Mongolia

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

Category 1: Preventing the emergence or release of pathogens with potential for international concern

1.1 ANTIMICROBIAL RESISTANCE (AMR)

1.1.1 AMR surveillance, detection, and reporting

1.1.1a

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

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

Current Year Score: 2

The government of Mongolia has a national AMR plan for the surveillance, detection, and reporting of priority AMR pathogens.

The National AMR plan, published in May 2017, is called "National Multisectoral Action Plan on Combatting Antimicrobial Resistance". It aims to promote rational use of antibiotics and prevention of the emergence and spread of AMR, improve surveillance of AMR and diagnostics, treatment of antimicrobial infections, and enhance the quality of hospital care and outcomes. [1]

On surveillance, the National Action Plan on AMR includes as a goal to "strengthen surveillance and diagnostic capacity for AMR and research" which consists of 13 activities including developing a national guideline on determination and surveillance of AMR based on internationally accepted guidelines and the World Health Organization (WHO) AMR surveillance manual.

On detection, Activities 12 and 13 include as objectives “to increase the number of laboratories capable of early and rapid detection of antimicrobial resistance by means of molecular biological level in regard to tuberculosis and rifampicin and to identify and locate opportunities to introduce a rapid detection method for antibiotic susceptibility”.

On reporting, Activity 7 of the first area (Establish a multisectoral coordination mechanism to combat AMR, improve legal environment) states as an objective, to "promote sharing of information from the human-animal sector through relevant journals, establish an each quarter reporting mechanism to AMR multisectorial working group, technical working group, and related stakeholders". [2]

[1] Ministry of Health. "Joint order of Minister for Health and Minister for Food, Agriculture and Light Industry on approving of the action plan." 12 May 2017. [http://www.mohs.mn/uploads/files/28f7d187c4adc4eb659d8287c1c480ff1647857c.pdf]. Accessed 21 November 2020.
[2] World Health Organization (WHO). May 2017. Joint order of Ministry of Health and Ministry of Food, Agriculture and Light Industry. "National Multi-sectoral Action Plan on Combatting Antimicrobial Resistance". [http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 21 November 2020.

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: 1

There is evidence that Mongolia has a national laboratory/laboratory system that can test for at least some of the 7+1 World Health Organization (WHO) priority AMR pathogens.

The Joint External Evaluation report (JEE) for Mongolia, published in May 2017, states that "a list of priority pathogens for laboratory testing has been approved and includes four of the seven WHO priority AMR pathogens."[1]. The JEE report elaborates that these priority pathogens are E.coli, K. pneumonia, S. aureus, and S. pneumonia. Mongolia's National Multi-Sectoral Action Plan on Combatting Antimicrobial Resistance, a 2017 document, also includes data on the resistance rates of various pathogens to drugs, indicating that there may be additional testing capacity in the country.

The pathogens listed in the Action Plan are E.coli, K. pneumonia, N.gonorrhea, Methicillin-resistant S.aureus (MRSA); S.pneumonia; non-typhoid Salmonella; and Shigella spp. [2] However, there is not enough publicly available evidence to confirm that this data was obtained from in-country tests. Also of note, according to a 2014 WHO report titled “Antimicrobial Resistance, Global Report on Surveillance”, Mongolia uses WHONET, which supports AMR surveillance, including data sharing. However, WHONET is not a surveillance network in itself. Rather, it is a freely available database for the management and analysis of microbiology laboratory data. [3]

No further information is available via the Ministry of Health, the National Center for Communicable Disease (NCCD), or the Ministry of Food, Agriculture and Light Industry. [4,5,6].

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 25 November 2020.
[2] Ministry of Health & Ministry of Food, Agriculture and Light Industry (MOFA). 12 May 2017. Joint order A/191 A/64. "National Multi-Sectoral Action Plan on Combatting Antimicrobial Resistance". [https://www.mohs.mn/uploads/files/28f7d187c4adc4eb659d8287c1c480ff1647857c.pdf]. Accessed 25 November 2020.
[3] World Health Organization (WHO). 2014. "Antimicrobial resistance, Global Report on Surveillance". [http://www.who.int/drugresistance/documents/surveillancereport/en/]. Accessed 25 November 2020.
[4] Ministry of Health. [http://mohs.mn/]. Accessed 25 November 2020.
[5] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 25 November 2020.
[6] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/]. Accessed 25 November 2020.

