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

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

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[www.ghsindex.org](http://www.ghsindex.org)
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
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**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
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5.4 Joint External Evaluation (JEE) and Performance of Veterinary Services Pathway (PVS)
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**CATEGORY 6: OVERALL RISK ENVIRONMENT AND VULNERABILITY TO BIOLOGICAL THREATS**

6.1 Political and security risk
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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: 1

There is a national AMR plan, but it is not publicly available and there is insufficient evidence that it covers surveillance, detection, and reporting. Following a World Health Organization (WHO) mission to assess antibiotic resistance in Belarus on 4-8 June 2012, the Republican Scientific and Practical Center for Microbiology and Epidemiology reported that a key recommendation of the mission was the establishment of a national action plan for the subsequent three to five years [1, 2].

The WHO Regional Office for Europe's Central Asian and Eastern European Surveillance of Antimicrobial Resistance Annual Report 2019 indicates that Belarus has developed an AMR action plan, but that dedicated funds have not been made available to implement the AMR action plan, active implementation of the AMR action plan is not ongoing and implementation of the AMR action plan is not monitored and evaluated [3].

The Global Database for Antimicrobial Resistance Country Self-Assessment for 2018-19 indicates that Belarus has developed an AMR national action plan. [4]

At the time of writing, the WHO Library of National Action Plans does not have an entry for Belarus [5]. No published plan or reports of the development of a plan have been identified in national resources. In particular, the Ministry of Healthcare, the Ministry of Agriculture and Food, and the Institute of Microbiology of the National Academy of Sciences of Belarus make no mention of any national AMR plans on their respective websites [6, 7, 8].

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: 2

Organization's (WHO) priority AMR pathogens. The Republican Scientific and Practical Center for Microbiology and Epidemiology is the designated national reference laboratory on the basis of Ministry of Health of the Republic of Belarus Order No. 163 of 10 October 2003, "On the establishment of a reference center for monitoring the resistance of clinically significant microorganisms towards antibiotics, antiseptics and disinfectants" [1]. The same order sets forth the role of sentinel laboratories, of which 34 are specified [1].

As of 2018, the AMR surveillance network comprised 118 laboratories, covering over 90% of hospitals and over 90% of the population, according to the WHO Regional Office for Europe's Central Asian and Eastern European Surveillance of Antimicrobial Resistance Annual Report 2019 [2]. The system is known to test all 7+1 of the priority AMR pathogens, namely E.coli, K. pneumonia, S. aureus, S. pneumoniae, Salmonella spp., N. gonorrhea, Mycobacterium tuberculosis and Shigella spp.

Ministry of Health of the Republic of Belarus Order No. 292 of 16 March 2012 “On approval of the instructions for the monitoring of clinically significant microorganisms towards antibacterial medicines in healthcare organizations”; designates E.coli, K. pneumonia, S. aureus and S. pneumoniae as priority AMR pathogens [3]. N. gonorrhea is tested, according to an academic paper titled “Antimicrobial susceptibility/resistance and NG-MAST characterization of Neisseria gonorrhoeae in Belarus, Eastern Europe, 2010-2013” of which Leonid Titov, head of the national reference laboratory, is an author [4].

The WHO Regional Office for Europe's Central Asian and Eastern European Surveillance of Antimicrobial Resistance Annual Report 2019 indicates that Salmonella spp. is tested in Belarus [2]. Diagnostic testing for Mycobacterium tuberculosis is carried out by the Republic Scientific and Practical Center of Pulmonology and Tuberculosis [5]. Diagnostic testing for Shigella is carried out by the Clinical Diagnosis Laboratory of the N.N. Alexandrov National Cancer Center of Belarus [6]. The Republic Scientific and Practical Center of Pulmonology and Tuberculosis and the Clinical Diagnosis Laboratory of the N.N. Alexandrov National Cancer Center of Belarus are specifically listed as sentinel sites for the national laboratory system in appendix 1 to Ministry of Health of the Republic of Belarus Order No. 163 of 10 October 2003 'On the establishment of a reference Center for monitoring the resistance of clinically significant microorganisms towards antibiotics, antiseptics and disinfectants' [1].


**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 evidence to suggest that the government conducts detection or surveillance activities for pathogens in the environment, but not AMR organisms. Sanitary oversight activities are undertaken by public bodies under the remit of the Ministry of Health [1]. Available information indicates that bodies of water are tested for microbial contamination, particularly E.coli in bodies of water used for recreational purposes [2, 3]. There is no information indicating that the responsible public bodies test for antimicrobial resistance, however. The website of the Ministry of Ecology and Natural Resources does not mention any such activities [4]. Furthermore, there is no evidence on the Ministry of Health website or World Health Organization Library of National Action Plans indicating that the Ministry of Ecology and Natural Resources conducts such activities [5, 6].


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: 0

There is no national legislation or regulation in place comprehensively requiring prescriptions for antibiotic use for humans. Ministry of Health of the Republic of Belarus Resolution No. 27 of 10 April 2019 “On the Establishment of the List of Pharmaceuticals Approved for Sale without a Medical Prescription” sets forth the list of pharmaceuticals approved for sale without a prescription [1]. In accordance with this list, a number of antibiotics are approved for sale without a prescription, including doxycycline, amoxicillin, amoxicillin combined with clavulanic acid, ampicillin, nitrofurantoin and nitrofuran derivatives. Ministry of Health of the Republic of Belarus Order No. 1301 of 29 November 2015 “On Actions to Reduce the Antimicrobial Resistance of Microorganisms”, ordered the Ministry of Health’s head of the pharmaceutical inspectorate and pharmaceutical provision organization, and head of the Ministry of Health’s Chief Directorate for Medical Assistance to submit proposals by 1 March 2016 for the gradual ban of prescription-free sales of antibacterial pharmaceuticals from 1 January 2017 [2].

The Ministry of Health’s justification for not banning the sale of the abovementioned antibiotics without a prescription is that their availability is to be maintained for the emergency prevention of Lyme disease and the treatment of widespread seasonal infections of the upper respiratory tract [3]. The Ministry of Health is responsible for pharmaceutical regulations, and no evidence of a legislative ban on the prescription-free sale of antibiotics has been found on the ministry’s website or in the World Health Organization’s Library of National Action Plans [6, 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 comprehensive legislation or regulation currently in place requiring prescriptions for antibiotic use for animals. Oversight of the use of veterinary pharmaceuticals in veterinary medicine and livestock farming falls under the remit of the Department of Veterinary and Food Production Oversight of the Ministry of Agriculture and Food [1]. In accordance with Ministry of Agriculture and Food Resolution No. 16 of 17 March 2011, veterinary medicines named under "List A" are subject to issuance by prescription only [2]. "List A" is defined by the Ministry of Health in Ministry of Health Resolution No. 42 of 17 April 2015. The only antibiotics included in the Ministry of Health’s "List A" are cytotoxic antibiotics [3]. No evidence of comprehensive legislation or regulation requiring prescriptions for antibiotic use for animals has been identified on the websites of the Ministry of Health (responsible for pharmaceutical regulation) or Ministry of Agriculture and Food, or in the World Health Organization’s Library of National Action Plans [4, 5, 6].

[3] Ministry of Health of the Republic of Belarus. Resolution No. 42 of 17 April 2016. "On the Establishment of the List of Medicines under 'List A' and the Order and Conditions of its Maintenance" ("Постановление Министерства здравоохранения Республики Беларусь от 17 апреля 2015 г. № 42 «Об установлении перечня лекарственных средств, относящихся к списку «А», а также порядка и условий его ведения»"). [http://kodeksy-by.com/norm_akt/source-%D0%9C%D0%B8%D0%BD%D0%B7%D0%B4%D1%80%D0%B0%D0%B2%20%D0%A0%D0%91/type-%D0%9F%D0%BE%D1%81%D1%82%D0%B0%D0%BD%D0%B0%BE%D0%B2%D0%BB%D0%B5%D0%BD%D0%B8%D0%BD/42-17.04.2015.htm]. Accessed 31 July 2020.
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

There is no unified national law, plan or equivalent strategy document on zoonotic disease, but there are at least six national plans, guidelines and laws that lay out the strategy for 6 individual zoonotic diseases. The Ministry of Health has devised strategies for five zoonoses: leptospirosis (adopted 2013), plague (2005), hemorrhagic fever with renal syndrome (2013), tularemia (2013) and tick-borne infections (2012) [1, 2, 3, 4, 5].

Taking the plague strategy as an illustrative example, the chief state sanitary doctor for each region of the country is responsible for implementing and monitoring compliance with the strategy’s provisions. [2] It includes measures to prevent the disease entering the country or breaking out; the primary response mechanism to suspicions of plague among people; measures to eliminate the disease in infection locations; the order of hospitalization of people ill with plague; isolation measures for people who have had contact with infected or suspected-infected people; extermination measures for vermin. [2] In addition, the Ministry of Agriculture and Food has developed a plan for echinococcosis [6].

In the past, the Ministry of Health and Ministry of Agriculture and Food jointly planned for brucellosis, anthrax, rabies as well as yersiniosis, Q fever, listeriosis, psittacosis, salmonellosis and campylobacteriosis, but all of these documents have expired [7, 8, 9, 10]. Of the expired legislation, two pieces have been superseded (for anthrax and rabies), but these new documents are issued solely by the Ministry for Agriculture and Food and only treat them as animal diseases, not zoonoses. [11, 12] The Ministry for Agriculture and Food also previously planned for avian influenza [13]. There is no mention of a unified or overarching plan on the websites of the Ministry of Health or the Ministry of Agriculture and Food [14, 15]. The most recent available OIE PVS Evaluation Report for Belarus, produced in 2015, confirms that the legislative framework in 2015 described specific measures for relevant animal diseases and zoonoses, but a list of compulsory notifiable animal diseases in accordance with OIE recommendations was not properly addressed in national legislation. [16]


of Belarus" ("Постановление Министерства здравоохранения Республики Беларусь и Министерства сельского хозяйства и продовольствия Республики Беларусь от 21 февраля 2018 г. No. 19/19 «О признании утратившими силу некоторых постановлений Министерства здравоохранения Республики Беларусь и Министерства сельского хозяйства и продовольствия Республики Беларусь").


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: 1

There is national legislation that includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans in Belarus.

The Veterinary Hygiene Rules for the Inspection of Meat Animals, Meat and Meat Products, as introduced by Resolution of the Ministry of Agriculture and Food Production No. 44 of 18 April 2008 "On Approval of the Veterinary Hygiene Rules for the Inspection of Meat Animals, Meat and Meat Products and the Repeal of the Veterinary Guidelines", set out the guidelines for antemortem and postmortem inspection of meat animals to ensure the quality and safety of meat and meat products, including with regard to zoonoses. All meat animals must be subjected to veterinary inspection and meat and meat products must undergo veterinary hygiene inspection and veterinary certification. The zoonoses specifically named in the rules include plague, erysipeloid, leptospirosis, streptococcosis, chlamydia, tuberculosis, rabies, brucellosis, glanders and ringworm, among others [6].

The Ministry of Health has devised strategies for five zoonoses: leptospirosis (adopted 2013), plague (2005), hemorrhagic fever with renal syndrome (2013), tularemia (2013) and tick-borne infections (2012) [1, 2, 3, 4, 5]. Taking the health rules pertaining to plague as an illustrative example of the nature of these strategies, the chief state sanitary doctor for each
region of the country is responsible for implementing and monitoring compliance with their provisions. [2] It includes measures to eliminate the disease in infection locations; the procedure for hospitalization of people ill with plague; isolation measures for people who have had contact with infected or suspected-infected people; extermination measures for vermin [2].

The most recent available World Organization for Animal Health (OIE) PVS Evaluation Report for Belarus, produced in 2015, confirms that national legislation includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans [7]. It notes a good level of implementation among large agricultural enterprises, but poor implementation at small farms and inconsistent implementation at abattoirs. More recent information on implementation of the Veterinary Hygiene Rules for the Inspection of Meat Animals, Meat and Meat Products has not been identified.


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 individually account for the surveillance and control of at least 6 zoonotic diseases. Tularemia, leptospirosis, plague, hemorrhagic fever with renal syndrome and tick-borne infections and echinococcosis are the 6 zoonotic diseases for which laws and guidelines for surveillance and control exist. As an illustrative example of the nature of the surveillance and control activities stipulated under these strategic national plans, Ministry of Health of the Republic of Belarus Health Standards and Rules “Requirements for the organization and Undertaking of Anti-epidemic Measures Aimed at the Prevention of the Carrying, Appearance and Spread of Hemorrhagic Fever with Renal Syndrome” of 26 December 2013 requires that specialists of the regional branches of the Minsk City Center for Hygiene and Epidemiology (including a zoologist and an epidemiologist) must identify and catalogue the natural sources of hemorrhagic fever with renal syndrome, identify testing locations and systematically monitor the population of rodent carriers, among other things. Local authorities must take action to keep areas under their control clean and remove any build-up of rubbish, among other things [3]. The Ministry of Agriculture and Food monitors and controls echinococcosis [6]. In the past, the Ministry of Health and Ministry of Agriculture and Food jointly monitored and controlled brucellosis, anthrax, rabies as well as yersiniosis, Q fever, listeriosis, psittacosis, salmonellosis and campylobacteriosis, but all of these documents have now expired [7, 8, 9, 10]. Of the expired legislation, only two pieces have been superseded (for anthrax and rabies), but these new documents are issued solely by the Ministry for Agriculture and Food and only treat them as animal diseases, not zoonoses [11, 12]. The Ministry for Agriculture and Food also previously monitored and controlled for avian influenza [13].


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 public evidence of a zoonotic disease unit that functions across ministries, beyond incidental cooperation, in Belarus. The websites of the Ministry of Health, the Republican Center for Hygiene, Epidemiology and Public Health, the Ministry of Agriculture and Food and the Department of Veterinary and Food Production Oversight make no mention of any such body. [1, 2, 3, 4] In the past, many but not all of the national plans, guidelines and laws that account for the surveillance and control of individual zoonoses were the result of inter-ministry cooperation. For example, the Health and Veterinary Rules in relation to zoonotic disease psittacosis (adopted in 2002) were jointly developed by the Ministry of Health, the Ministry of Agriculture and Food, the Republican Center for Hygiene, Epidemiology and Public Health, the Scientific Research Institute for Epidemiology and Microbiology, the S.N. Vyshelessky Institute of Experimental Veterinary Science at the Byelorussian National Academy of Sciences, Mazyr State Pedagogical University, Vitebsk State Academy of Veterinary Medicine, and Vitebsk State Medical University. [5] All such regulations have expired, there is no evidence of a unified body having coordinated such efforts in the past, and the Ministry of Agriculture and Food has opted to regulate on certain infections independently and purely as animal diseases, whereas previously they were jointly monitored as zoonoses. Aside from psittacosis, in the past, the Ministry of Health and the Ministry of Agriculture and Food jointly monitored and controlled brucellosis, anthrax, rabies, yersiniosis, Q fever, listeriosis, salmonellosis and campylobacteriosis. [6, 7, 8, 9] The Republican Headquarters for Emergency Measures to Eliminate African Swine Fever and Other Dangerous Animal Diseases was established in 2013 to coordinate the government’s response to an outbreak of the non-zoonotic African swine fever and unspecified ‘other dangerous animal diseases’. [10] No information on the work of this body is available in the public domain and its foundational regulations do not specifically mention zoonotic disease. [10] As such, it is impossible to confirm whether this public body could function as a zoonotic disease unit. The PVS Evaluation Report Republic of Belarus 2015 makes no mention of a zoonotic disease unit that functions across multiple ministries. [11]

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: 1

The country has a compulsory national mechanism for owners of livestock to conduct disease surveillance and report findings to the state veterinary service branch local to the site of the infection. This is a requirement introduced under Law of the
Republic of Belarus No. 438-Z of 24 October 2016 “On the Introduction of Amendments and Additions to the Law of the Republic of Belarus ‘On Veterinary Activities’”, which requires companies and individuals that are party to veterinary activities to inform without delay the local state veterinary service upon the emergence of grounds for suspicion of animal disease (refusal of feed, elevated temperature, uncharacteristic behavior) and upon the death of animals. [1] State Veterinary Oversight is responsible for monitoring compliance with veterinary health regulations by companies and individuals engaged in the production, preparation, storage, processing, transport and sale of animal products. No specific information on precisely how diseases are to be reported to this body is provided, however, the organization’s website lists 26 branches located in cities around Belarus with their telephone numbers and addresses. [2]


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: 1

There are laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners). Law No. 455-Z of 10 November 2008 "On Information, Information Technology and Data Protection" provides general protections for personal data (defined as information allowing an individual to be identified), requiring written permission for the collection, processing, storage and transfer of personal data until it is destroyed or depersonalized, unless otherwise dictated by law. [1] The same law stipulates that information about the condition of healthcare and agriculture is considered public data and cannot be subject to limitations on access, dissemination or disclosure, though it is not clear that information generated through animal surveillance activities would constitute information about the condition of healthcare and agriculture for the purposes of this law. [1] In any case, data protections exist under the state information system for the identification, registration, traceability of agricultural animals (herds) and the identification and traceability of animal products under Law No. 287-Z of 15 July 2015 "On the Identification, Registration, Traceability of Agricultural Animals (Herts) and the Identification and Traceability of Animal Products", which includes information on the epizootic situation at agricultural facilities. [2] Council of Ministers Resolution No. 1102 of 29 December 2015 “On Measures for the Implementation of the Law of the Republic of Belarus On the Identification, Registration, Traceability of Agricultural Animals (Herts) and the Identification and Traceability of Animal Products and the Amendment of Resolution of the Council of Ministers of the Republic of Belarus No. 156 of 17 February 2012” requires data protection measures be undertaken by those subject to the Law of the Republic of Belarus No. 287-Z of 15 July 2015, i.e. agricultural animal owners, producers of animal product foodstuffs and those that produce animal identification materials (e.g. brands, tattoos, microchips) in accordance with the relevant legislation (i.e. Law No. 455-Z of 10 November 2008 “On Information, Information Technology and Data Protection”). [3] The UNCTAD data protection and privacy legislation database contains no further information. [4] No specific data protection provisions exist under the legislation that requires the reporting of instances of animal disease, namely Law No. 438-Z of 24 October 2016 “On the Introduction of Amendments and Additions to the Law of the Republic of Belarus ‘On Veterinary Activities.’” [5] The Department of Veterinary and Food Production Oversight, Ministry of Agriculture and Food and Ministry of Health websites make no mention of confidentiality.
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

There is publicly available evidence that Belarus conducts surveillance of zoonotic disease in wild animals.

