italy, Afghanistan, Japan and China. [5]

On 15 March 2020 Tajikistan completely closed all crossing points on its border with Afghanistan, to people and to goods. [6]

On 20 March 2020 all of Tajikistan’s airports were closed indefinitely to both departures and arrivals. [7] On 2 March 2021, local media announced that Tajikistan had resumed flights to Belarus, Kazakhstan and Afghanistan. The same article noted that regular flights to Turkey, Uzbekistan and UAE had also resumed, but that a decision regarding when regular flights to Russia would start again had no yet been made [8]

Tajikistan closed all border crossings with Uzbekistan and Kyrgyzstan on 23 and 24 March 2020 respectively, except to citizens of Tajikistan entering Tajikistan, foreign citizens leaving Tajikistan, diplomats, government delegations and drivers involved in the international transport of goods. [9, 10]

On 10 April 2020 Tajikistan introduced a temporary ban on foreign citizens entering or exiting Tajikistan, with the exception of diplomats, staff of intergovernmental organizations, crews of international aircraft, crews of international trains, and
drivers involved in the international transport of goods. [11, 12, 13] Foreign citizens in Tajikistan who do not fall into these categories but wish to leave the country may apply for special permission to do so. [11, 12].

Category 4: Sufficient and robust health sector to treat the sick and protect health workers

4.1 HEALTH CAPACITY IN CLINICS, HOSPITALS, AND COMMUNITY CARE CENTERS

4.1.1 Available human resources for the broader healthcare system

4.1.1a
Doctors per 100,000 people
Input number

Current Year Score: 210.26

2014

WHO; national sources

4.1.1b
Nurses and midwives per 100,000 people
Input number

Current Year Score: 475.34

2014

WHO; national sources

4.1.1c
Does the country have a health workforce strategy in place (which has been updated in the past five years) to identify fields where there is an insufficient workforce and strategies to address these shortcomings?
Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan has a health workforce strategy in place that has been updated in the past five years. According to a list of National Strategies included on the Ministry of Healthcare and Social Protection of the Population (MoHSSPP) website, Tajikistan’s most recent healthcare strategy was published in 2010 [1].

The official website of the Ministry of Education includes the Ministry’s National Development Strategy of the Republic of Tajikistan for the Period up to 2030 [2]. The strategy was published in 2016 and includes a section (4.2) on “Healthcare and Longevity” which does identify the need “to improve the system of training personnel and payment for healthcare services provision in health facilities”. The document does not, however, define a strategy to identify fields where there is insufficient workforce.
Searches found no evidence that Tajikistan’s Ministry of Labour and Social Protection of the Population operates an official website, although references to the Ministry’s activities were identified [3].


### 4.1.2 Facilities capacity

#### 4.1.2a

**Hospital beds per 100,000 people**

Input number

| Current Year Score: 467 |

2014

WHO/World Bank; national sources

#### 4.1.2b

**Does the country have the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit and/or patient isolation room/unit located within the country?**

Yes = 1 , No = 0

| Current Year Score: 0 |

There is no evidence that Tajikistan has the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit or patient isolation room or unit located within the country. The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. However, the report does not refer explicitly to Tajikistan’s capacity to isolate patients with highly communicable diseases in a biocontainment unit [1]. According to a list of clinical institutions published by the State Medical University of Tajikistan [2], there are only two institutions in the country that specialise in infectious diseases - The State Hospital for Infectious Diseases and the State Children’s Hospital for Infectious Diseases. Research found no evidence that either hospital operates a website and, as such, it was not possible to determine whether or not biocontainment patient care units are located within them. Research found several articles that described the quarantine conditions for citizens of Tajikistan that were suspected of having been infected with COVID-19. An article from May 2020 outlined three different hospitals in Dushanbe that were accepting patients with severe COVID-19 symptoms (namely, Karabolo Hospital, Istiklol Clinic, and the First Soviet Hospital) but did not include any specific detail about biocontainment units [2]. Similarly, an article from April 2020 which described the locations in which citizens of Tajikistan...
who were suspected of having been infected by COVID-19 were being kept [3]. The article describes 5 locations, two holiday camps for children, two sanatoria, and one hospital in Dushanbe. It does not appear from the article than any of the locations were equipped with biocontainment units. There is no evidence of such capacity the websites of the Ministry of Healthcare and Social Protection of the Population, or the Governmental Committee on Emergency Situations and Civil Defence [4, 5].


4.1.2c

Does the country meet one of the following criteria?
- Is there evidence that the country has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years?
- Is there evidence that the country has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years, or that it has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years. There is no such evidence on the websites of the Ministry of Healthcare and Social Protection or the Governmental Committee on Emergency Situations and Civil Defense. [1, 2]


4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

4.2.1 Routine health care and laboratory system supply

4.2.1a

Is there a national procurement protocol in place which can be utilized by the Ministries of Health and Agriculture for the acquisition of laboratory supplies (e.g. equipment, reagents and media) and medical supplies (e.g. equipment, PPE) for routine needs?
Yes for both laboratory and medical supply needs = 2, Yes, but only for one = 1, No = 0

**Current Year Score: 2**

Tajikistan has a national procurement protocol in place that can be used by the ministries responsible for health and agriculture to acquire both laboratory and medical supplies. Tajikistan's national procurement procedure is governed by the 2006 Law on State Procurement of Goods, Labour and Services and the 2008 Regulations on State Procurement Procedures [1, 2]. These two items of legislation apply to all state procurement carried out in the territory of Tajikistan, with the exception of that intended to respond to an emergency situation or to protect national security, state secrets, precious metals or precious stones [1, 2]. State institutions – including both the Ministry of Healthcare and Social Protection, and the Ministry of Agriculture as institutions that are "established by the Government of Tajikistan – can use the procurement process if they meet qualification criteria, such as having a stable financial situation and qualified purchasing specialists [1]. Vendors are also required to have a good financial situation and domestic vendors are given preference over foreign ones [1].

Procurement can be carried out by the following methods: bidding with unlimited participants, bidding with limited participants, the "short list" method for consulting services, requests for quotes, purchases from single sources and e-procurement [1, 2]. The procurement process is usually conducted in Tajik, but if necessary can be in Russian or English [1].

The procurement system is overseen and co-ordinated by the Agency on State Purchases of Goods, Works and Services under the Government of Tajikistan [1]. The online e-procurement platform shows evidence of use to obtain laboratory needs: the National Reference Laboratory placed a tender for diagnostic chemical reagents and consumable products, while the National Laboratory of Public Health placed a tender for medical clothing [3]. Both of these laboratories are under the Ministry of Healthcare and Social Protection of the Population [4]. According to the official website of the Government Agency for State Procurement, on 24 December 2020, the government of Tajikistan purchased medicines for the needs of the Central District Hospital of the Dusty district of Dushanbe and on 23 December 2020 purchased medicines for the needs of the Regional Endocrinological Centre of the Sogd Region [5, 6]. There is also evidence that the Enterprise for the Improvement of Breeds and Artificial Insemination of Agricultural Animals of the Republic of Tajikistan procured "vaccines and veterinary drugs" in March 2018, however it is not clear whether or not this enterprise works within the structure of the Ministry of Agriculture [7, 8].