1.1.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available information that Mongolia is conducting detection or surveillance activities (e.g. in soil, waterways, etc.) for antimicrobial residues or AMR organisms.

Mongolia's National Multi-sectoral Action Plan On Combating Antimicrobial Resistance makes no mention of environmental surveillance.[1] There is also no public evidence of surveillance for AMR pathogens or antimicrobial residues in the environment via the Ministry of Health and Ministry of Nature and Environment websites. [2,3]

The Joint External Evaluation for Mongolia, conducted in May 2017, does not mention environmental surveillance of AMR pathogens other than to recommend Mongolia develop an "integrated multi-sectoral chemical surveillance program" that includes environmental monitoring. The JEE notes that the General Agency for Specialized Inspection conducts air, water, and soil testing for industrial contamination but there is no evidence that such testing includes AMR, nor is there an integrated national surveillance system. [4]

[1] Ministerial Order of Ministry of Health and MInistry of Food, Agriculture, and Light Industry. May 2017. "National Multi-sectoral Action Plan on Combatting Antimicrobial Resistance". [http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 25 November 2020
[2] Ministry of Health. 2019. [http://www.mohs.mn/search?cx=006963095439169593497%3A0fq3ilbybuc&cof=FORID%3A10&ie=UTF-8&siteurl=http%3A%2F%2Fwww.mohs.mn&ref=http%3A%2F%2Fwww.mohs.mn&ss=&q=antimicrobial+residues]. Accessed 25 November 2020
[3] Ministry of Nature and Environment. 2019. [https://www.mne.mn/?s=antimicrobial+residue]. Accessed 25 November 2020
[4] World Health Organization (WHO). 2017. "Joint External Evaluation Report". [https://www.who.int/ihr/publications/WHO-WHE-CPI-REP-2017.51/en/]. Accessed 25 November 2020.

1.1.2 Antimicrobial control

1.1.2a

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

Current Year Score: 1

There is legislation in place requiring prescriptions for antibiotic use for humans in Mongolia, as evidenced from the State Health Policy, the country's national AMR plan, the Law on Medicines and Hospital and the country's prescription drugs list. However, there is evidence of gaps in enforcement. [1,2,3,4].

In 2017, Mongolia approved its AMR National Action Plan (National Multi-Sectorial Action Plan on Combatting Antimicrobial Resistance, 2017-2020). [2] Part 4 of the accompanying Operational Action Plan of the National Multi-sectoral Action Plan On Combatting Antimicrobial Resistance includes a goal to "ensure quality and safety of antimicrobial medicines." One of the actions under this goal is to "develop and implement enforcement of regulations on prescription-only dispensing of medicines, including antibiotics" (Activity 4.11). Additionally, Section 16.5 of the Law on Medicines and Hospital states that "Selling prescription drugs without a valid prescription is prohibited" [3]. Antibiotics (Amoxicillin, Levomycetin, Ciprofloxacin) are included in Mongolia's Prescription Drug List [4]. A Ministry of Health media press release mentions, "World week: increasing knowledge about antibiotics and improving attitudes"[5]. However, there is evidence suggesting that this law is not fully implemented. A news article on DEVEX website discusses the overuse of antibiotics in Mongolia which indicates that gaps exist in the implementation of the laws and policies [6].