Under the national laws concerning individual zoonoses, the surveillance of individual zoonoses in animal populations is mandatory. For example, the Ministry of Health of the Republic of Belarus Health Standards and Rules “Requirements for the organization and Undertaking of Anti-epidemic Measures Aimed at the Prevention of the Carrying, Appearance and Spread of Tularemia” of 30 December 2013 call for, among other things, active infection sites to be investigated twice a year and for rodents to be tested for the disease at the Republican Center for Hygiene, Epidemiology and Public Health and the relevant regional center. [1]
zoonotic disease in wild animals has been carried out in Belarus, for example, it reports that the incidence of yersinia in rodents was 3.6% and the incidence of tick-borne encephalitis virus in ticks was 8.5%. [2] In 2016, the State Sanitary Service published the State Report on the Sanitary-Epidemiological Situation in the Republic of Belarus in 2015. [3] However, the link to download the report is broken, and there is no public information about whether the report included information about zoonoses in wild animals. [3]


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
Current Year Score: 0

There is no evidence of specific mechanisms for working together or for involving the private sector in disease control or response in the legislation, regulations and plans addressing individual zoonotic diseases. The five individual strategies for dealing with leptospirosis (adopted 2013), plague (2005), hemorrhagic fever with renal syndrome (2013), tularemia (2013) and tick-borne infections (2012) respectively include provisions requiring private sector actors to protect their premises from vector organisms such as rodents and ticks, but do not contain mechanisms for working together or for involving the private sector in disease control or response. [1, 2, 3, 4, 5] No evidence of specific joint-action plans or mechanisms has been identified on the websites of the Ministry of Health, Ministry of Agriculture and Food, Republican Scientific and Practical Center for Microbiology and Epidemiology or Republican Center for Hygiene, Epidemiology and Public Health. [6, 7, 8, 9] The PVS Evaluation Report Republic of Belarus 2015 does not refer to specific mechanisms for working together or for involving the private sector in disease control or response. [10]


### 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 public evidence that the country has in place a record, updated within the past 2 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. The Ministry of Health issues licenses permitting work with dangerous pathogens. [1] The list of dangerous pathogens is set out in Ministry of Health Resolution No. 118 of 21 November 2016. [2] Pathogens in the third and fourth risk categories may only be handled by state laboratories. [3] The legislation specifies that the Ministry of Health retains a copy of each license, but no provisions are made under the law for a consolidated and frequently updated record of the relevant facilities. No evidence of any such records exists on the websites of the Ministry of Health, Ministry of Defense, Ministry of Agriculture, Republican Center for Hygiene, Epidemiology and Public Health or the Republican Scientific and Practical Center for Microbiology and Epidemiology. [4, 5, 6, 7, 8] Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention, access to the reports is restricted, and it is unclear whether they contain information on this subject. [9] No relevant legislation has been identified in the Verification Research,
Training and Information Center’s Biological Weapons Convention legislation database. [10]


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: 1

The country has in place legislation and regulations related to biosecurity that address requirements such as physical containment and operational practices at facilities in which especially dangerous pathogens and toxins are stored or processed. The regulations for those working with potentially pathogenic microorganisms and pathogenic biological agents and for the organization and implementation of accounting for, storing, transferring and transporting them are laid out in Ministry of Health Resolution No. 2 of 6 January 2017. [1] The regulations for physical containment and operational practices are laid out in detail, but there are no provisions concerning failure reporting systems or cybersecurity at such facilities. While this piece of legislation mainly concerns biosafety, biosecurity is addressed under point 24, section 2, which stipulates that laboratories must be planned, constructed and equipped in such a manner as to prevent intruders from gaining access to the premises. Some details about the security arrangements at the Republican Research and Practical Center for Epidemiology and Microbiology are provided in a media article published by Tut.by on 28 September 2018, following a tour
of the laboratory for journalists as part of the Ministry of Health’s international conference Molecular Diagnosis – 2018. In particular, all employees are under constant video surveillance and access is by electronic pass only, with restricted access to glove box areas. [2] Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention, access to the reports is restricted, and it is unclear if they contain information on this subject. [3] No further relevant legislation has been identified in the Verification Research, Training and Information Center Biological Weapons Convention legislation database. 


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 established, dedicated agency responsible for the enforcement of biosecurity legislation and regulations. Belarus’s main item of biosecurity legislation, Ministry of Health Resolution No. 2 of 6 January 2017, does not specify an agency responsible for enforcement [1]. Law No. 340-Z of January 2012 "On the Health and Epidemiological Welfare of the Population" states that the Ministry of Health and its subsidiary bodies are responsible for organizing state health monitoring and implementing government policy in the relevant areas, but does not mention responsibility for enforcing biosecurity regulations [2]. However, the Ministry of Health issues licenses for those working with potentially pathogenic microorganisms and pathogenic biological agents and for the organization and implementation of accounting for, storing, transferring and transporting them, and can withdraw licenses upon violations of the legislative requirements [3]. The legislation requires that at each organization working with potentially pathogenic microorganisms and pathogenic biological agents, a commission for oversight of compliance with the biological safety requirements be established to oversee biological safety compliance; undertake actions to prevent emergency situations and resolve them; oversee the preparedness of colleagues for work with pathogens; analyze any identified biological safety violations, conditions leading to them and reasons for emergency situations; and to develop an action plan to improve the effectiveness of the biological safety system and compliance with the health and epidemiological requirements for those working with pathogens [1]. The responsibilities of the commission center on biosafety and do not explicitly include oversight of biosecurity measures. Furthermore, the composition of the commission at each organization is determined by the head of the relevant organization, so the commissions are not capable of providing independent oversight [1]. The armed forces have a specialist unit of radiation, chemical and biological defense
troops, but their responsibilities do not extend to enforcement of biosecurity legislation [4]. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention, access to the reports is restricted, and it is unclear if they contain information on this subject [5]. No mention of an agency responsible for the enforcement of biosecurity legislation and regulations is made on the websites of the Ministry of Health, Ministry of Defense, Ministry of Food and Agriculture, Republican Center for Hygiene, Epidemiology and Public Health or Republican Scientific and Practical Center for Microbiology and Epidemiology [6, 7, 8, 9, 10]. No relevant legislation has been identified in the Verification Research, Training and Information Center Biological Weapons Convention legislation database [11].

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

The Ministry of Health controls work with dangerous pathogens through licensing [1]. The list of dangerous pathogens is set out in Ministry of Health Resolution No. 118 of 21 November 2016 [2]. Pathogens in the third and fourth risk categories may only be handled by state laboratories [3]. "The Safety Requirements when Undertaking Work with Potentially Pathogenic Microorganisms and Pathogenic Biological Agents and towards the Organization and Implementation of Accounting for, Storing, Transferring and Transporting Them" (adopted by the Ministry of Health in 2017) set out the regulations for working with especially dangerous pathogens, pathogens with pandemic potential [4]. These requirements stipulate that organizations with a license to conduct activities with category 1 pathogens (low level of risk for the lives and health of the population, rarely causing infections) must transfer any pathogens of risk categories 2&4 that are identified in their laboratories to central laboratories. In particular, category 2 pathogens are to be transferred to regional centers for hygiene, epidemiology and public health, Minsk City Center for Hygiene and Epidemiology or the Republican Center for Hygiene, Epidemiology and Public Health, while category 4 pathogens (very high risk for the lives and health of the population with no known preventions or cures) are to be transferred to the Republican Research and Practical Center for Epidemiology and Microbiology. The Republican Research and Practical Center for Epidemiology and Microbiology's collection of pathogenic bacteria and viruses was included in the State Register of Scientific Assets Forming Part of Belarus's National Legacy in accordance with Council of Ministers Resolution No. 1152 of 14 December 2012 On the Declaration of Collections of Genetic Resources and Strains of Fungi, Viruses and Bacteria as Scientific Assets that Form Part of the National Legacy, suggesting that this entity's collection is unique [5]. The websites of the Ministry of Health, Ministry of Defense and Ministry of Agriculture make no mention of any such efforts [6, 7, 8]. No further relevant legislation has been identified in the Verification Research, Training and Information Center (VERTIC) Biological Weapons Convention (BWC) legislation database [9].

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: 0

There is no evidence of in-country capacity to conduct polymerase chain reaction (PCR)–based diagnostic testing for Ebola or anthrax that precludes the use of live cultures. Academic journal articles indicate that PCR testing capabilities exist for Ebola, but neither of these studies precluded the use of live cultures. "Think for yourselves, decide among yourselves: A tropical paradise and its hidden infectious side" by Galina Mokhnach in Belaruskaya Dumka No. 9 of 2014, indicates that the Republican Scientific and Practical Center for Microbiology and Epidemiology is capable of PCR-based testing for Ebola [4]. However, a further academic article indicates that this PCR capability for Ebola testing does not preclude the use of live cultures. The Belarusian State Medical University academic article of 22 June 2016, “Ebola Virus Reactivation After Prolonged Storage” by scientists from the Republican Scientific and Practical Center for Microbiology and Epidemiology indicates that PCR was used by the laboratory to confirm the authenticity of a live Ebola culture restored after storage [5].

An academic article from 24 July 2019, “Roadmap for Anthrax in Animals in the Republic of Belarus” by V.V. Maximovich indicates that research into the effectiveness of anthrax diagnosis using PCR is ongoing [6]. The eight PCR-test kits for the “diagnosis of especially dangerous diseases” purchased in 2013-2014 in accordance with Ministry of Agriculture and Food of the Republic of Belarus Resolution of the Council of Ministers of the Republic of Belarus No. 758 of 29 August 2013 “On Additional Measures to Eliminate and Prevent the Spread of African Swine Fever and Other Dangerous Animal Diseases”, are not known to have Ebola or anthrax testing capabilities [1]. Anthrax and Ebola are not listed among the 20 diseases for which the Republican Scientific and Practical Center for Microbiology and Epidemiology produces PCR-test systems [2, 3]. No public information about PCR capabilities for Ebola, precluding the use of live cultures has been identified, or for anthrax in general on the websites of the Ministry of Health, Ministry of Defense, Ministry of Agriculture and Food or Ministry of Emergency Situations [7, 8, 9, 10]. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention, access to the reports is restricted, and it is unclear if they contain information on this subject [11]. No relevant legislation has been identified in the Verification Research, Training and Information Center (VERTIC) Biological Weapons Convention (BWC) legislation database [12].

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 public information confirming that the country requires 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. Council of Ministers of the Republic of Belarus Resolution No. 1074 of 26 December 2016 “On the Order and Conditions of Obtaining Permission to Work with Potentially Pathogenic Microorganisms and Pathogenic Biological Agents” stipulates that to receive a license to work with dangerous pathogens, a laboratory must employ people with professional qualifications suited to such activities [1]. However, the precise qualifications are not outlined in the legislation. Article 16-1 of the Law of the Republic of Belarus No. 340-2 of 7 January 2012 “On the Health and Epidemiological Welfare of the Population” and Ministry of Health of the Republic of Belarus Resolution No. 2 of 6 January 2017 “On the Approval of the Health Standards and Rules ‘Safety Requirements when Undertaking Work with Potentially Pathogenic Microorganisms and Pathogenic Biological Agents and
towards the organization and Implementation of Accounting for, Storing, Transferring and Transporting Them” govern activities with dangerous pathogens, and they do not establish or require a standardized, required approach, such as through a common curriculum or a train-the-trainer program [2, 3]. No mention of a standardized, required approach, such as a common curriculum or a train-the-trainer program, is made on the websites of the Ministry of Health, Ministry of Defense, Ministry of Agriculture and Food [4, 5, 6]. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention (BWC), access to the reports is restricted, and it is unclear if they contain information on this subject [7]. No relevant legislation has been identified in the Verification Research, Training and Information Center (VERTIC) BWC legislation database [8].


### 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
The regulations and licensing conditions do not specify that security and other personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential are subject to any of the following checks: drug testing, background checks, or psychological or mental fitness checks. The licensing conditions are set out in Ministry of Health of the Republic of Belarus Resolution No. 2 of 6 January 2017 “On the Approval of the Health Standards and Rules “Safety Requirements when Undertaking Work with Potentially Pathogenic Microorganisms and Pathogenic Biological Agents and towards the organization and Implementation of Accounting for, Storing, Transferring and Transporting Them” [1]. Beyond requirements towards the education and professional qualifications of those working with potentially pathogenic microorganisms and pathogenic biological agents, the only requirements are that the individuals have no medical counterindications for vaccinations, medications or wearing protective equipment. No mention is made of drug testing, background tests or psychological or mental fitness checks. Council of Ministers of the Republic of Belarus Resolution No. 1074 of 26 December 2016 “On the Order and Conditions of Obtaining Permission to Work with Potentially Pathogenic Microorganisms and Pathogenic Biological Agents” makes no mention of drug testing, background checks, or psychological or mental fitness check requirements for the purposes of granting permission to work with dangerous pathogens, toxins, or biological materials with pandemic potential [2]. No mention is made of drug testing, background tests or psychological or mental fitness checks for other personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential on the websites of the Ministry of Health, Ministry of Defense, Ministry of Agriculture and Food [3, 4, 5]. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention (BWC), access to the reports is restricted, and it is unclear if they contain information on this subject [6]. No relevant legislation has been identified in the Verification Research, Training and Information Center (VERTIC) BWC legislation database [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

Belarus has publicly available information on national regulations on the safe and secure transport of infectious substances. Belarus is party to the "European Agreement concerning the International Carriage of Dangerous Goods by Road" (ADR), which covers infectious substances, is binding for all commercial transporters, and covers categories A and B, having acceded to the agreement by virtue of Resolution of the Council of Ministers No. 721 of 30 November 1992 "On the Accession of the Republic of Belarus to the International Agreement Concerning the International Carriage of Dangerous Goods by Road" (amended 2005) [1, 2, 3]. Further regulations on the safe and secure transport of infectious substances (risk categories 1-2 and 3-4) can be found in chapter 13 of the "Safety Requirements when Undertaking Work with Potentially Pathogenic Microorganisms and Pathogenic Biological Agents and towards the Organization and Implementation of Accounting for, Storing, Transferring and Transporting Them", which were adopted by the Ministry of Health in 2017 [4]. However, the regulations do not specifically mention category A and B substances; rather, the legislation uses the Soviet pathogenic risk categories as set out under article 16-1 of the Law of the Republic of Belarus No. 340-Z of 7 January 2012 "On the Health and Epidemiological Welfare of the Population" [5]. Category 1 pathogens are deemed to pose a low level of risk to the lives and health of the population, rarely causing infections, category 2 pathogens pose a medium risk to the lives and health of the population, category 3 pose a very high risk to the lives and health of the population, while category 4 pathogens pose a very high risk to the lives and health of the population, with no known prevention or cure [6]. Particular requirements depending on risk category address the equipping of people accompanying deliveries of such substances with protective gear and disinfectants, the bureaucratic procedures for such transport operations and the containers in which such substances are to be transported, among other things. In addition, although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention (BWC), access to the reports is restricted, and it is unclear if they contain information on this subject [5]. No relevant legislation has been identified in the Verification Research, Training and Information Center (VERTIC) BWC Legislation Database [7].