4.2.2 Stockpiling for emergencies

4.2.2a
Does the country have a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency?
Yes = 2, Yes, but there is limited evidence about what the stockpile contains = 1, No = 0

Current Year Score: 2

There is evidence that Tajikistan has a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency.

The Republic of Tajikistan completed a Joint External Evaluation (JEE) in October 2019. According to the report (page 46), "national stockpiles of emergency supplies are available in several regions, including medicines and medical and sanitary equipment". The report also noted that "all medical facilities in the country are obliged by law to maintain a 30-day stockpile of medical supplies [1]. According to the World Health Organization's 2013 report on Tajikistan’s health-system crisis preparedness, the National Immunization Center maintains reserves of vaccines for use in emergencies, while the Committee of Emergency Situations and Civil Defense has a warehouse with essential reserves, including medicines as well as other essential commodities such as food and tents, and pharmaceuticals (including humanitarian donations), which are stocked at the National Procurement Center warehouse in Dushanbe. Nonetheless, the report concludes that emergency stockpiles are limited due to financial constraints [2]. It contains no information on stockpiles of personal protective equipment. The same report also states that during emergencies private pharmacies can be asked to provide required pharmaceuticals on a voluntary basis, but there is no evidence of a formal agreement to this effect [2, 3, 4, 5].


4.2.2b
Does the country have a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency?
Yes = 2, Yes, but there is limited evidence about what the stockpile contains = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Tajikistan has a stockpile of laboratory supplies for national use during a public health emergency.
Tajikistan's Joint External Evaluation (JEE), which was completed in October 2019, reports that "all medical facilities in the country are obliged by law to have a 30-day stockpile of medical supplies", but does not mention what these supplies consist of. The JEE did not highlight any concerns with regards to the stockpiling of laboratory supplies [1].

According to the World Health Organization's 2013 Health-System Crisis Preparedness Report on Tajikistan, at the time "the capacity and capability of public health laboratories to perform diagnostics in compliance with international standards [needed] to be strengthened" [2]. This report also noted that the National Immunization Center maintained reserves of vaccines for use in emergencies, while the Committee of Emergency Situations and Civil Defence had a warehouse with essential reserves, including medicines as well as other essential commodities such as food and tents, while pharmaceuticals (including humanitarian donations) were stocked at the National Procurement Center warehouse in Dushanbe. Nonetheless, the report concludes that emergency stockpiles were limited due to financial constraints [3]. The report contains no information on stockpiles of laboratory supplies.

There is no evidence of laboratory supply stockpiles on the websites of the Ministry of Healthcare and Social Protection of the Population, the Governmental Committee on Emergency Situations and Civil Defense, or the Ministry of Defence. [4, 5, 6]

4.2.2c

Is there evidence that the country conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tajikistan conducts or requires an annual review of the national stockpile to ensure the supply is sufficient in the event of a national emergency. Tajikistan's 2006 Law on State Procurement of Goods, Labour and Services does not mention a requirement to review the national stockpile to ensure supply in the event of an emergency [1]. The same is true for the 2008 Regulations on State Procurement Procedures published by Tajikistan's Ministry of Economic Development and Trade [2]. There is no evidence of stockpile reviews being required or conducted on the websites of Tajikistan's Ministry of Healthcare and Social Protection or the Governmental Committee on Emergency Situations and Civil Defense [3, 4].

4.2.3 Manufacturing and procurement for emergencies

4.2.3a Does the country meet one of the following criteria?
- Is there evidence of a plan/agreement to leverage domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency?
- Is there evidence of a plan/mechanism to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency?

Needs to meet at least one of the criteria to be scored a 1 on this measure. Yes for both = 1, Yes for one = 1, No for both = 0

Current Year Score: 0

There is no evidence that Tajikistan has in place a plan/agreement to leverage domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE), nor is there evidence of a plan/mechanism to procure medical supplies during a public health emergency.

Relevant legislation passed by Tajikistan’s government relating to production and procurement of goods does not refer to any specific plan/agreement/mechanism to produce or procure medical supplies during an emergency [1, 2, 3]. Tajikistan’s National Disaster Risk Reduction Strategy for 2019-2030 does not make any reference to the procurement of medical supplies [4]. According to the WHO Health-System Crisis Preparedness Report on Tajikistan (September 2013), "no budget is dedicated exclusively to emergency situations for procuring drugs or fuel for transport of items". The report also notes that "private pharmacies can be asked to provide required pharmaceuticals on a voluntary basis in an emergency situation" [5]. There is, however, no reference to a particular plan/agreement to leverage domestic manufacturing to produce or procure medical supplies during a public health emergency. The United Nations’ Integrated Socioeconomic Response Framework to COVID-19 (ISEF) for Tajikistan noted Tajikistan’s limited quantity of medical supplies and the disrupted supply chains.

Financial support provided by the United Nations to help Tajikistan deal with the COVID-19 epidemic did not include any reference to a possibility to leverage domestic manufacturing or a plan/mechanism to procure medical supplies during that particular public health emergency [6]. There is no evidence on the websites of the Ministry of Healthcare and Social Protection of the Population, the Governmental Committee on Emergency Situations and Civil Defense, or the Ministry of Defense. [7,8,9]

4.2.3b

Does the country meet one of the following criteria?
- Is there evidence of a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies (e.g., reagents, media) for national use during a public health emergency?
- Is there evidence of a plan/mechanism to procure laboratory supplies (e.g., reagents, media) for national use during a public health emergency?