[1] Legal Info website. Government Resolution 11. 11 January 2017. "Approval of the National Program for the prevention and control of communicable diseases". [https://www.legalinfo.mn/law/details/12442]. Accessed 23 November 2020.
[2] Legal Info website. "National Program for the Prevention and Control of Communicable Diseases". [https://www.legalinfo.mn/annex/details/7593?lawid=12442]. Accessed 23 November 2020.
[3] Ministry of Health. Health Minister order A/128. 04 April 2017. "Approval of Action Plan "Preventing and Control of Communicable Diseases"". [https://www.mohs.mn/uploads/files/7f9f0d5246f54e0824131295bfd0037e.pdf]. Accessed 23 November 2020.
[4] Ministry of Health. 2018. "Annual program implementation progress report". [http://2018 Annual Implementation Report of the National Program on Prevention and Control of Communicable Diseases]. Accessed 23 November 2020.
[5] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 25 November 2020.
[6] DEVEX. 22 November 2019. "How Mongolia is trying to curb antibiotic overuse". [https://www.devex.com/news/how-mongolia-is-trying-to-curb-antibiotic-overuse-96079#:~:text=A%202013%20study%20in%20Mongolia,hospital%20by%20adults%20and%20children]. Accessed 20 April 2021.

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 public evidence of national legislation or regulation in place requiring prescriptions for antibiotic use for animals.

In 2017, Mongolia approved its AMR National Action Plan (National Multi-sectoral Action Plan on Combatting Antimicrobial Resistance, 2017-2020). In part 5, "Optimize the use of antimicrobials in the human and animal sectors" of the Operational Action Plan it says "Develop and implement standards on prescription and prescribing of veterinary medicines"(Activity 5.8). [1]

There is no public evidence of legislation or regulation in place requiring prescriptions for antibiotic use for animals on the Ministry of Health and Ministry of Food and Agriculture's websites. [2,3] However, in 2018, Mongolia approved the "Procedures for the organization of agricultural production and production of organic food", part 13.1.3 states that “Artificially produced animal drugs and animals that used antibiotics are not considered organic products" via the Ministry of Food, Agriculture and Light Industry. [4]

[1] Ministerial Order of Ministry of Health and MInistry of Food, Agriculture, and Light Industry. May 2017. "National Multi-sectoral Action Plan on Combatting Antimicrobial Resistance". [http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 25 November 2020
[2] Ministry of Health. [http://mohs.mn]. Accessed 25 November 2020.
[3] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn]. Accessed 25 November 2020.
[4] Ministry of Food, Agriculture and Light Industry (MOFA). 15 January 2018. "Procedures for organization of agricultural production and production of organic food". [https://www.legalinfo.mn/annex/details/8218?lawid=13149]. Accessed 25 November 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

The Government of Mongolia has national laws, ministerial programs, and orders on zoonotic disease.

Mongolia's 2015 Zoonotic Disease Monitoring and Prevention Strategy 2015-2020, a publication of the Ministry of Health and Sports (since renamed the Ministry of Health), covers multiple diseases. It includes an Action Plan against zoonotic disease and a Zoonotic Disease Monitoring and Prevention Framework. [1]

Further, the Joint External Evaluation (JEE) for Mongolia, conducted in October 2016, notes that "Cross-sectoral systems are in place for surveillance and response to priority zoonotic diseases, including plague, rabies, anthrax, brucellosis, echinococcosis, avian influenza, and tick-borne diseases. These are overseen by a multisectoral One Health Coordinating Committee". However, the JEE also calls for more robust systems to deal with zoonotic diseases. It states that "laws and systems for active and passive disease surveillance to support early detection and response for new and emerging diseases and priority endemic zoonoses require strengthening." The JEE also notes that "a new Law on Animal and Livestock Health, currently before Parliament, will strengthen early warning and response preparedness; hygiene of raw animal products; zoonotic diseases and public health services; regulation of drugs; and responsibilities of the key legal entities". [2] This law was passed in December 2017 by the Mongolian parliament. [3]

[1] Ministry of Health and Sports (former name). 2015. Order number 86. [https://www.mohs.mn/uploads/files/86e999191662c2a55bff3523ef335bb7.pdf]. Accessed 24 November 2020.
[2] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 24 November 2020.
[3] Parliament of Mongolia. 2017. "Law on Animal and Livestock Health". [https://www.legalinfo.mn/law/details/13026]. Accessed 24 November 2020.