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: 1

There is national legislation in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential. Law No. 363-Z of 11 May 2016 “On Export Control” sets out the aims, means and regulation of export control, particularly with regard to “specific goods (work, services)”, which are defined as goods for military use or dual use and goods controlled in the interests of Belarus’s national security that are included in one of the lists of specific goods [1]. One of the lists of specific goods named in the law is the “List of sources of disease (pathogens) for humans, animals and plants, their genetically modified forms, fragments of genetic material and equipment that can be used to create bacteriological (biological) and toxic weaponry”. The list is set out under Appendix 1 to State Military-Industrial Committee of the Republic of Belarus and State Customs Committee of the Republic of Belarus Resolution No. 15/137 of 28 December 2007 “On the Creation of the Lists of Specific Goods”, and includes dangerous pathogens such as Crimean-Congo hemorrhagic fever virus, Ebola virus and Lassa fever virus, among others [2]. The means of export control outlined under Law of the Republic of Belarus No. 363-Z of 11 May 2016 “On Export Control” include exchanging information with the relevant authorities in other jurisdictions and international organizations; specifying procedural import, export and transit rules; licensing exporters and middlemen; and monitoring use of goods to ensure compliance with the declared purpose, among other things [1]. Specific end-user screening procedures include checks on the proper use of the imported or exported especially dangerous pathogens, toxins and pathogens with pandemic potential after their delivery, requirements for persons undertaking associated import/export activities to undertake identification procedures and the requirement to obtain permission from the relevant agency in order to carry out said activities with said substances. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention (BWC), access to the reports is restricted, and it is unclear if they contain information on this subject [3]. No additional information has been identified in the Verification Research, Training and Information Center (VERTIC) BWC Legislation Database [4].


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: 1

Belarus has in place biosafety legislation and regulations. The regulations for those working with potentially pathogenic microorganisms and pathogenic biological agents and for the organization and implementation of accounting for, storing, transferring and transporting them are laid out in Ministry of Health Resolution No. 2 of 6 January 2017 [1]. The regulations for physical containment and operational practices in laboratories are laid out in detail, including, for instance, regulations on safety signage, requirements to have reserve (back-up) hot water and electricity supplies and safety requirements towards the air ventilation system, including filtration [1]. Each room in the infectious zone should be equipped with germicidal lamps, and in laboratories handling pathogens of the highest risk category, infectious zones may not be equipped with water supply unless physical means of prevention of leakage or return flow are in place [1]. The safety regulations regarding genetic engineering aim to protect both human and environmental health and are set out under Law of the Republic of Belarus No. 96-Z of 9 January 2006 “On the Safety of Genetic Engineering Activities” and Ministry of Health Resolution No. 65 of 25 August 2006 “On Certain Issues Concerning the Safety of Genetic Engineering Activities”, including measures to control and account for access to areas where such activities are carried out, technical requirements for the layout of such laboratories and the equipment installed in them and storage requirements for genetically engineered microorganisms [2, 3]. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention (BWC), access to the reports is restricted, so it is unclear whether they contain information on this subject [4]. No further information about biosafety legislation or regulations has been identified on the websites of the Ministry of Health, Ministry of Agriculture, Republican Center for Hygiene, Epidemiology and Public Health, Republican Scientific and Practical Center for Microbiology and Epidemiology or the Verification Research, Training and Information Center (VERTIC) BWC Legislation Database [5, 6, 7, 8, 9].

1.4.1b

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

Yes = 1 , No = 0

Current Year Score: 1

There is an established agency responsible for the enforcement of biosafety legislation and regulations in Belarus.

The biosafety regulations are set out in the Ministry of Health Resolution No. 2 of 6 January 2017, which stipulates that oversight and enforcement of the regulations is carried out in accordance with Belarusian law [1]. The agency responsible for organizing state sanitary oversight and enforcement is the Ministry of Health, in accordance with Law No. 340-Z of January 2012 “On the Health and Epidemiological Welfare of the Population” [2]. The delegation and organizational structure of this Ministry of Health oversight is detailed in the Instructions on the Procedure for Cooperation between Head State Sanitary Doctors when Undertaking State Sanitary Oversight as approved under Resolution of the Ministry of Health No. 100 of 16 July 2012, in accordance with which oversight is carried out at the republican level by the department of hygiene, epidemiology and disease prevention of the Ministry of Health, the Republican Center for Hygiene, Epidemiology and Public Health and the Center for Hygiene and Epidemiology, at the regional level by regional centers for hygiene, epidemiology and public health and the Minsk Municipal Center for hygiene, epidemiology and public health and at the district level by municipal, district, and zonal centers for hygiene and epidemiology [3].

Under Law of the Republic of Belarus No. 96-Z of 9 January 2006 “On the Safety of Genetic Engineering Activities”, the Ministry of Natural Resources and Environmental Protection, Ministry of Health and the Ministry of Agriculture and Food are responsible for state monitoring of genetic engineering safety compliance, which includes measures to control and account for access to areas where such activities are carried out, technical requirements for the layout of such laboratories and the equipment installed in them and storage requirements for genetically engineered microorganisms as outlined in Ministry of Health Resolution No. 65 of 25 August 2006 “On Certain Issues Concerning the Safety of Genetic Engineering Activities” [4, 5]. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons
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 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

The country requires biosafety training for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential, but there is no evidence that this must be through a standardized, required approach, such as through a common curriculum or a train-the-trainer program. The biosafety regulations are set out in Ministry of Health Resolution No. 2 of 6 January 2017, which stipulates that work with especially dangerous pathogens, toxins, or biological materials with pandemic potential may only be undertaken following one month’s
training by a specialist with experience working with such organisms or substances in case of higher risk category work and two weeks’ training for lower risk category work [1]. The head of the laboratory must instruct laboratory workers in compliance with the safety sanitary and epidemiological regulations as well as in the use of safety equipment and this training is recorded in the instruction journal upon initial employment and thereafter no less than twice a year [1]. No mention is made of a standardized approach in Ministry of Health Resolution No. 2 of 6 January 2017 [1]. For genetic engineering, under Ministry of Health Resolution No. 65 of 25 August 2006 “On Certain Issues Concerning the Safety of Genetic Engineering Activities”, those undertaking genetic engineering activities of higher risk categories must have higher and/or middle medical, biological or veterinary education and must undergo instruction by the head of the laboratory on biosafety [2]. No mention is made of a standardized approach to biosafety training on the websites of the Ministry of Health or the Ministry of Agriculture [3, 4]. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention (BWC), access to the reports is restricted, and it is unclear if they contain information on this subject [5]. No relevant information has been identified in the Verification Research, Training and Information Center (VERTIC) BWC Legislation Database [6].


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 publicly available evidence that Belarus 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. Activities with such pathogens and toxins may only be conducted at state institutions and must be accounted for using a standardized approach. Activities involving pathogens in the third and fourth risk categories (pathogens posing the threat of an epidemic with known methods of prevention and treatment and without known methods of prevention and treatment respectively) may only be handled by state laboratories [1, 2]. In accordance with Ministry of Health of the Republic of Belarus Resolution No. 2 of 6 January 2017 ‘On the Approval of the Health Standards and Rules “Safety Requirements when Undertaking Work with Potentially Pathogenic Microorganisms and Pathogenic Biological Agents and towards the organization and Implementation of Accounting for, Storing, Transferring and Transporting Them’”, such pathogens must be accounted for in a standardized manner, including registration in standardized journals of registration, inventory, dispensing and movement [3]. However, there is no mention of a specific assessment of dual-use research on the websites of the Ministry of Health, Ministry of Defense or Ministry of Agriculture [4, 5, 6]. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention (BWC), access to the reports is restricted, so it is unclear if they contain information on this subject [7]. No further relevant information has been identified in the Verification Research, Training and Information Center (VERTIC) BWC Legislation Database [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
There is insufficient evidence that oversight of dual-use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential, is required by Belarus though such research can only take place at state institutions and is carried out subject to extensive bureaucratic requirements. Activities involving pathogens in the third and fourth risk categories (pathogens posing the threat of an epidemic with known methods of prevention and treatment and without known methods of prevention and treatment respectively) may only be handled by state laboratories, as per article 16-1 of the Law of the Republic of Belarus On the Health and Epidemiological Welfare of the Population No. 340-Z of 7 January 2012 and Ministry of Health of the Republic of Belarus Resolution No. 118 of 21 November 2016 ‘On the Establishment of the List of Potentially Pathogenic Microorganisms and Pathogenic Biological Agents’ [1, 2]. In accordance with Ministry of Health of the Republic of Belarus Resolution No. 2 of 6 January 2017 ‘On the Approval of the Health Standards and Rules “Safety Requirements when Undertaking Work with Potentially Pathogenic Microorganisms and Pathogenic Biological Agents and towards the organization and Implementation of Accounting for, Storing, Transferring and Transporting Them”’, such pathogens must be accounted for in a standardized manner, including registration in standardized journals of registration, inventory, dispensing and movement [3]. There is no further information on oversight of dual-use research on the websites of the Ministry of Health, Ministry of Defense or Ministry of Agriculture [4, 5, 6]. No further relevant information has been identified in the Verification Research, Training and Information Center (VERTIC) Biological Weapons Convention (BWC) Legislation Database [7].


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?
There is insufficient evidence that Belarus has an agency responsible for oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research as well as insufficient evidence of legislation mandating oversight of dual-use research. The relevant legislation confining activities involving pathogens in the third and fourth risk categories (pathogens posing the threat of an epidemic with known methods of prevention and treatment and without known methods of prevention and treatment respectively) to state laboratories, i.e. Law of the Republic of Belarus On the Health and Epidemiological Welfare of the Population No. 340-Z of 7 January 2012, stipulates that the Ministry of Health is responsible for sanitary oversight as well as regulating sanitary health and epidemiology [1]. Ministry of Health of the Republic of Belarus Resolution No. 2 of 6 January 2017 "On the Approval of the Health Standards and Rules “Safety Requirements when Undertaking Work with Potentially Pathogenic Microorganisms and Pathogenic Biological Agents and towards the organization and Implementation of Accounting for, Storing, Transferring and Transporting Them”” stipulates that oversight and enforcement of the regulations is carried out in accordance with Belarusian law, i.e. is Law No. 340-Z of January 2012 [1, 2]. No further information about oversight of dual-use research has been identified on the websites of the Ministry of Health, Ministry of Defense or Ministry of Agriculture [3, 4, 5]. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention (BWC), access to the reports is restricted, so it is unclear if they contain information on this subject [6]. No relevant information has been identified in the Verification Research, Training and Information Center (VERTIC) BWC Legislation Database [7].


**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 national legislation requiring the screening of synthesized DNA before it is sold, but the legislation does not explicitly require the DNA code to be read. In accordance with Law of the Republic of Belarus No. 96-Z of 9 January 2006 "On the Safety of Genetic Engineering Activities", the use of genetically engineered pathogenic and potentially pathogenic microorganisms in economic activities is forbidden [1]. The use of non-pathogenic genetically engineered organisms including plants, animals and microorganisms is subject to state registration by the Ministry of Agriculture and Food. Registration is conditional on a positive conclusion following state safety screening and field tests. However, there is no reference to a requirement that code pass through a screener/code reader that looks for dangerous sequences before sale is authorized.

‘Genetic characteristics’ are one of the eight pieces of information held in the state register of non-pathogenic genetically engineered organisms, but it is not clear or explicitly stated that this includes the genetic sequence [2]. The procedure for state registration is set out under Resolution of the Council of Ministers of the Republic of Belarus No. 1195 of 12 September 2006 “On the Approval of the Statue on the Order of Government Registration of Types of GMO Plants, Animals and Non-Pathogenic GMO Microorganisms” [2]. The import, export and transit of genetically modified microorganisms and genetic material related to pathogens or coding for toxins is subject to state control in accordance with Law of the Republic of Belarus No. 363-2 of 11 May 2016 “On Export Control” and State Military-Industrial Committee of the Republic of Belarus and State Customs Committee of the Republic of Belarus Resolution No. 15/137 of 28 December 2007 “On the Creation of the Lists of Specific Goods” [3, 4]. Companies wishing to engage in such activities must receive state permission, though state military bodies granted the right by the president to carry out such activities need not obtain such permission. There is no evidence of screening involving the reading of organisms’ DNA code on the websites of the Ministry of Health, the Ministry of Defense, and the Ministry of Transport [5, 6, 7]. Although Belarus has submitted Confidence Building Measures for 2020 and 2019 under the Biological Weapons Convention (BWC), access to the reports is restricted, and it is unclear if they contain information on this subject [8]. No further relevant information has been identified in the Verification Research, Training and Information Center (VERTIC) BWC Legislation Database [9].


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
Publicly available evidence only indicates that Belarus's national laboratory system has the capacity to conduct diagnostic tests for 4 of the 10 World Health Organization (WHO)-defined core tests. State-owned laboratories have the capacity to conduct four of the diagnostic tests, but it is unknown whether these are available purely on a private basis or whether they conduct these as a public service. A list of private services offered by the Republican Research and Practical Center for Epidemiology and Microbiology indicates that the laboratory is capable of carrying out virus culture for poliovirus (polio) [1]. A similar list published by the Republican Research and Practical Center of Pulmonology and Tuberculosis indicates that the capacity exists for microscopy for mycobacterium tuberculosis [2]. A 1997 academic article by Vladimir Eremin references the use of serology for HIV at the Republican Research and Practical Center for Epidemiology and Microbiology [3]. Furthermore, serology for HIV was specifically provided for under Ministry of Health Order No. 351 of 16 December 1998 "On the Review of Legislative Acts Regulating Issues Related to the HIV/AIDS Problem" [4]. No information has been identified to confirm that Ministry of Health Order No. 351 of 16 December 1998 has expired or been superseded by subsequent legislation. The webpage for the Republican Research and Practical Center for Epidemiology and Microbiology indicates that ELISA (a form of serological test) and polymerase chain reaction (PCR) tests are available for HIV testing [5, 6]. Local regulations for the Gomel Region Tuberculosis Clinical Hospital (a state hospital) "Sampling, Storage and transport of Infectious Material for Laboratory Diagnosis of Highly Pathogenic Microbes" indicates capacity to conduct PCR testing for influenza virus [7]. A news report indicates that prior to flying to Uganda, missionaries were equipped with rapid tests for malaria, but it is not clear that these tests were provided by the national laboratory system [8]. The Requirements for Sanitary and Counter-Epidemic Measures to Prevent the Carrying, Appearance and Spread of Malaria as approved by Resolution of the Head State Sanitary Doctor of the Republic of Belarus No. 161 of 12 December 2003 refer only to laboratorial diagnosis [9]. No public evidence has been identified of capabilities for rapid diagnostic testing for Plasmodium spp. (malaria) by the national laboratory system. Bacterial culture for Salmonella enteritidis serotype Typhi (typhoid) is named as the method of diagnosis in Order of the Ministry of Healthcare of the Republic of Belarus No. 74 of 8 April 1994 "On Measures to Prevent Typhoid and Paratyphoid Infections in the Republic of Belarus" [10]. Although this Order was repealed by Order of the Ministry of Health of the Republic of Belarus No. 650 of 17 June 2011 "On the Repeal of Order of the Ministry of Health of the Republic of Belarus No. 74 of 8 April 1994", it suggests that the capabilities have existed, though no recent public evidence has been identified of capabilities for bacterial culture for Salmonella enteritidis serotype Typhi (typhoid) by the national laboratory system has been identified [11]. No public information has been identified concerning four country-defined tests has been identified on the websites of the Ministry of Health, Republican Center for Hygiene, Epidemiology and Public Health or Republican Scientific and Practical Center for Microbiology and Epidemiology [12, 13, 14].