Needs to meet at least one of the criteria to be scored a 1 on this measure. Yes for both = 1, Yes for one = 1, No for both = 0

Current Year Score: 0

There is no evidence that Tajikistan has in place a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies, nor is there evidence of a plan/mechanism to procure laboratory supplies during a public health emergency. Relevant legislation passed by the Tajikistan Government relating to production/procurement of goods does not refer to any specific plan/agreement/mechanism to produce or procure laboratory supplies during an emergency [1, 2, 3]. Tajikistan's National Disaster Risk Reduction Strategy for 2019-2030 does not make any reference to the procurement of laboratory supplies [4]. According to the WHO Health-System Crisis Preparedness Report on Tajikistan (September 2013), "no budget is dedicated exclusively to emergency situations for procuring drugs or fuel for transport of items". The report also noted that "private pharmacies can be asked to provide required pharmaceuticals on a voluntary basis in an emergency situation" [5]. There is, however, no reference to a particular plan/agreement to leverage domestic manufacturing to produce / procure laboratory supplies during a public health emergency. The UN's Integrated Socioeconomic Response Framework to COVID-19 (ISEF) for Tajikistan noted Tajikistan's limited quantity of medical supplies and the disrupted supply chains. Financial support provided by the UN to help Tajikistan deal with the COVID-19 epidemic did not include any reference to a possibility to leverage domestic manufacturing or a plan/mechanism to procure laboratory supplies during that particular public health emergency [6]. There is no evidence on the websites of the Ministry of Healthcare and Social Protection of the Population, the Governmental Committee on Emergency Situations and Social Defence, or the Ministry of Defense. [7,8,9]

4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

4.3.1 System for dispensing medical countermeasures (MCM) during a public health emergency

4.3.1a Does the country have a plan, program, or guidelines in place for dispensing medical countermeasures (MCM) for national use during a public health emergency (i.e., antibiotics, vaccines, therapeutics and diagnostics)?

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Tajikistan has a plan in place for dispensing medical countermeasures during a public health emergency.

There is no evidence of such a plan on the websites of the Ministry of Healthcare and Social Protection of the Population or the Governmental Committee on Emergency Situations and Civil Defence [1, 2].

According to Tajikistan’s Joint External Evaluation (JEE), which was completed in October 2019, the country has developed and tested its capacity for the deployment and use of medical countermeasures during public health emergencies [3]. The JEE also notes that "a system of health personnel has also been developed and tested, thus ensuring that Tajikistan is has a plan to dispense medical countermeasures as well as distribute them", but the JEE does not explain what this means. There is no further evidence that Tajikistan has in fact developed and tested its capacity for the deployment and use of medical countermeasures during public health emergencies.

According to the World Health Organization’s (WHO) 2013 report on Tajikistan’s health-system crisis preparedness, medical countermeasures for use during public health emergencies are stored variously at the Committee of Emergency Situations and Civil Defence’s warehouse, the National Procurement Centre’s warehouse and the National Immunization Centre. The report also states that private pharmacies can be asked to provide required pharmaceuticals on a voluntary basis during emergencies [4]. Although this report does not mention any plan for dispensing medical countermeasures, it states that during emergencies medical countermeasures can be transported to the necessary location via ambulances owned by the Ministry of Healthcare and Social Protection of the Population. However, it also notes that there is no budget dedicated to
providing fuel for this transportation and that no emergency fuel stocks are kept [4].


4.3.2 System for receiving foreign health personnel during a public health emergency

4.3.2a

Is there a public plan in place to receive health personnel from other countries to respond to a public health emergency?
Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tajikistan has a plan in place for receiving health personnel from other countries to respond to a public health emergency.

The Rapid Emergency Assessment and Co-ordination Team (REACT), within the Committee on Emergency Situations and Civil Defence, acts as a co-ordination body for all actors in the field of disaster-related assistance, including foreign non-governmental organizations, foreign states and intergovernmental organizations [1, 2, 3]. The mechanism regularly brings together relevant stakeholders to co-ordinate and share experiences related to disaster preparedness, response and mitigation [3]. During emergencies it works to co-ordinate the response and assistance provided by different actors [3]. REACT is described as having responsibility for "natural and industrial disasters", a term defined by the Law on Protecting the Population and Territory from Natural and Industrial Disasters in such a way that it would include public health emergencies [4, 5]. Furthermore, REACT is explicitly described as working on the health sector's disaster preparedness and in 2014 the body issued a report on the risk of dysentery and malaria epidemics [6, 7].

However, in 2013 the World Health Organization described the regulations for receiving health personnel from abroad during emergencies as insufficient [2]. On the websites of the Ministry of Healthcare and Social Protection of the Population, the Ministry of Defence and the Governmental Committee on Emergency Situations and Civil Defence there is no evidence of detailed plans or regulations for such practicalities as facilitating visas and travel [8, 9, 10].

4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a Does the constitution explicitly guarantee citizens’ right to medical care?

<table>
<thead>
<tr>
<th>Guarantee Type</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guaranteed free</td>
<td>4</td>
</tr>
<tr>
<td>Guaranteed right</td>
<td>3</td>
</tr>
<tr>
<td>Aspirational or subject to progressive realization</td>
<td>2</td>
</tr>
<tr>
<td>Guaranteed for some groups, not universally</td>
<td>1</td>
</tr>
<tr>
<td>No specific provision</td>
<td>0</td>
</tr>
</tbody>
</table>

Current Year Score: 4

2020

World Policy Analysis Center

4.4.1b Access to skilled birth attendants (% of population)

Current Year Score: 94.8

2017


4.4.1c Out-of-pocket health expenditures per capita, purchasing power parity (PPP; current international $)

Input number
Current Year Score: 146.15

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a
Are workers guaranteed paid sick leave?
Paid sick leave = 2, Unpaid sick leave = 1, No sick leave = 0

Current Year Score: 2

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a
Has the government issued legislation, a policy, or a public statement committing to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency?
Yes = 1, No = 0

Current Year Score: 0

There is no evidence of any legislation, policy or public statement committing to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency. There is no evidence of such legislation, policies or statements on the website of the Ministry of Healthcare and Social Protection (MoHSPP) [1]. The 2017 Healthcare Code (a wide-ranging law relating to healthcare) states that healthcare workers have the right to compensation for any sickness that might result from their work, but does not mention prioritized treatment [2]. According to articles 15 and 21 of the 2005 Law on Emergency Rescue Services, Rescue Teams and the Status of Rescuers, rescue workers who sustain illness or injury in the course of their work are entitled to free healthcare [3]. The law’s definition of rescue workers includes those working to counter the health effects of an emergency. However, the law does not mention prioritized healthcare. According to a December 2020 announcement made by Jamoliddin Abdullozoda (Minister of Healthcare and Social Protection) and published on the MoHSPP website, medical personnel were included in the group of citizens set to be given a COVID-19 vaccine [4].

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a
Is there a system in place for public health officials and healthcare workers to communicate during a public health emergency?
Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Tajikistan has a system in place for public health officials and healthcare workers to communicate during a public health emergency.

There is no evidence of such a system on the website of the Ministry of Healthcare and Social Protection of the Population or the Governmental Committee on Emergency Situations and Civil Defence [1, 2].

According to Tajikistan’s Joint External Evaluation (JEE) from October 2019, there are risk communication systems for unusual and unexpected events and emergencies. The JEE report also notes that "in the event of a public health emergency, communication mechanisms are in place to notify the superior administrative level in a timely manner and activate control and response measures at the respective levels and as appropriate" [3]. The report also recommends that emergency response coordination should be tested through simulation exercises. It does not mention the existence of a system for public health officials and healthcare workers to communicate.