1.2.1b

Is there national legislation, plans or equivalent strategy document(s) which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of national legislation, plans or equivalent strategy document(s) that include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. No evidence was found in documents related to the "National Program for the Prevention and Control of Communicable Diseases", an action plan for preventing and controlling communicable diseases nor the 2018 progress report for the action plan [1, 2, 3, 4]. Goal No 6 of the national program is to "Expand the surveillance system for some zoonotic pathogens and vectors, and improve outbreak response and Ministry of Health capabilities" and identifies measures to achieve the goal. However, specific risks and transmission pathways are not elaborated upon. The Joint External Evaluation (JEE) report states that "Cross-sectoral systems

are in place for surveillance and response to priority zoonotic diseases, including plague, rabies, anthrax, brucellosis, echinococcosis, avian influenza, and tick-borne diseases. These are overseen by a multisectoral One Health Coordinating Committee"[5]. But no more specific evidence was found.

[1] Legal Info website. Government Resolution 11. 11 January 2017. Approval of the National Program for the prevention and control of communicable diseases.[https://www.legalinfo.mn/law/details/12442]. Accessed 23 November 2020.
[2] Legal Info website. "National Program for the Prevention and Control of Communicable Diseases". [https://www.legalinfo.mn/annex/details/7593?lawid=12442]. Accessed 23 November 2020.
[3] Ministry of Health. 04 April 2017. Health Minister order A/128. "Approval of Action Plan: Preventing and Control of Communicable Diseases". [https://www.mohs.mn/uploads/files/7f9f0d5246f54e0824131295bfd0037e.pdf]. Accessed 23 November 2020.
[4] Ministry of Health. 2018. "Annual program implementation progress report". [http://2018 Annual Implementation Report of the National Program on Prevention and Control of Communicable Diseases]. Accessed 23 November 2020.
[5] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 25 November 2020.

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

The Government of Mongolia has national plans, guidelines, laws that account for the surveillance and control of multiple zoonotic pathogens of public health concern.

The National Center for Zoonotic Disease (NCZD) has a mandate to combat zoonotic disease. Over the last several decades, it has published national action plans against bubonic plague, cholera, smallpox, tularemia, poliomyelitis, cephalitis, glanders, malignant anthrax, rabies, and brucellosis. The plans and guidelines are regularly updated [1].

Additionally, Mongolia's 2015 Zoonotic Disease Monitoring and Prevention Strategy 2015-2020, a publication of the Ministry of Health and Sports (since renamed the Ministry of Health), covers multiple diseases. It includes an Action Plan against zoonotic disease and a Zoonotic Disease Monitoring and Prevention Framework [2].

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, also notes that "Cross-sectoral systems are in place for surveillance and response to priority zoonotic diseases, including plague, rabies, anthrax, brucellosis, echinococcosis, avian influenza, and tick-borne diseases. These are overseen by a multisectoral One Health Coordinating Committee". However, the JEE also calls for more robust systems to deal with zoonotic diseases. It states that "laws and systems for active and passive disease surveillance to support early detection and response for new and emerging diseases and priority endemic zoonoses require strengthening." The JEE also notes that "a new Law on Animal and Livestock Health, currently before Parliament, will strengthen early warning and response preparedness; hygiene of raw animal products; zoonotic diseases and public health services; regulation of drugs; and responsibilities of the key legal entities" [3]. This law was passed in December 2017 by the Mongolian parliament [4].

[1] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 25 November 2020.
[2] Ministry of Health and Sports (former name). 2015. "Order number 86".

[https://www.mohs.mn/uploads/files/86e999191662c2a55bff3523ef335bb7.pdf]. Accessed 25 November 2020.
[3] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 25 November 2020.
[4] Parliament of Mongolia. 2017. "Law on Animal and Livestock Health". [https://www.legalinfo.mn/law/details/13026]. Accessed 25 November 2020.

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: 1

Mongolia has an agency dedicated to zoonotic disease that functions across ministries.

This entity is called the National Center for Zoonotic Disease (NCZD). The NCZD works to reduce the risk of infection and organizes surveillance and control, early warnings, and responses. The NCZD belongs to and reports to both the Ministry of Health and Ministry of Food and Agriculture, and it is funded by the state budget. [1]

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not provide detailed information on the NCZD's cross-ministerial work. However, it notes that "Cross-sectoral systems are in place for surveillance and response to priority zoonotic diseases", and that these systems "are overseen by a multisectoral One Health Coordinating Committee". [2]

[1] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 23 November 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 23 November 2020.