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:** 1

There is a national plan, strategy or similar document for conducting testing during a public health emergency, which includes considerations for testing, scaling capacity, and defining goals for testing in relation to Covid-19 but not in respect to novel pathogens in general.
Ministry of Health Resolution No. 91 of 30 October 2020 establishes compulsory medical examination for those that have specified symptoms of Covid-19 (dry cough, fever, loss of sense of taste and smell, etc.) as well as primary contacts of such individuals and secondary contacts presenting with one or more of the specified symptoms; for patients attending hospital for planned medical procedures; and for medical personnel attending to Covid-19 patients [1].

The Ministry of Health’s Recommendations (Temporary) on the Treatment of Patients with Covid-19 as approved by Order of the Ministry of Health of the Republic of Belarus No. 615 of 5 June 2020 and last amended by Order of the Ministry of Health of the Republic of Belarus No. 690 of 1 July 2020 set out the procedure for testing for Covid-19 at the clinical level but do not mention testing for other novel pathogens or for scaling capacity or goals for testing [2]. No information about a national plan, strategy or similar document for conducting testing during a public health in respect of emergency novel pathogens in general has been identified on the websites of the Ministry of Health, Republican Center for Hygiene, Epidemiology and Public Health or Republican Scientific and Practical Center for Microbiology and Epidemiology [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: 1

There is a national laboratory that serves as a reference facility that is accredited. The Belarusian State Center for Accreditation lists the Republican Center for Hygiene, Epidemiology and Public Health and Republican Scientific and Practical Center for Microbiology and Epidemiology as accredited with ISO/IEC 17025:2017 with current attestation lasting from 10 December 2019-10 December 2024 and 21 November 2016-21 November 2021 respectively [6, 7]. According to the website of the Republican Research and Practical Center for Epidemiology and Microbiology, its laboratory is accredited by the World Health Organization (WHO) as a national reference center for poliomyelitis, measles and rubella, and as a regional reference laboratory for rotavirus [1]. Two projects have been initiated in respect of medical laboratory accreditation in Belarus, both with funding from the European Union (EU). According to the International Aid Transparency Initiative Development Portal, the “International accreditation of testing laboratories for medical products and support to healthcare in Belarus” project began on 31 December 2014 with EUR8.3m committed to contribute to the introduction of ISO/IEC 17025 into Belarusian testing laboratories in the health sector, among other things [2]. The project had a planned end date of 25 October 2016, but
according to d-portal (a database of International Aid Transparency Initiative data), the project is still currently being implemented at the time of research in September 2020 [2]. The second project began on 9 February 2016 with US$ 1.6m committed to contribute to the introduction of international standard of quality management ISO/IEC 17025 into Belarusian testing laboratories in health sector [3]. This project had a planned end date of 8 February 2019, but according to d-portal, the project is still currently being implemented at the time of research in September 2020 [3]. The Belarusian State Center for Accreditation lists only one laboratory accredited as ISO 15189:2012, namely the National Anti-Doping Laboratory [4]. The Belarusian State Center for Accreditation states that ISO 15189:2012 accreditation work is ongoing at other laboratories although these laboratories are not identified [5].


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

The national laboratory that serves as a reference facility is subject to external quality assurance review. The Republican Research and Practice Center of Epidemiology and Microbiology – the national laboratory serving as a reference facility for a number of infectious diseases – is subject to quality assurance review by the Center for Examinations and Tests in Health Service of the Ministry of Health of Belarus [1]. According to the website of the Republican Research and Practical Center for Epidemiology and Microbiology, its laboratory is accredited by the World Health Organization as a national reference center for poliomyelitis, measles and rubella, which necessarily subjects the laboratory to external quality assurance reviews, as outlined in the respective laboratory manuals for the networks [2, 3, 4].
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: 1

There is a nationwide specimen transport system in Belarus. Private companies offer delivery services for biological specimens, including AAA Cargo, CIRION (via Globex24) and Translog Biologic [1, 2, 3]. AAA Cargo specifically states on its website that it operates in Belarus and can deliver specimens from any region, offering a door-to-door service intended for doctors, clinical researchers, pharmaceutical companies, major laboratories, research centers and medical establishments engaged in clinical testing. The transportation of pathogens and potentially pathogenic microorganisms is regulated under Ministry of Health Resolution No. 2 of 6 January 2017 ‘On the Approval of the Health Standards and Rules “Safety Requirements when Undertaking Work with Potentially Pathogenic Microorganisms and Pathogenic Biological Agents and towards the organization and Implementation of Accounting for, Storing, Transferring and Transporting Them”’, which lays out the procedural and documentational requirements for such activities [4]. There is no evidence of a state-run transport system, but according to Resolution of the Ministry of Health No. 138 of 23 December 2009 “On Various Issues Related to the Activities of the Sectoral Subsystem of the State System for the Forecasting and Elimination of Emergency Situations of the Ministry of Health of the Republic of Belarus”, in times of raised preparedness (i.e. during a worsening of the biological (bacteriological) situation or upon emergence of a forecast of the possibility of an emergency situation arising) medical formations under the Sectoral Subsystem of the State System for the Forecasting and Elimination of Emergency Situations of the Republic of Belarus are responsible for taking samples, transporting them and conducting laboratorial research [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 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. The Ministry of Health is the licensing body for diagnostic laboratories in accordance with Presidential Order No. 450 of 1 September 2010 “On the Licensing of Certain Types of Activity” [1]. This order makes no provision for expedited authorization or licensing [1]. The accreditation of laboratories is governed by Resolution of the State Committee for Standardization of the Republic of Belarus No. 27 of 31 May 2011 “On Approval of the Accreditation Rules”, which makes no provision for expedited attestation [2]. There is no mention of rapid authorization or licensing of laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak on the websites of the Ministry of Health, Ministry of Agriculture, Republican Center for Hygiene, Epidemiology or Public Health and Republican Scientific and Practical Center for Microbiology and Epidemiology [3, 4, 5, 6]. Sub-component 1.3 of the World Bank Belarus Emergency Covid-19 Response Project relates to supporting the national surveillance system through strengthening of public health laboratories and epidemiological capacity for early detection, confirmation and reporting of cases [7]. It will finance medical supplies and equipment needed to detect Covid-19 infection, including personal protective equipment, Covid-19 testing kits, laboratory reagents and other consumables, but makes no mention of governance changes to permit rapid authorization or licensing [7].

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

Current Year Score: 0

There is no publicly available evidence that the country is conducting ongoing event-based surveillance and analysis for infectious disease. In accordance with Law of the Republic of Belarus No. 183-Z of 27 November 2006 “On Civil Defense”, a network of observation and laboratorial monitoring for civil defense should monitor the outbreak of epidemics, epizootics, epiphytotics and other infectious diseases, including hygiene and epidemiological centers, veterinary laboratories and stations, agrochemical laboratories and environmental monitoring laboratories, among others [1]. The precise activities of this network are set out under Council of Ministers Resolution No. 1493 of 10 October 2008 “On the Approval of the Statue on the Order of Establishment and Activities of the Network of Observation and Laboratorial Monitoring For Civil Defense”, but this legislation is not available in the public domain, as evidenced by its omission from the National Register of Legislative Acts [2]. A presentation on the website of the University of Civil Protection of the Ministry for Emergency Situations of Belarus provides some insight into the work of the network of observation and laboratorial monitoring, including sampling bodies of water, air, soil and plants, food, and animal feed for radioactive, chemical or biological hazards, but there is not enough information to conclude that the network conducts event-based monitoring, though this material is no longer available [3]. No public evidence of ongoing event-based surveillance and analysis for infectious disease being carried out by the country is available on the websites of the Ministry of Health, Ministry of Agriculture or Ministry of Emergency Situations [4, 5, 6].


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 public evidence that Belarus has reported a potential public health emergency of international concern to the World Health Organization (WHO) within the last two years. No reports are present on the WHO Disease Outbreak News website, the WHO Regional Office for Europe country page for Belarus, or the website of the Ministry of Health [1, 2, 3].


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: 0

There is insufficient evidence of an electronic reporting surveillance system operating at the national or sub-national level, though a new national electronic health information system is under development and a non-electronic system exists. A non-electronic system functions in accordance with Ministry of Health Resolution No. 73 of 5 July 2017 “Health Standards and Rules ‘Sanitary-Epidemiological Requirements Towards organizations Rendering Medical Services, Including Towards the Organization and Implementation of Sanitary and Anti-Epidemic Measures To Prevent Infectious Diseases At Such organizations’”. Upon the discovery of an infectious disease or suspicions thereof, the local state health monitoring body must be informed using a standardized form as laid out under Ministry of Health Order No. 976 of 22 December 2006 “On the Approval of the Forms for Primary Medical Documentation to Record Infectious Diseases” [1, 2]. The System for Inter-Ministry Document Processing for State Bodies, an electronic document processing system being rolled out through the country for government bodies and other organizations to share many kinds of electronic documents, was supposed to be close to fully implemented in the healthcare system by the end of 2015 in pursuance of the Strategy for Development of the Information Society to 2015 as approved under Cabinet of Ministers Resolution No. 1174 of 9 August 2010 and Cabinet of Ministers Resolution No. 384 of 28 March 2011 [3, 4, 5, 6]. In July 2017 Vyacheslav Shilo, deputy health minister, indicated that most healthcare organizations were connected to this network, and 85% of Minsk healthcare facilities were digitalized, along with 45-50% of facilities outside of Minsk [7]. None of the laboratories that form the state health monitoring network are individually listed on the system’s website [8]. A dedicated nationwide health information system is being developed with support from the World Bank [9]. The project envisages a US$125 million investment from the International Bank for Reconstruction and Development between 18 November 2016 and 31 December 2023. According to the project results...
framework, as of 2 December 2019 the indicator “Percentage of selected health facilities (phc centers/ambulatories, polyclinics, hospitals, and diagnostic centers) that can electronically exchange patient summaries” stood at 0%, with a target of 100% by 31 May 2022 [10]. In a June 2019 interview published by lex, Victor Sidorenko, Head of Programing and Data Management of the Ministry of Health confirms that the work is to be completed by May 2022, but no mention is made of progress towards the goal [11]. The website of the Republican Scientific and Practical Center for Microbiology and Epidemiology includes a link to the ProMed international reporting system and the service has reported on outbreaks in Belarus since 1997 based on local reports and media reports [12, 13].

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 public evidence of an electronic reporting surveillance system to collect ongoing or real-time laboratory data. A non-electronic system functions in accordance with Ministry of Health Resolution No. 73 of 5 July 2017 “Health Standards and Rules ‘Sanitary-Epidemiological Requirements Towards organizations Rendering Medical Services, Including Towards the organization and Implementation of Sanitary and Anti-Epidemic Measures To Prevent Infectious Diseases At Such organizations’”. Upon the discovery of an infectious disease or suspicions thereof, the local state health monitoring body must be informed using a standardized form as laid out under Ministry of Health Order No. 976 of 22 December 2006 “On the Approval of the Forms for Primary Medical Documentation to Record Infectious Diseases” [1, 2]. The System for Inter-Ministry Document Processing for State Bodies, an electronic document processing system being rolled out through the country for government bodies and other organizations to share many kinds of electronic documents, was supposed to be close to fully implemented in the healthcare system by the end of 2015 in pursuance of the Strategy for Development of the Information Society to 2015 as approved under Cabinet of Ministers Resolution No. 1174 of 9 August 2010 and Cabinet of Ministers Resolution No. 384 of 28 March 2011 [3, 4, 5, 6]. In July 2017 Vyacheslav Shilo, deputy health minister, indicated that most healthcare organizations were connected to this network, and 85% of Minsk healthcare facilities were digitalized, along with 45-50% of facilities outside of Minsk [7]. None of the laboratories that form the state health monitoring network are individually listed on the system’s website [8]. A dedicated nationwide health information system is being developed with support from the World Bank [9]. The project envisages a US$125 million investment from the International Bank for Reconstruction and Development between 18 November 2016 and 31 December 2023. According to the project results framework, as of 2 December 2019 the indicator “Percentage of selected health facilities (phc centers/ambulatories, polyclinics, hospitals, and diagnostic centers) that can electronically exchange patient summaries” stood at 0%, with a target of 100% by 31 May 2022 [10]. The website of the Republican Scientific and Practical Center for Microbiology and Epidemiology includes a link to the ProMed international reporting system and the service has reported on outbreaks in Belarus since 1997 based on local reports and media reports [11, 12].

медицинскую помощь, в том числе к организации и проведению санитарно-противоэпидемических мероприятий по профилактике инфекционных заболеваний в этих организациях».


[https://bymed.top/docs/by-regulatory/%D1%8D%D0%BA%D1%81%D1%82%D1%80%D0%B5%D0%BD%D0%B0%BE%D0%B5-%D0%B8%D0%B7%D0%B2%D0%B5%1%89%D0%B5%D0%BD%D0%B8%D0%B5-976-1245]. Accessed 10 August 2020.


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

Current Year Score: 1

Electronic health records are in use, but there is insufficient evidence that their use is common. The introduction of electronic health cards is a goal of the Conceptual Plan for the Development of eHealth in the Republic of Belarus 2022 [1]. In July 2017 Vyacheslav Shilo, deputy health minister, said that electronic health records had been in use for many years, but had not been fully implemented in certain hospitals, as the medical staff did not have access to computers [2]. Shilo further said that information was not updated automatically, being subject to manual input. He reported that 85% of Minsk healthcare facilities were digitalized, along with 45-50% of facilities outside of Minsk. In December 2017 Yelena Bogdan, head of the main directorate of medical aid and inspection at the Ministry of Health, announced that all medical records would be electronic by the end of 2022, except for those patients who choose to opt out [3]. The World Health Organization’s 2015 eHealth profile for Belarus indicates that at the time of reporting, electronic health records were in use in primary, secondary and tertiary care facilities, however this only applied to 25-50% of facilities of each type [4]. There is no evidence of more recent reports about progress in the adoption of electronic health records.


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: 1

Belarus’s national public health system has access to the electronic health records of individuals. The national public health system in Belarus comprises public healthcare provided by the Ministry of Health [1]. The system is centralized and medical records remain state property under Law of the Republic of Belarus No. 323-Z of 2 November 2011 “On Archiving and Record Keeping in the Republic of Belarus” [2]. Letter of the Ministry of Health No. 02-3-10/738-355 “On Issues of Informing Patients of their State of Health” indicates that a patient’s medical records are property of the relevant healthcare facility [3]. No
specific law exists in relation to electronic records. The system of electronic health records is being developed by the government for the centralized state health service [4]. In a June 2019 interview published by Ilex, Viktor Sidorenko, Head of Programming and Data Management at the Ministry of Health, confirms that there will be no division in electronic record keeping between the state and private healthcare systems; he also confirms that medical records will be accessible through the Single Portal for Electronic Services of the Belarusian government [5]. An interview published by the Mogilev Central Polyclinic website (date unknown) indicates that electronic records are stored in the Ministry of Health’s segment in the state storage facility beCloud [6].

[3] 6th Central District Clinical Hospital. "Letter of the Ministry of Health No. 02-3-10/738-355 "On Issues of Informing Patients of their State of Health”” (Письмо Министерства здравоохранения Республики Беларусь от 31.07.2009г. № 02-3-10/738-355 «О вопросах информирования пациентов о состоянии их здоровья»). [http://www.poliklinika6.by/content/%D0%BE-%D0%B2%D0%BE%D0%BF%D1%80%D0%BE%D1%81%D0%BD%D1%85-%D0%B9%D0%BE%D1%80%D0%BC%D0%B8%D1%80%D0%BE%D2%0D%0D%BD%0D%88%D1%8F-%D0%BF%D0%BD%01%86%D0%BB%D0%BD%01%82%D0%BE%D0%BD%0D%88%0D%BD%0D%88%D1%85-%D0%B7%D0%B4%D0%BE%D1%80%0D%BE%0D%82%0D%8C%0D%8F]. Accessed 11 August 2020.