4.5.1b
Does the system for public health officials and healthcare workers to communicate during an emergency encompass healthcare workers in both the public and private sector?
Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Tajikistan has a system in place for public health officials and healthcare workers to communicate during a public health emergency.

There is no evidence of such a system on the website of the Ministry of Healthcare and Social Protection of the Population or
According to Tajikistan’s Joint External Evaluation (JEE) from October 2019, there are risk communication systems for unusual and unexpected events and emergencies. The JEE report also notes that "in the event of a public health emergency, communication mechanisms are in place to notify the superior administrative level in a timely manner and activate control and response measures at the respective levels and as appropriate" [3]. The report also recommends that emergency response coordination should be tested through simulation exercises. It does not mention the existence of a system for public health officials and healthcare workers to communicate.


4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

4.6.1 Healthcare associated infection (HCAI) prevention and control programs

4.6.1a

Is there evidence that the national public health system is monitoring for and tracking the number of healthcare associated infections (HCAI) that take place in healthcare facilities?

Yes = 1, No = 0

Current Year Score: 0

There is not sufficient evidence that the national public health system in Tajikistan is monitoring for and tracking the number of healthcare-associated infections (HCAIs) that take place in healthcare facilities.

According to Tajikistan’s Joint External Evaluation (JEE) from October 2019, there is some surveillance for the detection of anti-microbial resistance in humans being conducted by hospital-based laboratories in the country [1]. The JEE also reports that, in 2014, "National Guidelines for the Prevention of Infections in Medical Facilities of the Republic of Tajikistan" were approved by an order of the Ministry of Healthcare and Social Protection of the Population and supported by a professional development programme for medical workers, and that selected healthcare facilities implement the guidelines. [1] However, the JEE does not describe the contents of these guidelines, and there is no evidence of them online. The JEE does not make any further mentions of monitoring HCAIs. [1]

There is no further evidence of monitoring or tracking of HCAIs on the website of the Ministry of Healthcare and Social Protection of the Population (MoHSPP), in the National Action Plan to Tackle Antimicrobial Resistance, on the World Health Organization (WHO) website or in the WHO's 2010 or 2016 reviews of Tajikistan's health system [2, 3, 4, 5, 6]. The 2016 health system review mentions that many healthcare facilities do not adequately follow infection-prevention measures [6].

4.7 CAPACITY TO TEST AND APPROVE NEW MEDICAL COUNTERMEASURES

4.7.1 Regulatory process for conducting clinical trials of unregistered interventions

4.7.1a

Is there a national requirement for ethical review (e.g., from an ethics committee or via Institutional Review Board approval) before beginning a clinical trial?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that an ethical review is required before beginning a clinical trial.

Article 65 of the 2017 Healthcare Code (a general law on diverse aspects of healthcare) states that clinical trials can only be conducted with the subject’s written consent and with special permission from the relevant state organ [1]. It also states that clinical trials must be interrupted whenever the subject asks or if there is any threat to his or her health. Article 26 of the 2001 Law on Medicine and Pharmaceutical Activities (which regulates the development, manufacture, preclinical and clinical trials, quality control, effectiveness, safety and sale of medicine) states that a clinical trial is approved by the relevant state organ on the basis of a statement by the pharmaceutical company, a report, a positive opinion on preclinical testing and instructions on the drug’s usage [2]. The same article also states that clinical trials can only be carried out at institutions that have been granted special permission by the Ministry of Healthcare and Social Protection of the Population.

Neither of the aforementioned laws mention a requirement for ethical reviews and there is no evidence of such a requirement on the website of the Ministry of Healthcare and Social Protection of the Population [1, 2, 3].

4.7.1b
Is there an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics?
Yes = 1, No = 0
Current Year Score: 0

There is no evidence of an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics.

No evidence of such a process could be found on the website of the Ministry of Healthcare and Social Protection of the Population, in the 2017 Healthcare Code (Tajikistan’s main piece of healthcare legislation) or in the 2001 Law on Medicine and Pharmaceutical Activities (which regulates the development, manufacture, preclinical and clinical trials, quality control, effectiveness, safety and sale of medicine) [1, 2, 3].


4.7.2 Regulatory process for approving medical countermeasures

4.7.2a
Is there a government agency responsible for approving new medical countermeasures (MCM) for humans?
Yes = 1, No = 0
Current Year Score: 1

There is a government agency responsible for approving new medical countermeasures for humans.

According to article 6 of the 2001 Law on Medicine and Pharmaceutical Activities (which regulates the development, manufacture, preclinical and clinical trials, quality control, effectiveness, safety and sale of medicine), the Ministry of Healthcare and Social Protection of the Population has the following responsibilities in relation to "medicines and medical products": authorizing them for sale and use; examining their quality, efficacy and safety; registering them [1]. Article 3 of the same law defines the term "medicine" as including all substances obtained from organic sources or produced synthetically that are used for the prevention, diagnosis or treatment of diseases or for the prevention of pregnancy. It further defines "medical products" as products or materials used in medical practice to diagnose, treat or prevent illness, including for example bandages, medical technology and items for patient care.

According to article 26 of the same law, the Ministry of Healthcare and Social Protection of the Population also gives institutions permission to conduct clinical trials. The law does not mention any specific department within the Ministry and the Ministry’s website does not clearly indicate which department might have these responsibilities [1, 2]. There is one
department listed on the Ministry’s website that has a name suggesting it may be responsible for approving medical countermeasures â€” the Directorate of Pharmacy and Medical Products â€” but there is no publicly available information about this department’s responsibilities [2, 3].


4.7.2b
Is there an expedited process for approving medical countermeasures (MCM) for human use during public health emergencies?
Yes = 1 , No = 0

Current Year Score: 1

Tajikistan has an expedited process for approving medical countermeasures for human use during public health emergencies. According to the 2009 Regulations on Import and Export of Medicine, Medical Goods, Narcotics, Psychotropic Substances and Precursors Used in Medicine, during emergencies (including natural disasters, epidemics and outbreaks of infectious diseases) the Ministry of Healthcare and Social Protection of the Population may allow one-time importation of medicine and other medical goods that are not registered in Tajikistan [1]. This document uses the definitions given in the 2001 Law on Medicine and Pharmaceutical Activities [1]. Medicine is defined as including all substances obtained from organic sources or produced synthetically that are used for the prevention, diagnosis or treatment of diseases or for the prevention of pregnancy. It further defines “medical products” as products or materials used in medical practice to diagnose, treat or prevent illness, including for example bandages, medical technology and items for patient care [2]. Medical goods are defined as products and materials used in medical practice for the diagnosis, treatment or prevention of diseases [2]. On 20 May 2020, during the COVID-19 pandemic, Tajikistan’s president declared that the authorities involved in approving the import of drugs and medical equipment should “work around the clock, so that the population is provided with medicine and medical equipment in a timely manner”. [3] However, there is no evidence that this has translated into any concrete measures. According to the website of the Ministry of Healthcare and Social Protection of the Population, Tajikistan has joined the Gavi COVAX Advanced Market Commitment mechanism to make COVID-19 vaccines available to lower-income countries [4]. In addition, an announcement was made on 4 March 2021 that the necessary measures had been taken in Tajikistan to receive and administer the AstraZenika vaccine, specifically to people entering the country, thus providing further evidence that an expedited process for approving medical countermeasures does exist in Tajikistan [5].