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

There are standards to ensure data is comparable. Two standards have been identified for the “digitalization of health” in Belarus. State Standard ISO 13606-5-2013 concerns electronic health record communication between systems and services. It describes the informational architecture required for interoperable communication between systems and services which can be accessed using the electronic health card and has been adopted by Belarus [1]. Secondly, State Standard ISO 21549-8-2013 concerns the structure of data on plastic health cards and has been adopted by Belarus [2]. It provides a standardized structure for data stored on health cards that makes accessing the data more convenient. In accordance with point 8.37 of the Statute on the Ministry of Health of the Republic of Belarus, the Ministry of Health develops and establishes the form of medical documents and approves the instructions for their use [3]. For example, Ministry of Health Order No. 710 of 30
August 2007 “On Approval of the Forms for Primary Medical Documentation for Outpatient Polyclinics” sets forth a standardized document for medical records at polyclinics [4]. Thus, non-electronic health records are standardized.

[4] Ministry of Health of the Republic of Belarus. Order No. 710 of 30 August 2007. "On Approval of the Forms for Primary Medical Documentation for Outpatient Polyclinics“ (Приказ Министерства здравоохранения Республики Беларусь от 30.08.2007 N 710 "Об утверждении форм первичной медицинской документации в амбулаторно-поликлинических организациях"). [https://belzakon.net/%D0%97%D0%B0%D0%BA%D0%BE%D0%BD%D0%BE%D0%B4%D0%B0%D1%82%D0%BD%D0%BB%D1%81%D1%82%D0%B2%D0%BE%BD%9F%D1%80%D0%B8%D0%BA%D0%B0%D0%B7%D1%8B/2007/102964]. Accessed 11 August 2020.

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 public evidence of an established mechanism at the relevant ministries responsible for animal, human and wildlife surveillance to share data relating to public health matters. Ministry of Health Resolution No. 105 of 17 July 2012 “On Public Health Monitoring” stipulates that when monitoring public health, the public health bodies must cooperate with the National System for Monitoring the Environment by sharing information on the environmental impact of natural and anthropogenic factors [1]. The websites of the Ministry of Health, the Ministry of Agriculture and Food, and the Ministry of Natural Resources and Environmental Protection make no mention of such a mechanism for public health, nor do the Department of Veterinary and Food Production Oversight, the Republican Scientific and Practical Center for Microbiology and Epidemiology or the Republican Center for Hygiene, Epidemiology and Public Health [2, 3, 4, 5, 6, 7]. Disease-specific plans stipulate that upon learning of an outbreak, the state sanitary oversight bodies must inform the local executive bodies of the source of the infection and the plan to localize and resolve the outbreak [8]. Ecological data collected in accordance with the Statute on Monitoring Forests and the Use of Derived Data (adopted 2016) include changes in the condition of forests under the influence of harmful insects, diseases and other natural and human factors, but this information is subject to sharing only with other national environmental monitoring agencies [9].

[1] kodeksy-by.com. Ministry of Health Resolution No. 105 of 17 July 2012. “On Public Health Monitoring” (“Постановление Минздрав РБ 105 17.07.2012 О социально-гигиеническом мониторинге”). [http://kodeksy-by.com/norm_akt/source-%D0%9C%D0%B8%D0%BD%D0%B7%D0%B4%D1%80%D0%B0%D0%B2%20%D0%A0%D0%91/type-
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

There is insufficient evidence that Belarus regularly makes de-identified health surveillance data on disease outbreaks publicly available via reports on government websites.

No evidence of the regular publication of data is available through the Ministry of Health, Republican Center for Hygiene, Epidemiology and Public Health, and the Republican Research and Practical Center for Epidemiology and Microbiology [1, 2, 3]. De-identified health surveillance data on disease outbreaks are made publicly available at the regional level on the websites of some regional centers for hygiene, epidemiology and public health. For example, Gomel Regional Center for Hygiene, Epidemiology and Public Health publishes 6 monthly data for infectious disease at the regional and national level as well as monthly reports on rabies incidence in animals within the region [4, 5, 6]. Other regional centers do not publish such data, for example, similar reports have not been identified on the website of the Minsk Region Regional Center for Hygiene, Epidemiology and Public Health [7]. The regional centers for hygiene, epidemiology and public health publish annual reports on the general epidemiological status of the relevant region, including de-identified health surveillance data, for example, Health of the Population and Environment of Vitebsk Region 2019, Health of the Population and Environment of Minsk Region 2019 and Sanitary and Epidemiological Health of the Population of Brest Region 2018 [8, 9, 10].
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: 1

Belarus makes de-identified Covid-19 surveillance data available via daily reports on the Ministry of Health website. A daily update is uploaded to the "Events" section of the Ministry of Health website, which includes information on the number of recovered confirmed cases, the total number of positive case results and total number of tests administered, and the total number of deaths [1, 2]. Links to these posts are posted irregularly on the "News" section of the website of the Republican Research and Practical Center for Epidemiology and Microbiology [3]. Worldwide data are regularly posted on the website of the Republican Center for Hygiene, Epidemiology and Public Health, which include data for Belarus [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 legislation in place that safeguards the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities. Article 46 of the Law of 18 June 1993 “On Healthcare” sets out the requirements for medical secrecy [1]. In accordance with this legislation, diagnoses and information about medical intervention are considered medical secrets, but they may be disclosed without the permission of the patient upon application by the Ministry of Health or its bodies for the purposes of state health monitoring, among other things. Under Law No. 455-Z of 10 November 2008 “On Information, Digital Affairs and Data Protection”, while information on the status of healthcare may not be subject to limitations in terms of public access, personal data are subject to limitations, specifically including the state of the individual’s health [2].


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: 1

The laws governing the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, do not include specific mention of protections from cyber attacks, but those responsible for data protection are required to take measures to protect digital information. Cyber attacks are not specifically mentioned in either Law of the Republic of Belarus of 18 June 1993 “On Healthcare” or Law of the Republic of Belarus No. 455-Z of 10 November 2008 “On Information, Digital Affairs and Data Protection” [1, 2]. However, Law of the Republic of Belarus No. 455-Z of 10 November 2008 “On Information, Digital Affairs and Data Protection” requires that data protection measures be implemented in relation to information subject to access limitations, including personal medical data, and in relation to all government data [2]. This includes the use of technological and cryptographical protections certified by the relevant government body [2]. No mention of the protection of individuals’ data from cyber attacks is made on the Ministry of Health website [3]. General protections against cybercrime are outlined in the Belarusian Criminal Code, which prescribes criminal sanctions for relevant acts such as unauthorized access to digital data, modification of digital data, computer sabotage, theft of computer data and other hacking-related activities [4]. However, these do not specifically mention protection of identifiable health information for individuals, such as that generated through health surveillance activities.
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: 2

The government has made a commitment via cooperative agreements to share surveillance data during a public health emergency with other countries in the region for multiple diseases.

A 2020 news report indicates that an agreement was signed between the member states of the Commonwealth of Independent States (CIS) regarding the rules for implementing the IT processes for healthcare measures to speed up existing initiatives in response to the coronavirus pandemic [1]. Directive of the Eurasian Intergovernment Council No. 17 of 17 July 2020 “On the Integrated Plan of Healthcare and Epidemiological Measures to Prevent the Spread of Coronavirus and Other Infectious Diseases on the Territory of the Member-states of the Eurasian Economic Union” approves the Integrated Plan of Healthcare and Epidemiological Measures to Prevent the Spread of Coronavirus and Other Infectious Diseases on the Territory of the Member-states of the Eurasian Economic Union, which includes mutual data sharing on coronavirus-related epidemiological information immediately as well as data sharing in relation to the “Formation, Implementation and Use of Databases for Infectious Disease Outbreaks and Mass Non-infectious Disease Events (Poisoning) and the Dissemination of Products that Endanger Health or the Habitable Environment and Implemented Health Measures”, a process foreseen for 2020-2021 [2].

As a member of the CIS, Belarus has signed up to a number of international agreements to cooperate on public health matters and share data. One such agreement is the Statute on the Order of Information Exchange Between Member States of the Commonwealth of Independent States on Epidemiological Surveillance of Quarantine and Other Dangerous Infectious Disease and on the Control of Potentially Life-Threatening Goods (approved 2003), of which the full text is not available for free online [3]. A 2010 CIS report on the progress of the implementation of the Convention on Cross-Border Cooperation between Member States of the Commonwealth of Independent States (CIS CBC Convention) notes that Belarus actively participates in the Coordination Committee for Problems in Health Security on the Territory of the Member States of the CIS Concerning Dangerous Infectious Diseases, including quarterly reporting that includes information on emergency situations [4]. The CIS CBC Convention itself (adopted 2010) contains a high-level commitment to facilitate development in joint monitoring activities for the sanitary, epidemiological and veterinary health of the population and the protection of territories from the import of infectious livestock and a high-level commitment to facilitate development in healthcare, but
no specific commitment to share surveillance data during a public health emergency [5].


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 of a national system in place to provide support at the sub-national level to conduct contact tracing in the event of a public health emergency in response to an active public health emergency.

No mention of such a system is made on the websites of the Ministry of Health, Republican Center for Hygiene, Epidemiology and Public Health, and the Republican Research and Practical Center for Epidemiology and Microbiology [1, 2, 3]. No mention of such a system is made in Law No. 2435-XII of 18 June 1993 "On Healthcare" or Law No. 340-Z of January 2012 "On the
Health and Epidemiological Welfare of the Population" [4, 5].

However, according to the Covid-19 Health System Response Monitor, as of 11 August 2020, contact tracing was being carried out by medical personnel from the sanitary epidemiological service with the involvement of the Ministry of Internal Affairs. By 22 March more than 23,000 contacts had been traced [6]. A news report from 25 June 2020 indicates that a contract tracing mobile application has been developed for use in Belarus [7].


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: 1

There is some evidence that Belarus provides 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.

With regard to Covid-19, economic support is provided for those who are in self-isolation in accordance with Article 4 of Council of Ministers Resolution No. 208 of 8 April 2020 “On the Introduction of Limitation Measures” [1]. Under this provision, citizens who are included in the social insurance system and who must self-isolate (i.e. those infected with coronavirus or who have been in contact with an infected person) receive payments from the state extrabudgetary fund for social protection of the population of the Republic of Belarus on the basis of inability to work [2]. Furthermore, for workers returning from secondments abroad who must self-isolate as a result, salary is to be paid at no lower than two thirds in accordance with article 1.2 of Resolution of the Council of Ministers of the Republic of Belarus No. 194 of 3 April 2020 [3].

As regards medical assistance during self-isolation, hotline numbers for local regional centers for hygiene, epidemiology and public health are available on the Ministry of Health website as well as instructions to call the emergency services in case of a
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

Belarus does not make de-identified data on contact tracing efforts for Covid-19 available via daily reports (or other formats) on government websites. No such data was identified on the websites of the Ministry of Health, Republican Center for Hygiene, Epidemiology and Public Health or Republican Research and Practical Center for Epidemiology and Microbiology [1, 2, 3].


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

Belarus does not have 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. No such plans or agreements were identified on the websites of the Ministry of Health, Republican Center for Hygiene, Epidemiology and Public Health or Republican Research and Practical Center for Epidemiology and Microbiology.

Current Year Score: 1

There is a joint plan and 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 but only in response to an ongoing emergency.

Epidemiological control at the Belarusian border is governed by Cabinet of Ministers Resolution No. 58 of 3 June 2010 “On Various Issues of Epidemiological Control at Entry Points at the State Border of the Republic of Belarus”, which stipulates that the epidemiological authorities conduct sanitary and epidemiological control at the 30 listed border crossing points, including Minsk National Airport and Gomel Airport, as well as by Presidential Decree No. 524 of 1 January 2014 “On Various Issues of Epidemiological Control at Entry Points at the State Border of the Republic of Belarus”, which stipulates that cooperation between customs, border service and epidemiological authorities is determined locally on the basis of local legislative instruments between said authorities [1, 2]. No such local agreements have been identified in the public domain.

The coordination of the activities of the Border Service and Ministry of Health in respect of Covid-19 is governed by Resolution of the Cabinet of Ministers of the Republic of Belarus No. 171 of 25 March 2020 “On Measures to Prevent the Entry and Spread of Covid-19 Infections”, which for example stipulates that Border Service agents give out forms approved by the Ministry of Health to arrivals and, after they have been filled in, the agents pass them to the responsible Ministry of Health officials [3].


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

**Current Year Score: 0**

There is no public evidence that Belarus has an applied epidemiology training program, or that resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs. Belarus is not mentioned as a host or participant of Field Epidemiology Training Program (FETP) programs with the CDC or Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET), or potentially relevant regional organizations (European Program for Training in Epidemiological Interventions (EPIET)/European public health microbiology (EUPHEM) and South Caucasus Field Epidemiology and Laboratory Training Program (SC-FELTP)) [1, 2, 3, 4]. No mention of government sponsorship of citizens to attend FETP programs abroad is made on the website of the Ministry of Health [5].


### 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 no evidence of any field epidemiology training programs (FETP) inclusive of animal health professionals or a specific animal health field epidemiology training program in Belarus. Belarus is not mentioned as a host or participant of FETP or FETPV programs with the Centers for Disease Control (CDC) or Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET), or potentially relevant regional organizations - European Program for Intervention Epidemiology Training (EPIET)/European Public Health Microbiology training (EUPHEM) and South Caucasus Regional Field Epidemiology and Laboratory Training Program (SC-FELTP) [1, 2, 3, 4]. No mention of government sponsorship of citizens to attend FETP or Field Epidemiology Training Program for Veterinarians (FETPV) programs abroad is made on the website of the Ministry of Health [5].

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: 2

into and out of such territories, self-isolation as well as disinfection [1, 2, 3, 4]. In accordance with the abovementioned legislation, upon the occurrence of a communicable disease with pandemic potential in Belarus, the Council of Ministers takes the decision to introduce the abovementioned restrictive measures and interventions as elaborated by the Ministry of Health.


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: 1

Belarus’s overarching national public health emergency response plan has been updated in the last 3 years. Law No. 340-Z of January 2012 “On the Health and Epidemiological Welfare of the Population” was amended in July 2019 by Law No. 217-Z, but no amendments were made to chapter 4, which includes the public health emergency response plan [1, 2]. Ministry of Health Resolution No. 108 of 18 July 2012 “On Restrictive Measures”, was amended in April 2020 by Ministry of Health Resolution No. 32 to include self-isolation and “other sanitary and epidemiological measures to prevent the spread of infectious diseases and to localize and eliminate them” [3, 4].

3.1.1c
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


Sanitary Doctor of the Republic of Belarus No. 143 of 26 December 2002". [1, 2, 3, 4]. No mention of such considerations is made on the websites of the Ministry of Health, the Republican Center for Hygiene, Epidemiology and Public Health, or the Republican Research and Practical Center for Epidemiology and Microbiology [5, 6, 7].


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: 0

There is no public evidence of a specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. Article 23 of Law No. 340-Z of January 2012 “On the Health and Epidemiological Welfare of the Population” and Ministry of Health Resolution No. 108 of 18 July 2012 “On Restrictive Measures” stipulate that emergency commissions established by the Council of Ministers of the Republic of Belarus and local executive agencies are responsible for the leadership and coordination of organizations and individuals, including individual entrepreneurs (sole traders), in the preventing the entry, appearance and spread of infectious diseases and their localization and elimination, but no further detail is provided [1, 2]. The websites of the Ministry of Health and Ministry of Emergency Situations make no mention of any such mechanisms [3, 4].


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: 2

Belarus has a policy in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic for multiple diseases.

Article 23 of Law of the Republic of Belarus No. 340-Z of January 2012 “On the Health and Epidemiological Welfare of the Population” envisages the introduction of restrictive measures by decision of the Council of Ministers and local executive agencies upon representations made by vice minister for health the head state sanitary doctor, the head state sanitary doctors of regions, cities, districts and urban districts [1].
The List of Restrictive Measures and the Instructions on the Procedure for Restrictive Measures as approved by Resolution of the Ministry of Health of the Republic of Belarus No. 108 of 18 July 2012 includes quarantine (measures to prevent spread, localize and resolve outbreaks), observation (isolation of healthy individuals arriving or leaving quarantined territories who could have had contact with infectious individuals or carriers to observe, control and, if necessary, administer healthcare to prevent spread within and outside of quarantined territories), self-isolation (isolation in domestic or other settings of individuals arriving from countries with a poor epidemiological situation or individuals who have had or may have had contact with individuals with infectious diseases, carriers and those in recovery) and ‘other sanitary and epidemiological measures to prevent the spread of infectious diseases and to localize and eliminate them’ [2, 3].

The legislation provides only for non-specific criteria for the imposition of NPIs, namely the occurrence of highly contagious infectious diseases in Belarus, including but not limited to wild polio, SARS, novel influenza and plague [2]. No NPI policy is outlined in Law of the Republic of Belarus No. 2435-XII of 18 June 1993 “On Healthcare” [4]. No further details are available on the websites of the Ministry of Health, Republican Center for Hygiene, Epidemiology and Public Health or Republican Research and Practical Center for Epidemiology and Microbiology [5, 6, 7]. As regards the coronavirus response, according to the Covid-19 Health System Response Monitor, Belarus has only introduced mild restrictions and physical distancing measures with stricter measures only introduced at the municipal level in Minsk and a number of state mass-public gatherings have been held during the pandemic [8].


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?

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 Belarus has activated the national emergency response plan for an infectious disease outbreak in the past year, but not that it has completed a national-level biological threat-focused exercise (either with the World Health Organization (WHO) or separately) in the past year.

In response to the Coronavirus outbreak, Belarus activated the national emergency response mechanism under Law No. 340-Z of January 2012 by adopting Resolution of the Council of Ministers No. 208 of 8 April 2020 “On the Introduction of Restrictive Measures” [1, 2].

The WHO Strategic Partnership for International Health Regulations (2005) and Health Security (SPH) does not have any information about a national emergency response plan for infectious disease in Belarus or that it has activated one over the past year [3]. The Strategic Partnership for International Health Regulations (2005) and Health Security (SPH) also has no information about any conducted or planned national-level biological threat-focused exercises in Belarus [3, 4].

In accordance with point 11 of the Statute on the Procedure for mobilization Training for Leaders and Employees of National State Agencies, Other Government Agencies under the Control of the Government of the Republic of Belarus, Local Executive Bodies, organizations Involved in the Defense of the Population and Territory from Natural and Anthropogenic Emergencies and Civil Defense Regardless of Ownership, as well as Citizens Recruited into Special Formations of Bodies and Departments Responsible for Emergency Situations as approved by Resolution of the Council of Ministers No. 413 of 23 May 2013, headquarter level exercises involving the Ministry of Emergency Situations, Ministry of Health and other interested ministries are to be carried out once in three years and only headquarter exercises at certain civil Defense organizations are held on an annual basis excluding multi-agency exercises [5]. No information about national-level biological threat-focused exercises in the past year has been identified on the websites of the Ministry of Health or the Ministry of Emergency Situations [6, 7].

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 public evidence that in the last year Belarus has undergone an exercise to identify a list of gaps and best practices through either an after-action review or a biological threat-focused IHR exercise with the World Health Organization (WHO). The WHO after-action review page does not have any information on exercises with Belarus [1]. In October 2018 Belarus was one of 12 countries that participated in a 2-day polio outbreak simulation exercise (POSE) that was organized by the WHO and the European Center for Disease Prevention and Control (ECDC). The simulation was based on a real event and afterwards each country made a gap analysis of the plans for responding to such an event in a poliovirus essential facility (PEF), but Belarus has not published its gap analysis [2, 3]. There is no additional information on the websites of the Ministry of Health, the Ministry of Agriculture and Food or the WHO Strategic Partnership for International Health Regulations (2005) and Health Security (SPH) page for Belarus, and no such exercises over the past year have been identified [3, 4, 5].

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 Belarus has, in the past year, undergone a national-level biological threat-focused exercise that has included private sector representatives. The Strategic Partnership for International Health Regulations (2005) and Health Security (SPH) has no information about any conducted or planned national-level biological threat-focused exercises in Belarus [1, 2]. The Statute on the Procedure for Mobilization Training for Leaders and Employees of National State Agencies, Other Government Agencies under the Control of the Government of the Republic of Belarus, Local Executive Bodies, Organizations Involved in the Defense of the Population and Territory from Natural and Anthropogenic Emergencies and Civil Defense Regardless of Ownership, as well as Citizens Recruited into Special Formations of Bodies and Departments Responsible for Emergency Situations (adopted 2013) applies to organizations involved in protecting the population and territory from natural and anthropogenic emergencies and civil defense, regardless of their ownership, however there is no express provision made for biological threat-focused exercises in this legislation [3]. No information about national-level biological threat-focused exercises in the past year including private sector representatives has been identified on the websites of the Ministry of Health or Ministry of Emergency Situations [4, 5].

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

Belarus has in place an emergency operations center (EOC) that specifically covers health issues, namely the Council of Ministers Commission for Emergency Situations. The State System for the Prevention and Resolution of Emergency Situations specifically covers epidemics and within this system the Council of Ministers Commission for Emergency Situations has coordinating and management responsibilities during emergency situations under Council of Ministers Resolution No. 495 of 10 April 2001 "On the State System for the Prevention and Resolution of Emergency Situations" [1]. On 3 June 2019 a website was created for the Republican Center for the organization of Medical Response [2]. According to the website, the Center was established in accordance with Order of the Ministry of Health No. 309 of 18 March 2019, however this legislation has not been identified in the public domain and there is no explicit reference to pandemic or epidemiological response on the website, though the Center is reported to have arranged the supply and delivery of 100,000 Covid-19 antibody express tests from China in a media report of 11 May 2020 [3, 4, 5, 6, 7]. The Republican Emergency Management and Response Center of the Ministry of Emergency Situations is responsible for directing state bodies in reaction to general emergency situations and the coordination of their work, however no evidence of involvement in health issues has been identified on the Republican Emergency Management and Response Center of the Ministry of Emergency Situations website, including as regards the Coronavirus epidemic, or in its foundational document under Council of Ministers Resolution No. 688 of 24 June 2005 [8, 9].
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 insufficient evidence to confirm that Belarus’s emergency operations center is required to conduct a drill for a public health emergency scenario at least once per year, nor that such a drill is conducted once per year.

In accordance with Resolution of the Council of Ministers No. 413 of 23 May 2013 “On Approval of the Statute on the Procedure for mobilization Training for Leaders and Employees of National State Agencies, Other Government Agencies under the Control of the Government of the Republic of Belarus, Local Executive Bodies, organizations Involved in the Defense of the Population and Territory from Natural and Anthropogenic Emergencies and Civil Defense Regardless of Ownership, as well as Citizens Recruited into Special Formations of Bodies and Departments Responsible for Emergency Situations”, table-top exercises are held in agencies and organizations with the involvement of the Ministry of Emergency Situations, Ministry of Internal Affairs, Ministry of Health and other interested parties as necessary once in three years, comprehensive training exercises with forces and agencies leading the State System of Prevention and Elimination of Emergency Situations and Civil Defense once every seven years, tactical special exercises with emergency services once a year and training with institutions within the network of monitoring and laboratorial control at the national level once every three years, at the regional level once every two years and at the local level once a year [1]. However, the resolution makes no mention of health-specific exercises. [1] The Ministry of Health, Ministry of Emergency Situations and Ministry of Internal Affairs websites make no reference to drill frequency requirements or annual drills having taken place [2].

[1] National Legal Internet Portal of the Republic of Belarus (Pravo.by). Resolution of the Council of Ministers No. 413 of 23 May 2013. "On Approval of the Statute on the Procedure for mobilization Training for Leaders and Employees of National State Agencies, Other Government Agencies under the Control of the Government of the Republic of Belarus, Local Executive Bodies, organizations Involved in the Defense of the Population and Territory from Natural and Anthropogenic Emergencies and Civil Defense Regardless of Ownership, as well as Citizens Recruited into Special Formations of Bodies and Departments Responsible for Emergency Situations" ("Постановление Совета Министров Республики Беларусь 23 мая 2013 г. № 413 Об утверждении Положения о порядке обучения руководителей и работников республиканских органов государственного управления, иных государственных организаций, подчиненных Правительству Республики Беларусь, местных исполнительных и распорядительных органов, организаций независимо от форм собственности и населения в области защиты населения и территорий от чрезвычайных ситуаций природного и техногенного характера и гражданской обороны, а так же граждан, которыми комплектуются специальные формирования органов и подразделений по чрезвычайным ситуациям по мобилизации").

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 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. According to information posted on the Ministry of Emergency Situations website in April 2018, the Republican Emergency Management and Response Center participated in a large-scale "tactical-special" drill at Vitebsk Airport to test the cooperation between government agencies, improve the agencies response to aviation emergencies and the management of such emergencies [1]. No information is available on response times or on incidents over the past year. There is no mention of such capabilities on the Ministry of Health website [2]. No information about the ability of the Republican Center for the Organization of Medical Response to conduct a coordinated emergency response or to show that this emergency response exercise was activated within 120 minutes of the identification of the public health scenario has been identified [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 public evidence that public health and national security authorities have carried out a joint exercise to respond to a potential deliberate biological event (i.e., bioterrorism attack). There is no evidence of publicly available standard operating procedures, guidelines, memoranda of understanding or other agreements between the public health and security authorities to respond to a deliberate biological event. According to the Ministry of Defense website, specialist radiation, chemical and biological defense troops underwent a four-day tactical-special exercise on 24-27 April 2018, but there is no indication that the health authorities, or any other government bodies, were involved in this exercise. [1] The Ministry of Health, the Ministry for Emergency Situations, the Republican Emergency Management and Response Center and the
Republican Center for the Organization of Medical Response make no mention of any such exercises or guidelines [2, 3, 4, 5].


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 (eg different languages, location within the country, media reach)?

Yes = 1, No = 0

Current Year Score: 1

Belarus’s communication strategy to guide national public health response outlines how messages will reach populations and sectors with different communication needs. Council of Ministers Resolution No. 1118 of November 2014 “On the Approval of the Statute on the System of Informing the Public and Management Bodies of the State System for the Prevention and Resolution of Emergency Situations” outlines that the main means of informing the public is through recorded voice broadcasts that interrupt television and radio programs. In certain situations, the information may be conveyed by direct speech or by electronic recording. The signals are to be broadcast from a number of geographically dispersed locations through a complex of dispersed electronic communications apparatus to ensure the consistent functioning of the communication system. The signals can be broadcast to all of Belarus, but also to individual locations, districts and regions according to requirements. For those living in areas not covered by the communication system (sparsely populated areas, rural localities, etc.), vehicles equipped with loudspeakers may be employed [1]. Beyond people living in rural areas, no other special communication groups are mentioned. The Republican Emergency Management and Response Center also highlights its use of five means of communicating information about emergencies to the population in all Belarusian territory, the commission for emergency situations at the Council of Ministers of the Republic of Belarus, national state executive bodies and state organizations under the control of the Belarusian government and regional branches of the Ministry of Emergency Situations of the Republic of Belarus, namely through State System of Emergency Warning and Resolution and Civil Defense signals, interruption of radio and television broadcasts through broadcast stations, placing scrolling text on television channels, sending SMSs and uploading information to the Internet [2]. It is not specifically mentioned that the range of means of communication is designed to reach special populations with different communications needs.

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: 1

The country has in place a risk communication plan that is intended for use during a public health emergency. The State System for the Prevention and Resolution of Emergency Situations is laid out in Resolution of the Council of Ministers of the Republic of Belarus No. 495 of 10 April 2001 “On the State System for the Prevention and Resolution of Emergency Situations”. It is a governance system designed to unite the state bodies managing the prevention of and response to emergency situations. It specifically includes provisions for epidemics [1]. The risk communication plan for the State System for the Prevention and Resolution of Emergency Situations is set out in Ministry of Emergency Situations Resolution No. 33 of 31 July 2020 “On the Information-Management System of the State System for the Prevention and Resolution of Emergency Situations” [2]. The information management system envisaged under this legislation is designed to facilitate communication within the State System for the Prevention and Resolution of Emergency Situations and with the public, among other things. The plan calls for the relevant organizations to be equipped with the necessary technology to participate in the communication plan and details the flow of information between organizations. Furthermore, Council of Ministers Resolution No. 1118 of November 2014 “On the Approval of the Statute on the System of Informing the Public and Management Bodies of the State System for the Prevention and Resolution of Emergency Situations” further details the communication plan, particularly as regards the process for communicating with the public [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

The risk communication plan does not designate a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. The risk communication plan for the State System for the Prevention and Resolution of Emergency Situations as set out under Ministry of Emergency Situations Resolution No. 33 of 31 July 2020 “On the Information-Management System of the State System for the Prevention and Resolution of Emergency Situations” and Council of Ministers Resolution No. 1118 of November 2014 “On the Approval of the Statute on the System of Informing the Public and Management Bodies of the State System for the Prevention and Resolution of Emergency Situations” make no reference to the designation of a specific position within the government to serve as the primary spokesperson to the public during a public health emergency [1, 2]. No information about such a position has been identified on the websites of the Ministry of Health or the Ministry of Emergency Situations [3, 4].


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: 2

The government uses media platforms to inform the public about public health emergencies. A 2018 report in state media indicates that the Ministry of Emergency Situations has used Twitter for more than nine years to provide rapid updates on incidents and answer questions from the public [1]. Furthermore, the same report indicates that the ministry has Viber and Telegram channels. The Twitter profile has 82.4k followers as of August 2020 [2]. The Viber community has 110,440
members as of August 2020 [3]. The Telegram channel has 4,178 subscribers as of August 2020 [4]. The Ministry of Emergency Situations posts updates on its website about emergencies after they have been resolved [5]. There is no evidence to suggest that the Republican Emergency Management and Response Center uses their websites to post updates on public health emergencies [5, 6]. The Ministry of Emergency Situations uploaded a video by Ministry of Emergency Situations students about personal actions to prevent the spread of coronavirus, but has otherwise not actively posted about the epidemic [7]. The Ministry of Health has an information page about Covid-19 in Belarus which includes a link to a presentation entitled ‘Dispelling Myths about COVID-19’ which contains information from the World Health Organization [8, 9]. It also regularly posts Coronavirus updates on its Telegram channel created on 2 March 2020 [10].

[9] Ministry of Health of Belarus. "Dispelling Myths about COVID-2019" ("Разрушая мифы о COVID-2019"). [http://minzdrav.gov.by/upload/dadvfiles/letter/%D0%A0%D0%80%D0%B7%D1%83%D1%88%D0%B0%D0%B5%D0%BC%20%D0%BC%20%D1%84%D1%8B%20%BE%20COVID-2019.pdf]. Accessed 17 August 2020.

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: 0

There is evidence that the president has shared misinformation or disinformation on infectious diseases in the past two years. Alexander Lukashenko, the country's president, has made the following claims in public media, which constitute or likely constitute misinformation: that 97% of the population experience no symptoms from coronavirus; that there is a psychosis surrounding the virus; that not one person had died from the virus in Belarus, and the deaths alleged to have
resulted from the disease actually died of existing chronic diseases; that nobody in Belarus would die from the virus; that a combination of medicines to save people had already been identified; that having regular meals can prevent the virus; that 40-50 ml of vodka should be consumed each day to poison the virus; that going to the sauna two or three times a week can prevent the virus; that simply working will protect against the virus, as the tractor and field heals everyone. [1, 2, 3]


### 3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

#### 3.6.1 Internet users

**3.6.1a**

**Percentage of households with Internet**

<table>
<thead>
<tr>
<th>Input number</th>
<th>Current Year Score: 82.79</th>
</tr>
</thead>
</table>

2019

International Telecommunication Union (ITU)

#### 3.6.2 Mobile subscribers

**3.6.2a**

**Mobile-cellular telephone subscriptions per 100 inhabitants**

<table>
<thead>
<tr>
<th>Input number</th>
<th>Current Year Score: 122.92</th>
</tr>
</thead>
</table>

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: 2.0

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

Current Year Score: 5.0

2019

Gallup; Economist Impact calculation

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

Current Year Score: 0

In the past year, Belarus has issued a restriction, without international or bilateral support, on the export of medical goods due to an infectious disease outbreak. On 17 March 2020 Belarus introduced a ban on the export of certain types of mask, protective goggles, mask filters, disposable protective overalls and chemical suits, foot coverings, bandages, gauze and wadding, surgical gloves, surgical scrubs, other medical protective clothing and other breathing equipment and gas masks, effective until 1 July 2020 [1]. On 21 April 2020 the resolution was amended to include ventilators and equipment for oxygen therapy [2]. In restricting the export of these goods, Belarus relied on the derogation available under article 29 of the Agreement on the Eurasian Economic Union (EEU) of 29 May 2014 and the right to unilateral imposition of non-tariff restrictions under article 47 [3]. No international or bilateral support for these measures has been identified. As a member state of the EEU, Belarus is also subject to EEU export restrictions on medical and protective equipment such as disinfectants, masks, protective eyewear and various textiles with medical applications, which were introduced on 28 April 2020 and last until 30 September 2020 [4].