Category 5: Commitments to improving national capacity, financing plans to address gaps, and adhering to global norms

5.1 INTERNATIONAL HEALTH REGULATIONS (IHR) REPORTING COMPLIANCE AND DISASTER RISK REDUCTION

5.1.1 Official IHR reporting

5.1.1a
Has the country submitted IHR reports to the WHO for the previous calendar year?
Yes = 1, No = 0

Current Year Score: 0

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a
Are epidemics and pandemics integrated into the national risk reduction strategy or is there a standalone national disaster risk reduction strategy for epidemics and pandemics?
Yes = 1, No = 0

Current Year Score: 0

There is no evidence that epidemics and pandemics are integrated into the national risk reduction strategy of Tajikistan.
Pandemics were integrated into Tajikistan's previous national risk reduction strategy (2010-2015) [1]. The country's more recently published National Disaster Risk Reduction Strategy for 2019-2030 does not include references to epidemics or pandemics [2]. Instead, the new strategy refers to the need to "build resilience capacity of the health care system, including by integration of disaster risk management".

The previous risk reduction strategy (2010-2015) named four main categories of hazard to which Tajikistan is prone: hydrological/meteorological, geological, technological and biological. The biological category is defined as including epidemics, epizootics and epiphytotics. Correspondingly, epidemics are addressed throughout the document [1].

There is no further evidence that epidemics and pandemics are integrated into the national risk reduction strategy of Tajikistan on the official websites of the Ministry of Healthcare and Social Protection of the Population and the Government Committee on Emergency Situations and Civil Defence [4, 5].


5.2 CROSS-BORDER AGREEMENTS ON PUBLIC HEALTH AND ANIMAL HEALTH EMERGENCY RESPONSE

5.2.1 Cross-border agreements

5.2.1a Does the country have cross-border agreements, protocols, or MOUs with neighboring countries, or as part of a regional group, with regards to public health emergencies?

Yes = 2, Yes, but there is evidence of gaps in implementation = 1, No = 0

Current Year Score: 2

Tajikistan has cross-border agreements and protocols with neighboring countries and as part of a regional group with regards to public health emergencies, and there is no evidence of gaps in implementation.

Together with Kazakhstan, Kyrgyzstan and Uzbekistan, Tajikistan is party to an Agreement on Co-operation in the Sphere of Emergency Prevention and Response. This agreement lays out a framework for the four Central Asian states to provide one another with assistance during emergencies. It is, however, general to all emergencies and does not make any specific mention of public health emergencies, but its definition of emergencies implicitly includes public health emergencies [2].

The Republic of Tajikistan is a member of the CIS Health Cooperation Council, the aim of which is "to promote comprehensive
cooperation of the Commonwealth member states in the field of health protection and ensuring the sanitary and epidemiological well-being of the population”. Members of the CIS Health Cooperation Council are required to provide information about the state of public health in the territory in the event of epidemics and other emergency situations. In addition, member states are tasked with coordinating medical training, information on requirements to produce medical equipment, as well as cooperation to solve problems in international health policy [1]. Neighbouring countries to Tajikistan that also participate in the CIS Health Cooperation Council are Kyrgyzstan and Uzbekistan.

As a member of the Commonwealth of Independent States, Tajikistan shares information on emergencies with other CIS members [3]. It should however be noted that this information sharing pertains to emergencies in general and that the treaty governing it neither provides any definition of emergencies nor specifically mentions public health emergencies or any examples thereof. Furthermore, the Order on Organizing the Interaction of CIS Member States in Eliminating the Consequences of Natural and Manmade Emergencies lays out a procedure for CIS members to request and provide one another with assistance in the face of emergencies [4]. Again, it should be noted that this document concerns emergencies in general and does not define emergencies or specifically mention public health emergencies. Tajikistan also has access to the CIS Health Cooperation Council. This body facilitates multilateral cooperation between CIS member states in the field of public health, including policy coordination in preventing infectious diseases and minimizing the medical consequences of disasters [5].

Tajikistan also has a bilateral agreement on emergency assistance with Ukraine [6].

There is no additional evidence of any relevant agreements specific to public health emergencies on the websites of the Ministry of Healthcare and Social Protection of the Population or the Governmental Committee on Emergency Situations and Civil Defence [7, 8].

5.2.1b

Does the country have cross-border agreements, protocols, or MOUs with neighboring countries, or as part of a regional group, with regards to animal health emergencies?

Yes = 2, Yes, but there is evidence of gaps in implementation = 1, No = 0

Current Year Score: 0

There is no evidence of cross-border agreements, protocols or MOUs with neighboring countries, or as part of a regional group, with regards to animal health emergencies.

Although Tajikistan is a member of the CIS Health Cooperation Council, there is no evidence that the aims of the Council extend to animal health emergencies [1].

Tajikistan is a member of the West Eurasia Foot-and-Mouth Disease (FMD) Roadmap, set up by the Food and Agriculture Organisation [2]. The FAO website explains that one of the "pillar objectives" of the European Commission for the Control of Foot-and-Mouth Disease (EuFMD) is to "improve preparedness for management of Foot-and-Mouth and Similar Transboundary (FAST) disease crises" [3]. It does not appear, however, that the commission has any sort of agreement, protocol or MOU that deals with animal health emergencies specifically.

There is no evidence of such agreements on the website of the Ministry of Healthcare and Social Protection, the Ministry of Foreign Affairs or the Governmental Committee on Emergency Situations and Civil Defence [4, 5, 6].


5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

Does the county have signatory and ratification (or same legal effect) status to the Biological Weapons Convention?