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

Current Year Score: 0

In the past year Belarus has issued a restriction, without international or bilateral support, on the export of non-medical goods due to an infectious disease outbreak. On 31 March 2020 Belarus introduced a ban on the export of buckwheat, buckwheat groats, onions, pearl onions and garlic from 3 April 2020 to 3 July 2020 [1]. In restricting the export of these goods, Belarus relied on the derogation available under article 29 of the Agreement on the Eurasian Economic Union of 29 May 2014 and the right to unilateral imposition of non-tariff restrictions under article 47 [3]. No international or bilateral support for these measures has been identified. As a member state of the Eurasian Economic Union (EEU), Belarus was also subject to EEU export restrictions on a number of food goods, namely onion, garlic, turnip, rye, rice, buckwheat, proso millet, cereals and course flour, hulled buckwheat, soybeans whole or broken, sunflower seeds whole or broken, prepared food made from buckwheat, which were introduced on 31 March 2020 and lasted from 10 April 2020 until 30 June 2020 [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: 1

In the past year Belarus has not implemented a ban on travelers arriving from a specific country or countries due to an infectious disease outbreak. All of Belarus’s neighboring states (Russia, Poland, Ukraine, Latvia and Lithuania) closed their borders with Belarus [1]. However, no evidence of reciprocal measures has been identified on the websites of the Ministry of Health, Ministry of Foreign Affairs or Border Service. [2, 3, 4]. President Lukashenko strongly criticized such measures by Russia [5]. In accordance with Resolution of the Council of Ministers of the Republic of Belarus No. 171 of 25 March 2020 “On Measures to Prevent the Introduction and Spread of Covid-19”, individuals arriving from countries in which Covid-19 is active (as listed by the Ministry of Health) must self-isolate in domestic conditions for 14 days [6, 7].

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: 519.05

2015

WHO; national sources

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

Current Year Score: 1100.27

2015

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 public evidence of a public workforce strategy to identify fields where there is an insufficient workforce or strategies to address these shortcomings.

In 2004, the National Committee for Sustainable Development of the Republic of Belarus published the National Strategy for Sustainable Socio-Economic Development in the Republic of Belarus for the period until 2020 [1]. The strategy addresses general demographic problems and strategic solutions, mainly focusing on population shrinkage, but does not address sectoral workforce needs. [1]

The Ministry of Labor and Social Protection publishes data on supply and demand by profession. [2] The data as at 1 January 2020 show a large unmet demand for doctors (2,672 vacancies), nurses (2,548 vacancies) and medical or laboratory
assistants (404) [2]. However, no strategy to address shortages has been identified. A news article from February 2018 reports that the apparent deficit posted by the Ministry of Labor is actually due to the system of accounting for vacancies, which does not take into consideration the fact that many hospitals keep vacancies posted on a permanent basis to attract interest, and the fact that many professionals work part-time at a number of different hospitals [3]. The article reports that the Ministry of Health does not consider there to be a shortage of medical workers and actually predicts a surplus of medics, which is leading the ministry to cut the number of university places for medical students. [3] However, opposition movement Charter 97 noted a high rate of emigration among medical professionals in 2019 and a resulting increase in the deficit of medical workers [4].

No information about a public workforce strategy has been identified on the website of the Ministry of Health [5]. In October 2019, President Lukashenko was asked by journalists whether the government fears the widespread flow of medical specialists out of the country and what steps would be taken to prevent it, to which he responded that it concerns the government, but not overly, as the minister of health says the problem would be resolved in two years and that Belarus would take measures to support specialists, in particular by creating the necessary standards of living and working and raising salaries [6]. The health minister, Vladimir Karanik, announced in June 2019 that medical salaries would be doubled by 2025 [7]. In December 2019, the president denied that there was a problem with medical workers emigrating [8].


4.1.2 Facilities capacity

4.1.2a Hospital beds per 100,000 people

Input number
Current Year Score: 1083

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: 1

Belarus has the capacity to isolate patients with highly communicable diseases in a patient isolation facilities located within the country. For example, the City Clinical Infectious Disease Hospital has 216 beds in infectious wards, including an isolation unit [1]. No detailed information about the equipment employed in the unit is presented on the website. According to a media report from 2014, the City Clinical Infectious Disease Hospital is designated as the treatment hospital should anybody in Belarus contract Ebola [2]. This article describes a drill response to an Ebola outbreak, indicating that the patient is transported in a hermetically sealed polyethylene containment stretcher with built-in gloves and air valves and the medical staff wear personal protective equipment, including biological protection suits. There is a special entrance to the containment unit for contaminated individuals with locked doors and a window for giving food and medicines while limiting exposure to the patient. An interview with Svyatoslav Velgin, Deputy Chief Doctor for Medicine of 6 April 2020, published by the Information and Analytical Portal of the Union State, shows that the City Clinical Infectious Disease Hospital has been engaged in the treatment of patients during the coronavirus epidemic [3].


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: 1
There is some evidence that Belarus has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years.

A press report by The Village dated 17 March 2020 titled "Hospital No. 6 in Minsk Converted into Quarantine for Suspected Coronavirus Cases" indicates that, during the Covid-19 pandemic, one of the buildings of Hospital No. 6 in Minsk was reprofiled for Covid-19 isolation [1]. A press report by BELTA dated 25 October 2020 titled "Number of Belarusian Hospitals Reprofiled for Covid-19 Patients" indicates that many hospitals have been reprofiled for use during the Covid-19 outbreak, for example, 1,762 beds were made available for Covid-19 patients in hospitals in Minsk Region [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

There is a national procurement protocol in place, which can be utilized by the Ministries of Health and Agriculture for the acquisition of laboratory needs and medical supplies for routine needs.

Law No. 419-Z of 13 July 2019 “On State Procurements of Goods (Work, Services)” sets out the regulations for state procurement [1]. Under article 18 of this law, each procurer must approve and publish an annual state procurement plan, and each procurement is uploaded to one of a number of official electronic trade platforms, for example http://goszakupki.by and http://zakupki.btb.by, as stipulated by Council of Ministers Resolution No. 395 of 15 June 2019 [1, 2].

The Ministry of Health and its subsidiary bodies, as well as the Ministry of Agriculture and its subsidiary bodies, can use this system for the procurement of laboratory items. For example, the Republican Research and Practical Center for Epidemiology and Microbiology’s procurement plan for 29 July 2020 can be accessed on the National Center for Marketing Electronic Trading Platform [3]. An example of routine procurement of medical supplies is the procurement of x-ray cassettes, electrocardiogram paper, disposable equipment for enemas and biopsy forceps by Borisov Hospital No. 2 on 30 March 2020 [4].

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: 1

Belarus has a stockpile of medical supplies for national use during a public health emergency, but there is little information available on what the stockpile contains.

Ministry of Health Order No. 102 of 31 May 1993 “On the Establishment in the Republic of an Emergency Medical Service for Public Health Emergencies” calls on the Ministry of Health to prepare a proposal on establishing emergency supplies of medicines and medical supplies in designated centers, as well as linking the centers with communications and transport [1]. According to Ministry of Health Resolution No. 138 of 23 December 2009 “On Various Issues Related to the Activities of the Sectoral Subsystem of the State System for the Forecasting and Elimination of Emergency Situations of the Ministry of Health of the Republic of Belarus”, medical formations under the Sectoral Subsystem of the State System for the Forecasting and Elimination of Emergency Situations are responsible for establishing, maintaining and replacing stockpiles of medical equipment and supplies necessary for responding to emergencies [2].

According to a 2015 Ministry of Health textbook for students of the clinical and pediatric faculties at the Grodno State Medical University military department, emergency medical centers are located in regional centers at regional hospitals, and each center holds stockpiles of medical supplies for 500 patients for centers in regional institutions and 1,000 patients for national-level centers. [3] A 2007 textbook from the same university indicates that the emergency medical centers are also supplied by medical facilities, which specifically stockpile medicines and medical equipment to treat 100 patients for two days in case of a public health emergency [4].

According to Lyudmila Reutskaya, former head of the Pharmaceutical Inspectorate and organization of Medicine Provision of the Ministry of Health of the Republic of Belarus, quoted in a 2017 Ministry of Health press release, a stockpile of medicines is created every year for the autumn-winter period for the treatment of acute respiratory illnesses and influenza [5]. No further information has been identified on the websites of the Ministry of Health, Ministry of Defense, Ministry of Emergency Situations, Republican Center for Hygiene, Epidemiology and Public Health or Republican Scientific and Practical Center for Microbiology and Epidemiology [6, 7, 8, 9, 10].
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 no publicly available evidence that Belarus has a stockpile of laboratory supplies for national use during a public health emergency. No mention of any such stockpile is made on the websites of the Ministry of Health, Ministry of Defense, Ministry of Emergency Situations, Republican Center for the Organization of Medical Response or Center for Examinations and Tests in Health Service [1, 2, 3, 4, 5].

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 to suggest that Belarus conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency.

According to Ministry of Health Resolution No. 138 of 23 December 2009 “On Various Issues Related to the Activities of the Sectoral Subsystem of the State System for the Forecasting and Elimination of Emergency Situations of the Ministry of Health of the Republic of Belarus”, medical formations under the State System for the Forecasting and Elimination of Emergency Situations responsible for establishing and maintaining stockpiles of medicines necessary for the work of the medical formations during normal conditions should check stockpiles for readiness during times of heightened preparedness, i.e. when the threat level is heightened. [1] However, no mention is made of an annual review [1]. There is also no mention made of an annual review of the national stockpile in Ministry of Health Order No. 102 of 31 May 1993 “On the Establishment in the Republic of an Emergency Medical Service for Public Health Emergencies” [2].

According to Lyudmila Reutskaya, former head of the Pharmaceutical Inspectorate and Organization of Medicine Provision of the Ministry of Health of the Republic of Belarus, quoted in a 2017 Ministry of Health press release, a stockpile of medicines is created every year for the autumn-winter period for the treatment of acute respiratory illnesses and influenza. [3] However, the press release makes no mention of an annual review of other stockpiles [3]. No further information was identified on the websites of the Ministry of Health, Ministry of Defense, Ministry of Emergency Situations, Republican Center for Hygiene, Epidemiology and Public Health or Republican Scientific and Practical Center for Microbiology and Epidemiology [4, 5, 6, 7, 8].

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 of a plan or agreement to leverage domestic manufacturing capacity to produce medical supplies for national use during a public health emergency, nor is there evidence of a plan/mechanism to procure medical supplies for national use during a public health emergency.

During the Covid-19 pandemic, domestic manufacturers have been producing diagnostic tests, but there is no evidence that this is done on the basis of a plan or agreement [1]. A news article from 9 April 2020 states that the Ministry of Health refused to comment on cooperation with private companies until they had achieved figures that they had promised to achieve [2]. No subsequent statements have been identified. There are many examples of domestic manufacturing capacity being repurposed to produce medical supplies: in particular, more than 50 major companies have reportedly begun producing masks and medical gowns, while a number of alcoholic beverage factories have started producing disinfectant [3]. Media reports indicate that this resulted from instructions handed down by the president [4, 5]. However, no information has been identified to confirm that such efforts are based on a formal plan or agreement on the websites of the Ministry of Health, Ministry of Emergency Situations, Republican Center for the organization of Medical Response or Ministry of Industry [6, 7, 8, 9, 10].

The Republican Center for the organization of Medical Response has been involved in the procurement of medical supplies, for example, 100,000 Covid-19 express tests were acquired from China [11]. According to the Ministry of Health, as of 17 April 2020, BYN5.34m (US$2m) and EUR79,011 (US$93,000) have been received in charitable donations, which has been used in the procurement of masks and other protective equipment [12]. The ordinary mechanisms for state procurement are available for use during public health emergencies and are used as such, but this is limited to the institutional level rather than the national level. [13, 14]. On 31 March 2020, the Ministry of Anti-Trust Regulation and Trade simplified the procurement procedure in response to the Covid-19 epidemic allowing for procurement from a single source in emergency circumstances [15]. No information about a plan or mechanism to procure medical supplies during a public health emergency has been identified on the websites of the Ministry of Health, Ministry of Emergency Situations, Republican Center for the organization of Medical Response, Ministry of Industry or Ministry of Defense [6, 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 of a plan or agreement to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency, nor of a plan or mechanism to procure laboratory supplies for national use during a public health emergency. Belarusian laboratory equipment company Algimed has created a special Covid-19 page to advertise its laboratory media and reagents, but it does not mention any government plan or agreement [1]. There is no evidence of such a plan or agreement on the websites of the Ministry of Health, Ministry of Emergency Situations, Republican Center for the Organization of Medical Response, Ministry of Industry, Republican Center for Hygiene, Epidemiology and Public Health or Republican Research and Practical Center for Epidemiology and Microbiology [2, 3, 4, 5, 6, 7]. According to the Ministry of Health, as of 17 April 2020, BYN5.34m (US$2m) and EUR79,011 (US$93,000) had been received in charitable donations, which has been used in the procurement of masks and other protective equipment [8]. The ordinary mechanisms for state procurement are available for use during public health emergencies and are used as such, but this is limited to the institutional level rather than the national level. [10, 11]. On 31 March 2020, the Ministry of Anti-Trust Regulation and Trade simplified the procurement procedure in response to the Covid-19 epidemic, allowing for procurement from a single source in emergency circumstances [12]. No information about a plan or mechanism to procure laboratory supplies during a public health emergency has been identified on the websites of the Ministry of Health, Ministry of Emergency Situations, Republican Center for the organization of Medical Response, Ministry of Industry, Republican Center for Hygiene, Epidemiology and Public Health or Republican Research and Practical Center for Epidemiology and Microbiology [2, 3, 4, 5, 6, 7].

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 no evidence that the country has a national plan in place for dispensing medical countermeasures for national use during a public health emergency. No legislative basis for such a plan has been identified in the public domain, including the websites of the Ministry of Health, Ministry of Defense and Ministry for Emergency Situations [1, 2, 3].

Academic materials from Grodno State Medical University indicate that emergency medical service medical workers are to be organized into brigades to operate in hospitals and at the sites of public health emergencies [4]. However, plans at individual hospitals are made at institutional level to take into account local conditions and resources.

No mention of any such plan or guidelines is made in the relevant legislation, i.e. Resolution of the Ministry of Health of the Republic of Belarus No. 138 of 23 December 2009 “On Various Issues Related to the Activities of the Sectoral Subsystem of the State System for the Forecasting and Elimination of Emergency Situations of the Ministry of Health of the Republic of Belarus” [5].

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 public plan in place that specifically relates to receiving health personnel from other countries to respond to a public health emergency. Belarus has at least 50 agreements relating to international emergency response and planning, a number of which contain provisions for the exchange of assistance during emergency situations, including with Ukraine and Kazakhstan, but none have been identified that specifically refer to receiving health personnel from other countries [1, 2, 3]. There is no evidence of specific guidelines for receiving health personnel on the websites of the Ministry of Health, Ministry of Defense, Ministry for Emergency Situations, Republican Emergency Management and Response Center or Republican Center for the organization of Medical Response [4, 5, 6, 7, 8].


4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a

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

Guaranteed free = 4, Guaranteed right = 3, Aspirational or subject to progressive realization = 2, Guaranteed for some groups, not universally = 1, No specific provision = 0
**4.4.1b**
Access to skilled birth attendants (% of population)
Input number

Current Year Score: 99.8

2014


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

Current Year Score: 310.68

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 public evidence of legislation, policies or public statements committing to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency. No mention of any such commitments is made on the Ministry of Health, Ministry of Emergency Situations or Republican Center for the Organization of Medical Response websites [1, 2, 3]. Furthermore, no mention is made in the emergency planning legislation: Law No. 117-Z of 24 June 2002 “On the State of Emergency” or Council of Ministers Resolution No. 495 of 10 April 2001 “On the State System for the Prevention and Resolution of Emergency Situations” [4, 5].