Signed and ratified (or action having the same legal effect) = 2, Signed = 1, Non-compliant or not a member = 0

Current Year Score: 2
2021

Biological Weapons Convention

5.3.1b
Has the country submitted confidence building measures for the Biological Weapons Convention in the past three years?
Yes = 1, No = 0

   Current Year Score: 1

2021

Biological Weapons Convention

5.3.1c
Has the state provided the required United Nations Security Council Resolution (UNSCR) 1540 report to the Security Council Committee established pursuant to resolution 1540 (1540 Committee)?
Yes = 1, No = 0

   Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d
Extent of United Nations Security Council Resolution (UNSCR) 1540 implementation related to legal frameworks and enforcement for countering biological weapons:
Very good (60+ points) = 4, Good (45–59 points) = 3, Moderate (30–44 points) = 2, Weak (15–29 points) = 1, Very weak (0–14 points) or no matrix exists/country is not party to the BWC = 0

   Current Year Score: 3

2021

Biological Weapons Convention

5.3.2 Voluntary memberships

5.3.2a
Does the country meet at least 2 of the following criteria?
- Membership in Global Health Security Agenda (GHSA)
- Membership in the Alliance for Country Assessments for Global Health Security and IHR Implementation (JEE Alliance)
- Membership in the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction (GP)
- Membership in the Australia Group (AG)
- Membership in the Proliferation Security Initiative (PSI)
Needs to meet at least two of the criteria to be scored a 1 on this measure. Yes for five = 1, Yes for four = 1, Yes for three = 1, Yes for two = 1, Yes for one = 0, No for all = 0

Current Year Score: 0

2021

Global Health Security Agenda; JE Alliance; Global Partnership; Australia Group; PSI

5.4 JOINT EXTERNAL EVALUATION (JEE) AND PERFORMANCE OF VETERINARY SERVICES PATHWAY (PVS)

5.4.1 Completion and publication of a Joint External Evaluation (JEE) assessment and gap analysis

5.4.1a
Has the country completed a Joint External Evaluation (JEE) or precursor external evaluation (e.g., GHSA pilot external assessment) and published a full public report in the last five years?
Yes = 1, No = 0

Current Year Score: 1

2021

WHO Strategic Partnership for IHR and Health Security (SPH); Global Health Security Agenda

5.4.1b
Has the country completed and published, within the last five years, either a National Action Plan for Health Security (NAPHS) to address gaps identified through the Joint External Evaluation (JEE) assessment or a national GHSA roadmap that sets milestones for achieving each of the GHSA targets?
Yes = 1, No = 0

Current Year Score: 0

2021

WHO Strategic Partnership for IHR and Health Security (SPH); Global Health Security Agenda

5.4.2 Completion and publication of a Performance of Veterinary Services (PVS) assessment and gap analysis

5.4.2a
Has the country completed and published a Performance of Veterinary Services (PVS) assessment in the last five years?
Yes = 1, No = 0

Current Year Score: 1
2021

OIE PVS assessments

5.4.2b

Has the country completed and published a Performance of Veterinary Services (PVS) gap analysis in the last five years?
Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5 FINANCING

5.5.1 National financing for epidemic preparedness

5.5.1a

Is there evidence that the country has allocated national funds to improve capacity to address epidemic threats within the past three years?
Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tajikistan has allocated national funds to improve capacity to address epidemic threats within the past three years, aside from funding as part of the country’s COVID-19 response plan.

In 2016, the Ministry of Education of Tajikistan published its National Development Strategy of the Republic of Tajikistan for the Period up to 2030. The document notes the need to build capacity in the healthcare system, including improvements to the national surveillance system and response to an epidemic [1]. The document does not, however, outline explicitly the allocation of national funds to implement this part of the National Development Strategy.

In August 2020, the Government of Tajikistan published its Emergency COVID-19 Project: Environment and Social Management Framework (ESMF). The executive summary of the project notes that the project consists of four component parts. Component 1 is described as “strengthening intensive care capacity” and notes that US$ 6.3 million should be allocated to finance the procurement of medical supplies and equipment to aid the emergency response to COVID-19 [2].

There is no further evidence that Tajikistan has allocated national funds to improve capacity to address epidemic threats within the past three years on the websites of the Ministry of Healthcare and Social Protection of the Population or the Government Committee on Emergency Situations and Civil Defence [3, 4].

5.5.2 Financing under Joint External Evaluation (JEE) and Performance of Veterinary Services (PVS) reports and gap analyses

5.5.2a
Does the Joint External Evaluation (JEE) report, National Action Plan for Health Security (NAPHS), and/or national GHSA roadmap allocate or describe specific funding from the national budget (covering a time-period either in the future or within the past five years) to address the identified gaps?
Yes = 1, No/country has not conducted a JEE = 0
Current Year Score: 0

2021

WHO Strategic Partnership for IHR and Health Security (SPH); Global Health Security Agenda

5.5.2b
Does the Performance of Veterinary Services (PVS) gap analysis and/or PVS assessment allocate or describe specific funding from the national budget (covering a time-period either in the future or within the past five years) to address the identified gaps?
Yes = 1, No/country has not conducted a PVS = 0
Current Year Score: 0

2021

OIE PVS assessments

5.5.3 Financing for emergency response

5.5.3a
Is there a publicly identified special emergency public financing mechanism and funds which the country can access in the face of a public health emergency (such as through a dedicated national reserve fund, an established agreement with the World Bank pandemic financing facility/other multilateral emergency funding mechanism, or other pathway identified through a public health or state of emergency act)?
Yes = 1, No = 0
Current Year Score: 1

There are funds that Tajikistan can access in the face of a public health emergency.

Tajikistan is one of the 75 countries eligible for financial support from the International Development Association [1]. As such, it can access the World Bank Pandemic Emergency Financing Facility [2]. According to the World Bank website, on 11 February 2021 Tajikistan was approved funding of US$ 8.63 million and US$ 12.57 million to prevent, prepare and respond to...
the COVID-19 pandemic [3].

Furthermore, Tajikistan maintains its own extra-budgetary Fund for Eliminating the Consequences of Emergencies [4, 5]. This fund is funded through mandatory quarterly contributions from Tajikistan’s state and private companies [5]. It can be used to pay for social care for people affected by emergencies, equipment necessary for responding to emergencies and any unforeseen costs in emergency response [5]. The fund's maintenance is the responsibility of the Main State Tax Authority, while its use is the responsibility of the State Commission of Emergency Situations [5].


5.5.4 Accountability for commitments made at the international stage for addressing epidemic threats

5.5.4a

Is there evidence that senior leaders (president or ministers), in the past three years, have made a public commitment either to:
- Support other countries to improve capacity to address epidemic threats by providing financing or support?
- Improve the country’s domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity?

Needs to meet at least one of the criteria to be scored a 1 on this measure. Yes for both = 1, Yes for one = 1, No for both = 0

Current Year Score: 0

There is insufficient evidence that senior leaders in Tajikistan have, in the past three years, made a public commitment to improve the country’s domestic capacity to address epidemic threats by expanding financing to improve capacity, but not that they have made a public commitment to support other countries to improve capacity to address epidemic threats.

On 3 June 2018 President Emomali Rahmon expressed commitment to continue improving Tajikistan’s healthcare system, including the capacity to combat infectious diseases. [1] However, this statement appears more geared toward diseases of domestic concern such as malaria and tuberculosis, rather than concerns over controlling future pandemics. [1].

Although there is insufficient evidence of additional statements, there is evidence of commitments to improve the health system more broadly. Furthermore, the Global Health Security Funding Tracking Dashboard Funding Tracking Dashboard indicates that between 2014 and 2020 donors committed to provide Tajikistan with USD 521.67 million and actually disbursed USD 347.96 million. [2] In addition, in May 2020 the president of Tajikistan, Emomali Rakhmon, allocated US$ 1.23 million from the President Reserve Fund in order to provide additional payments to the salaries of doctors [3].
There is no further evidence from the past 3 years of Tajikistan's senior leaders committing to support other countries to improve capacity to address epidemic threats on the websites of the Ministry of Healthcare and Social Protection of the Population or Ministry of Foreign Affairs [4, 5].


5.5.4b

Is there evidence that the country has, in the past three years, either:
- Provided other countries with financing or technical support to improve capacity to address epidemic threats?
- Requested financing or technical support from donors to improve the country’s domestic capacity to address epidemic threats?

Needs to meet at least one of the criteria to be scored a 1 on this measure., Yes for both = 1, Yes for one = 1, No for both = 0

Current Year Score: 1

There is evidence that Tajikistan has, in the past 3 years, invested finances to improve the country's domestic capacity to address epidemic threats, but not that it has invested finances or provided technical support to other countries to improve capacity to address epidemic threats.

According to the Georgetown Infectious Disease Atlas (GIDA), in 2018 Tajikistan invested US$ 51.03 million in emergency response operations, and US$ 5.84 million on immunization, as well as smaller sums on surveillance, biosafety, biosecurity, the national laboratory system, and workforce development [1].

The Global Health Security Funding Tracking Dashboard indicates that, between 2014 and 2020, donors committed to provide Tajikistan with USD 521.67 million, and actually disbursed USD 347.96 million [2].

In December 2020, in the context of the COVID-19 pandemic, the United States Agency for International Development (USAID) announced that it was providing Tajikistan with US$ 2.6 million to support medical oxygen systems [3]. USAID also has an ongoing programme, launched in February 2015, to help Tajikistan improve its capacity to control tuberculosis [3, 4, 5].

There is no evidence of Tajikistan supporting other countries to improve capacity to address epidemic threats in the past three years on the websites of the Ministry of Healthcare and Social Protection of the Population or the Ministry of Foreign Affairs [6, 7].

5.5.4c
Is there evidence that the country has fulfilled its full contribution to the WHO within the past two years?
Yes = 1 , No = 0

Current Year Score: 0

2021

Economist Impact analyst qualitative assessment based on official national sources, which vary by country

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

5.6.1 Commitment to sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) in both emergency and nonemergency research

5.6.1a
Is there a publicly available plan or policy for sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) along with the associated epidemiological data with international organizations and/or other countries that goes beyond influenza?
Yes = 1 , No = 0

Current Year Score: 0

Tajikistan shares epidemiological data with international organizations and other countries, but there is no evidence of commitments to do so in the form of government policy statements or plans.

As a member of the World Health Organization’s (WHO’s) European Measles and Rubella Laboratory Network, Tajikistan shares epidemiological data on measles and rubella [1, 2].

As a member of the Central Asian and Eastern European Surveillance of Antimicrobial Resistance (CAESAR) network, Tajikistan is
committed to report surveillance data on antimicrobial resistance once it has developed the capacity to do so [3]. However, at the moment Tajikistan (like many other CAESAR network members) is still building its domestic surveillance capacity for antimicrobial resistance [3].

There is no evidence of relevant government policy statements or plans on the websites of the Ministry of Healthcare and Social Protection of the Population or the Ministry of Agriculture [4, 5].

Tajikistan has shared epidemiological data with the WHO during the COVID-19 pandemic. According to the WHO Coronavirus Disease (COVID-19) Dashboard, between 3 January 2020 and 6 March 2021 Tajikistan has reported 13,714 confirmed cases of COVID-19 and 91 deaths [6].


5.6.1b
Is there public evidence that the country has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years?
Yes = 0, No = 1

Current Year Score: 1

There is no evidence that Tajikistan has failed to share samples in accordance with the PIP framework in the past two years.

There is no evidence of such a failure on the website of the World Health Organization, including its PIP pages, or in local or international media [1].


5.6.1c
Is there public evidence that the country has not shared pandemic pathogen samples during an outbreak in the past two years?
Yes = 0, No = 1
There is no evidence that Tajikistan has failed to share pandemic pathogen samples including Covid-19 during an outbreak in the past two years. There is no evidence of such a failure on the website of the World Health Organization (WHO) or in local or international media [1]. Local media reports stated in April 2020 that Tajikistan had sent samples of coronavirus for control inspection abroad (WHO reference laboratories in Russia and the United Kingdom) [2]. The article also noted that, since the closure of regular flights out of Tajikistan, it had not been possible for the Ministry of Healthcare and Social Protection of the Population of Tajikistan to send pathogen samples abroad.


### Category 6: Overall risk environment and vulnerability to biological threats

#### 6.1 POLITICAL AND SECURITY RISK

##### 6.1.1 Government effectiveness

**6.1.1a**

**Policy formation (Economist Intelligence score; 0-4, where 4=best)**

Input number

Current Year Score: 1

2020

Economist Intelligence

**6.1.1b**

**Quality of bureaucracy (Economist Intelligence score; 0-4, where 4=best)**

Input number

Current Year Score: 0

2020

Economist Intelligence
6.1.1c
Excessive bureaucracy/red tape (Economist Intelligence score; 0-4, where 4=best)
Input number
Current Year Score: 0

2020
Economist Intelligence

6.1.1d
Vested interests/cronyism (Economist Intelligence score; 0-4, where 4=best)
Input number
Current Year Score: 0

2020
Economist Intelligence

6.1.1e
Country score on Corruption Perception Index (0-100, where 100=best)
Input number
Current Year Score: 25

2020
Transparency International

6.1.1f
Accountability of public officials (Economist Intelligence score; 0-4, where 4=best)
Input number
Current Year Score: 0

2020
Economist Intelligence

6.1.1g
Human rights risk (Economist Intelligence score; 0-4, where 4=best)
Input number
Current Year Score: 0
2020
Economist Intelligence

**6.1.2 Orderly transfers of power**

**6.1.2a**

How clear, established, and accepted are constitutional mechanisms for the orderly transfer of power from one government to another?

Very clear, established and accepted = 4, Clear, established and accepted = 3, One of the three criteria (clear, established, accepted) is missing = 2, Two of the three criteria (clear, established, accepted) are missing = 1, Not clear, not established, not accepted = 0

Current Year Score: 0

2021
Economist Intelligence

**6.1.3 Risk of social unrest**

**6.1.3a**

What is the risk of disruptive social unrest?