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 of a system in place for public health officials and healthcare workers to communicate during a public health emergency.

Ministry of Health Order No. 102 of 31 May 1993 "On the Establishment in the Republic of a Public Health Emergency Medical Service" requires that the emergency medical centers at national and subnational levels be equipped with the technical capabilities to maintain communications and alert systems to ensure rapid response management and cooperation for resolutions in the context of emergency situations [1]. This order does not lay out specific provisions for public health officials and healthcare workers, but it does specifically stipulate that the communication system must allow communications between the Republican Center for Emergency Medicine and regional emergency centers, scientific research centers and other ministries and government agencies for the specific purpose of managing the response to emergency situations, among other things. On the website of the Republican Center for Emergency Medicine, the center indicates it has responsibility for overseeing the alert system [2]. No further evidence was found on the websites of the Ministry of Health or Republican Center for the Organization of Medical Response [3, 4].

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 public evidence of a system for public health officials and healthcare workers to communicate during an emergency that encompasses healthcare workers in both the public and private sector. No mention is made of the inclusion of private sector healthcare workers in the public health emergency communication system, which is outlined in Ministry of Health Order No. 102 of 31 May 1993 “On the Establishment in the Republic of a Public Health Emergency Medical Service” [1]. There is no mention of the inclusion of private sector healthcare workers in the public health emergency communication system on the websites of the Republican Center for Emergency Medicine, Ministry of Health or Republican Center for the Organization of Medical Response [2, 3, 4].


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: 1

There is evidence that the national public health system is monitoring for and tracking the number of healthcare-associated infections (HCAIs) that take place in healthcare facilities.

In accordance with Ministry of Health Resolution No. 73 of 5 July 2017, if an infectious disease is identified in a hospitalized
A November 2015 presentation by Yekaterina Varivoda, Head of Epidemiological Monitoring at Healthcare Organizations at the Republican Center for Hygiene, Epidemiology and Public Health presents statistics on HCAIs in Belarus in 1990-2012, attesting that HCAIs are monitored and tracked [4]. A report issued by the Minsk Region Center for Hygiene, Epidemiology and Public Health in 2019 presents statistics on HCAIs at regional level, stating that 40 cases were registered in the Minsk Region in 2018 [5].
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: 1

There is a national requirement for ethical review before beginning a clinical trial. Under Article 15 of Law No. 161-Z of 20 July 2006 “On Pharmaceuticals”, clinical trials must be approved by an ethics committee [1]. Ethics committees are established in state healthcare organizations to examine the protection of the rights, safety and health of the individuals participating in trials, assess the qualifications of the researchers and compliance with the conditions of clinical trials. The requirements for ethical reviews of clinical trials are detailed in Ministry of Health Resolution No. 55 of 28 March 2008 “On the Approval of the Statute on the Ethics Committee” [2].


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 public evidence of an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics. No such provisions are made under Law No. 161-Z of 20 July 2006 “On Pharmaceuticals” or Ministry of Health Resolution No. 55 of 28 March 2008 “On the Approval of the Statute on the Ethics Committee” [1, 2]. The Center for Examinations and Tests in Health Service of the Ministry of Health of Belarus acts as the drug regulatory authority in Belarus, but its website makes no mention of any such expedited process [3]. There is also no mention any such expedited process on the websites of the Ministry of Health [4].
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. In accordance with Council of Ministers Resolution No. 254 of 1 April 2015 “On the State Registration (Approval of State Registration) of Medicines and Pharmaceutical Substances and the Introduction of Amendments and Additions to Council of Ministers of the Republic of Belarus Resolution No. 1269 of 2 September 2008”, the approval of new medical countermeasures for humans is the responsibility of the Ministry of Health, the Committee for Medicines and Pharmaceutical Substances at the Ministry of Health and the Center for Examinations and Testing in Healthcare of the Ministry of Health of Belarus [1]. Although the resolution does not explicitly mention emergency medicines or vaccines, it relies on the definition of medicines outlined in Law No. 161-Z of 20 July 2006 “On Pharmaceuticals”, i.e. “a substance or combination of several substances of natural, synthetic or biotechnological origin that is pharmacologically active and used in a certain pharmaceutical formulation for medical prevention, diagnosis, treatment and rehabilitation of patients and the prevention of pregnancy through internal or external application” [2]. According to the website of the Center for Examinations and Testing in Healthcare, the agency is responsible for approving new medications, medical devices and medical equipment [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: 0

There is no evidence of an expedited process for approving medical countermeasures for human use during public health emergencies. No provision is made for such a process in the relevant legislation, namely the Council of Ministers of the Republic of Belarus Resolution No. 254 of 1 April 2015 “On the State Registration (Approval of State Registration) of Medicines and Pharmaceutical Substances and the Introduction of Amendments and Additions to Council of Ministers of the Republic of Belarus Resolution No. 1269 of 2 September 2008” and Law of the Republic of Belarus No. 161-Z of 20 July 2006 “On Pharmaceuticals” [1, 2]. The Center for Examinations and Testing in Healthcare, which acts as the drug regulatory authority in Belarus, has an expedited process for approving medications already registered in Belarus, but this relates only to changes such as new instructions for consumption, new expiry dates or new storage conditions, and does not relate to public health emergencies [3]. No mention is made of any such expedited process on the website of the Ministry of Health [4]. A news report from April 2020 indicates that at least one Belarusian manufacturer received a special one-off license to deliver a batch of diagnostic tests by expedited procedure, but in the article the director of the company that received the license suggests that there is no established process, and that decisions are made on an ad hoc basis [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: 1

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: 1

Pandemics are integrated into the national risk reduction strategy. According to the United Nations’ “National Platforms for Disaster Risk Reduction Overview”, published in April 2020, Council of Ministers Resolution No. 495 of 10 April 2001 “On the State System for the Prevention and Resolution of Emergency Situations” constitutes the basis for the national platform for disaster risk reduction [1, 2]. This resolution refers to epidemic risks, stipulating that the Ministry of Health is responsible for: monitoring the epidemiological situation in the country; forecasting and evaluating the epidemiological situation in emergency zones; developing and implementing anti-epidemic measures; monitoring, analyzing and evaluating conditions and changes of sources of emergencies (infectious diseases and epidemics); and forecasting their incidence [2].

[https://www.google.com/url?sa=t&rlz=1C5CHFA_enUS868US868&rct=j&q=National+Platforms+for+Disaster+Risk+Reduction+Overview&esrc=s&source=web&cd=&ved=2ahUKEwi0z8Cq6a3rAhXwQ09F1f2yVQoQFjABwAECig&usg=AOvVaw1dj7uOFQorZjX02TH2xXk]. Accessed 21 August 2020.
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

Belarus has a cross-border agreements as part of a regional group with regard to public health emergencies, and there is no evidence of gaps in implementation. Article 3 of the Agreement on Cooperation in the Sanitary Protection of the Territories of the Member States of the Commonwealth of Independent States of 31 May 2001 includes a commitment to provide scientific, technical and other aid in carrying out anti-epidemiological measures for the sanitary protection of territories (detection, localization and elimination of epidemiological sources) and carrying out epidemiological control and to command anti-plague or anti-epidemic specialists of one or more member states at the request of any member state during epidemiological emergencies [1]. On 18 June 2020, an expert working group adopted a draft of a new version of this agreement and submitted it to the Council of State Leaders for consideration [2].

In addition, Belarus has disaster-related bilateral agreements with all of its neighbors (Russia, Ukraine, Poland, Latvia and Lithuania) regarding general emergency situations, but these do not specifically address public health emergencies or include detailed provisions concerning them [3, 4, 5, 6, 7, 8]. Belarus is a member of the Interstate Council for Natural and Manmade Emergency Situations of the Commonwealth of Independent States (CIS), which works to coordinate the resources of CIS governments to prevent and resolve emergency situations, including information exchange, assigning emergency resources between countries to deal with emergencies, coordinating evacuations and delivering humanitarian aid [9]. This body is not specifically designed to deal with public health emergencies, but such emergencies would likely fall within its remit.


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: 2

The country has cross-border agreements with neighboring countries, including as part of a regional group, with regard to animal health emergencies, and there is no evidence of gaps in implementation. Belarus is a signatory of the Agreement on Veterinary Cooperation between the member states of the Commonwealth of Independent Nations [1]. The purpose of this agreement is to prevent the emergence and spread of animal diseases on the countries' territories. Belarus has also signed a number of bilateral veterinary cooperation agreements with neighbors, which include provisions for animal health emergencies. These include the Memorandum on Cooperation between the Veterinary and Food Services of Belarus and Latvia of 27 April 2011 and the Agreement on Veterinary Cooperation with Lithuania of 21 February 2014 [2, 3]. Bilateral agreements on veterinary cooperation have also been signed with non-neighboring countries such as Turkey (Agreement Between the Government of the Republic of Belarus and the Government of the Turkish Republic on Veterinary Cooperation of 31 March 2010) [4].

5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a Does the country 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: 4

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: 0

2021
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

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: 0

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 insufficient evidence that South Korea has cross-border agreements, protocols or MOUs with neighboring countries, or as part of a regional group, with regard to animal health emergencies.


[4] Ministry of Health of Belarus. "Work Plan of the Ministry of Health of the Republic of Belarus 2020" ("План работы Министерства здравоохранения Республики Беларусь на 2020 год"). [http://minzdrav.gov.by/upload/dadfiles/work%20plan/%D0%9F%D0%BB%D0%B0%D0%BD%20%D1%80%D0%B0%D0%B1% D0%BE%D1%82%D1%8B.pdf]. Accessed 24 August 2020.


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: 0

There is no evidence of a special emergency public financing mechanism or funds that the country can access in the face of a public health emergency. Belarus is not an International Development Association (IDA)-eligible borrowing country and, as such, does not qualify for the World Bank pandemic financing facility [4, 5]. Law No. 117-Z of 24 June 2002 “On the State of Emergency” stipulates that measures to resolve emergencies are to be funded through the budgets of the responsible organizations, and states that if funds are insufficient or non-existent, funds from the republican budget are to be allocated [6]. In response to the Covid-19 pandemic, Belarus secured US$98.5 million in financing from the World Bank and EUR15 million (US$18 million) from the European Investment Bank, but this was an ad hoc arrangement not based on existing agreements [1, 2]. It has been reported, for example by BELTA on 19 June 2020, that Belarus has struggled to attract financing from other providers such as the International Monetary Fund, based on a reluctance to commit to various conditions, such as lockdown measures [3].

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 no evidence that, in the past three years, senior leaders have made a public commitment to support other countries to improve capacity to address epidemic threats by providing financing or support, or to improve Belarus’s own domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity. No reports of such commitments have been published on the websites of the Ministry of Health, Ministry of Foreign Affairs, World Health Organization, or the United Nations [1, 2, 3, 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 the country has, in the past three years, invested finances (from donors) to improve the country’s domestic capacity to address epidemic threats, but not that Belarus has invested finances or provided technical support to other countries to improve capacity to address epidemic threats.

Belarus has attracted financing from the World Bank and European Investment Bank for its response to Covid-19, both of which aim to provide longer-term capacity building for pandemic preparedness in general [1, 2]. The Global Health Security Funding tracker has no information regarding financial support from Belarus for other countries to improve capacity to address epidemic threats [1]. The Global Health Security Funding tracker indicates that funds have been disbursed for investment in various epidemic preparedness categories, including the national laboratory system, antimicrobial resistance, workforce development, reporting, zoonotic disease, national legislation, policy and financing, linking public health and security policies and real-time surveillance [1]. The Ministry of Health has stated that the World Bank funds are being used, among other things, to modernize intensive care units, improve the capacity of national laboratories and the epidemiological...
control services [4].


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: 1

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

There is no public evidence of policies for sharing genetic data, epidemiological data, clinical specimens, and/or isolated specimens (biological materials) with international organizations or other countries that goes beyond influenza and beyond sharing of routine surveillance data. Belarus does share routine surveillance data. According to the website of the Republican Research and Practical Center for Epidemiology and Microbiology, the laboratory is accredited by the World Health Organization (WHO) as a national reference center for antimicrobial resistance, rotaviruses, acute respiratory infections, poliomyelitis, measles and rubella [1]. As a member of the relevant laboratory networks, Belarus shares epidemiological data on these diseases. For example, as a member of the WHO European Measles and Rubella Laboratory Network, Belarus shares epidemiological data on measles and rubella [2]. Belarus is a member of the Eurasian Economic Union (EAEU) and according to paragraph 7 of the EAEU Protocol on the Application of Sanitary, Veterinary-Sanitary and Phytosanitary Quarantine
Measures, the sanitary-epidemiological authorities of a member state are entitled to request reports on laboratory studies and tests from those of other member states [3]. However, this does not constitute a plan for sharing such data when requested. Belarus has signed a number of bilateral agreements concerning cooperation in medical science and healthcare. For example, the Agreement Between the Ministry of Health and Social Development of the Russian Federation and the Ministry of Health of the Republic of Belarus on Cooperation in Healthcare and Medical Science was signed on 28 April 2011 [4]. Under this agreement, the parties agree to cooperate in scientific research and the timely exchange of information. Specific commitments to share genetic data, epidemiological data, clinical specimens, and/or isolated specimens (biological materials) are not made. An extensive list of such bilateral treaties can be found on the Ministry of Health website, with other similar agreements having been made with Latvia and China [5]. No further relevant commitments are available through the websites of the Ministry of Health and Ministry of Agriculture [6, 7].


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 public evidence to suggest that the country has failed to share samples in accordance with the Pandemic Influenza Preparedness framework in the past two years. No such reports are made on the websites of the World Health Organization or in international or local media outlets [1, 2, 3].


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

**Current Year Score: 1**

There is no public evidence that the country has failed to share pandemic pathogen samples during an outbreak in the past two years. There is also no evidence to suggest that Belarus has not shared Covid-19 samples. No such reports are made on the websites of the World Health Organization, or in international or local media outlets. [1, 2]


**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: 0**

2020

Economist Intelligence

6.1.1b

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

Input number

**Current Year Score: 0**

2020
6.1.1c
Excessive bureaucracy/red tape (Economist Intelligence score; 0-4, where 4=best)
Input number

   Current Year Score: 1

2020

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

   Current Year Score: 0

2020

6.1.1e
Country score on Corruption Perception Index (0-100, where 100=best)
Input number

   Current Year Score: 47

2020

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

   Current Year Score: 0

2020

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

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: 0

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: 3
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: 0

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: 2

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: 0

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: 99.76

2018

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: 0.88

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

2018
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: 0

The latest available figures indicate that less than 25% of Belarus's employment is in the informal sector. The most recent estimate made by A. Vankevich and quoted by the European Training Foundation in a 2016 document was that the share of informal employment remained below 8% [1]. A more recent European Training Foundation document, published in 2018, states that there are no available estimates of informal employment [2]. The statistical databases maintained by the World Bank and the International Labor Organization do not provide statistics on informal employment in Belarus [3, 4].


6.2.3c
Coverage of social insurance programs (% of population)
Scored in quartiles (0-3, where 3=best)

Current Year Score: 3

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: 1

2021

Economist Intelligence Democracy Index
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

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

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

Current Year Score: 0.25

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: 2

2021

Economist Intelligence

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

Current Year Score: 1

2021
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: 2

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 79.04

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: 0.87

2008-2018

World Bank; Economist Impact

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: 3
6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a
Total life expectancy (years)
Input number
  Current Year Score: 74.18

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: 608

2019

WHO

6.5.1c
Population ages 65 and above (% of total population)
Input number
  Current Year Score: 15.2

2019

World Bank

6.5.1d
Prevalence of current tobacco use (% of adults)
Input number
  Current Year Score: 26.6

2018
6.5.1e
Prevalence of obesity among adults
Input number
Current Year Score: 24.5
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: 96.48
2017

UNICEF; Economist Impact

6.5.2b
Percentage of homes with access to at least basic sanitation facilities
Input number
Current Year Score: 97.79
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: 797.39
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: 0
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