Very low: Social unrest is very unlikely = 4, Low: There is some prospect of social unrest, but disruption would be very limited = 3, Moderate: There is a considerable chance of social unrest, but disruption would be limited = 2, High: Major social unrest is likely, and would cause considerable disruption = 1, Very high: Large-scale social unrest on such a level as to seriously challenge government control of the country is very likely = 0

Current Year Score: 2

2021
Economist Intelligence

**6.1.4 Illicit activities by non-state actors**

**6.1.4a**

How likely is it that domestic or foreign terrorists will attack with a frequency or severity that causes substantial disruption?

No threat = 4, Low threat = 3, Moderate threat = 2, High threat = 1, Very high threat = 0

Current Year Score: 2

2021
Economist Intelligence
6.1.4b
What is the level of illicit arms flows within the country?
4 = Very high, 3 = High, 2 = Moderate, 1 = Low, 0 = Very low
Current Year Score: 4

2020
UN Office of Drugs and Crime (UNODC)

6.1.4c
How high is the risk of organized criminal activity to the government or businesses in the country?
Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0
Current Year Score: 1

2021
Economist Intelligence

6.1.5 Armed conflict
6.1.5a
Is this country presently subject to an armed conflict, or is there at least a moderate risk of such conflict in the future?
No armed conflict exists = 4, Yes; sporadic conflict = 3, Yes; incursional conflict = 2, Yes, low-level insurgency = 1, Yes; territorial conflict = 0
Current Year Score: 2

2021
Economist Intelligence

6.1.6 Government territorial control
6.1.6a
Does the government’s authority extend over the full territory of the country?
Yes = 1, No = 0
Current Year Score: 1

2021
Economist Intelligence
6.1.7 International tensions

6.1.7a
Is there a threat that international disputes/tensions could have a negative effect?
No threat = 4, Low threat = 3, Moderate threat = 2, High threat = 1, Very high threat = 0
Current Year Score: 1

2021
Economist Intelligence

6.2 SOCIO-ECONOMIC RESILIENCE

6.2.1 Literacy

6.2.1a
Adult literacy rate, population 15+ years, both sexes (%)
Input number
Current Year Score: 99.8

2014
United Nations Development Programme (UNDP); United Nations Educational, Scientific and Cultural Organization (UNESCO); The Economist Intelligence Unit

6.2.2 Gender equality

6.2.2a
United Nations Development Programme (UNDP) Gender Inequality Index score
Input number
Current Year Score: 0.62

2018
United Nations Development Programme (UNDP); The Economist Intelligence Unit

6.2.3 Social inclusion

6.2.3a
Poverty headcount ratio at $1.90 a day (2011 PPP) (% of population)
Input number
Current Year Score: 0.9

2015
6.2.3b

Share of employment in the informal sector
Greater than 50% = 2, Between 25-50% = 1, Less than 25% = 0

Current Year Score: 1

The share of employment in the informal sector in Tajikistan is between 25-50%.

A precise and up-to-date percentage regarding the share of employment in the informal sector of Tajikistan's workforce is not available. An April 2019 article published on the International Labor Organization website provided an approximate figure, stating that, according to Tajikistan's Statistics Agency, "the share of informal sector in non-agricultural sectors of Tajikistan's economy decreased from 53.8% to 29.4% between 2009 and 2016 [1]. The article also noted that agriculture in Tajikistan, which employs almost 50% of the country's population, was not taken into account in the analysis of the informal sector.

In 2017, the World Bank published "Jobs Diagnostic Tajikistan: Strategic Framework for Jobs" in which it stated (Figure 25, page 33) that 57% of Tajikistan’s workforce received an informal wage or were unpaid [2]. The same report stated that approximately 1 million working age adults, or 30% of Tajikistan’s labor force, have opted to leave the country for employment (90% of Tajikistan’s migrants work in Russia).

Accessed 28 February 2021.

6.2.3c

Coverage of social insurance programs (% of population)
Scored in quartiles (0-3, where 3=best)

Current Year Score: 2

2016, or latest available

World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions
Input number

Current Year Score: 2
6.2.5 Local media and reporting

6.2.5a
Is media coverage robust? Is there open and free discussion of public issues, with a reasonable diversity of opinions?
Input number

Current Year Score: 0

6.2.6 Inequality

6.2.6a
Gini coefficient
Scored 0-1, where 0=best

Current Year Score: 0.34

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a
What is the risk that the road network will prove inadequate to meet needs?
Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 1

6.3.2 Adequacy of airports

6.3.2a
What is the risk that air transport will prove inadequate to meet needs?
Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0
6.3.3 Adequacy of power network

6.3.3a
What is the risk that power shortages could be disruptive?
Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0
Current Year Score: 0

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a
Urban population (% of total population)
Input number
Current Year Score: 27.31

6.4.2 Land use

6.4.2a
Percentage point change in forest area between 2006–2016
Input number
Current Year Score: 0.11
6.4.3 Natural disaster risk

6.4.3a
What is the risk that the economy will suffer a major disruption owing to a natural disaster?
Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 0

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a
Total life expectancy (years)
Input number

Current Year Score: 70.88

2018

United Nations; World Bank, UNICEF; Institute for Health Metrics and Evaluation (IHME); Central Intelligence Agency (CIA)
World Factbook

6.5.1b
Age-standardized NCD mortality rate (per 100 000 population)
Input number

Current Year Score: 876.1

2019

WHO

6.5.1c
Population ages 65 and above (% of total population)
Input number

Current Year Score: 3.09

2019

World Bank
6.5.1d
Prevalence of current tobacco use (% of adults)
Input number

   Current Year Score: 27.43

2018
World Bank

6.5.1e
Prevalence of obesity among adults
Input number

   Current Year Score: 14.2

2016
WHO

6.5.2 Access to potable water and sanitation

6.5.2a
Percentage of homes with access to at least basic water infrastructure
Input number

   Current Year Score: 81.2

2017
UNICEF; Economist Impact

6.5.2b
Percentage of homes with access to at least basic sanitation facilities
Input number

   Current Year Score: 97.02

2017
UNICEF; Economist Impact

6.5.3 Public healthcare spending levels per capita

6.5.3a
Domestic general government health expenditure per capita, PPP (current international $)
Input number
Current Year Score: 67.55

2018

WHO Global Health Expenditure database

6.5.4 Trust in medical and health advice

6.5.4a Trust medical and health advice from the government
Share of population that trust medical and health advice from the government, More than 80% = 2, Between 60-80%, or no data available = 1, Less than 60% = 0
Current Year Score: 2

2018

Wellcome Trust Global Monitor 2018

6.5.4b Trust medical and health advice from medical workers
Share of population that trust medical and health advice from health professionals, More than 80% = 2, Between 60-80%, or no data available = 1, Less than 60% = 0
Current Year Score: 2

2018

Wellcome Trust Global Monitor 2018