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

Mongolia has a national mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency.

Herders can report to the leader of a bagh (the smallest administration unit in Mongolia, similar to a county), or directly report to a unit of the National Emergency Management Authority (NEMA). [1] There is also a specific hotline for zoonotic disease, run by the National Center for Zoonotic Diseases (NCZD). [2]

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not contain information on these specific channels of reporting by livestock owners. However, it gives Mongolia a favorable score of 4 for its indicator- and event-based surveillance systems, indicating that "indicator and event-based surveillance system(s) [are] in place to detect public

health threats". [3,4]

Reporting is mandatory, according to Legal Info, by the minister's order on the Procedure for Immediate reporting of severe infectious diseases of animals, part 1.1, which states "the purpose of the regulation is to report suspected cases of highly contagious animal diseases and confirm the diagnoses in order to detect suspected cases of highly contagious animal diseases in the territory of Mongolia early, prevent their spread and promptly respond to highly contagious diseases." [5]

[1] National Emergency Management Authority. [https://nema.gov.mn/]. Accessed 26 November 2020.
[2] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 26 November 2020.
[3] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 26 November 2020.
[4] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 26 November 2020.
[5] Unified Legal Information System, Mongolia. 2019. [https://www.legalinfo.mn/annex/details/9159?lawid=13989]. Accessed 26 November 2020.

1.2.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners).

Documents outline procedures for reporting and responding to zoonotic disease but make no mention of safeguarding the confidentiality of information generated through surveillance activities for animals. These documents include the National Emergency Management Agency's Guideline for Organizing Cooperation among Emergency Prevention Organizations and National Emergency Management Agency during Communicable Zoonotic Diseases Outbreak, and the Surveillance Rule for Communicable Disease. [1, 2]

Article 4.2.2 of Mongolia's Privacy Law states that health confidentiality applies to specific diseases and conditions for humans, but there is no detail on confidentiality for owners with regards to the health of their animals. [3]

There is no relevant information shared via the publicly available websites of the Ministry of Food and Agriculture or the National Center for Zoonotic Disease (NCZD). [4, 5]

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not contain information on privacy protection or safeguards that apply to surveillance activities for animals. [6]

[1] National Emergency Management Agency (NEMA). 30 December 2015. "Order number A344: Guideline for organizing cooperation among emergency prevention organizations and National Emergency Management Agency during communicable zoonotic diseases outbreak". [http://nema.gov.mn/wp-content/uploads/2014/06/%D0%9C%D0%B0%D0%BB-%D0%B0%D0%BC%D1%8C%D1%82%D0%BD%D1%8B-%D0%B3%D0%BE%D1%86-%D1%85%D0%B0%D0%BB%D0%B4%D0%B2%D0%B0%D1%80%D1%82-

%D3%A9%D0%B2%D1%87%D0%BD%D0%B8%D0%B9-%D2%AF%D0%B5%D0%B4%D1%80.pdf]. Accessed 23 November 2020.
[2] Minister of Health. 17 November 2016. Order number A121. "Surveillance Rule for Communicable Disease". [https://www.mohs.mn/uploads/files/52b3495bd22aa6ff20c2233282242167.PDF]. Accessed 23 November 2020.
[3] Government of Mongolia. 21 April 21 1995. "Privacy Law". [http://www.legalinfo.mn/law/details/537]. Accessed 23 November 2020.
[4] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/blog/7/240]. Accessed 23 November 2020.
[5] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 23 November 2020.
[6] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 23 November 2020.

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: 0

There is insufficient public evidence to confirm that Mongolia conducts surveillance of zoonotic disease in wildlife.

The National Center for Zoonotic Disease (NCZD) and the National Center for Communicable Disease (NCCD) conduct surveillance activities of zoonoses. These activities are outlined in the National Emergency Management Agency's Guideline for Organizing Cooperation among Emergency Prevention Organizations and National Emergency Management Agency during Communicable Zoonotic Diseases Outbreak, and the Surveillance Rule for Communicable Disease. [1, 2, 3, 4]

The Joint External Evaluation for Mongolia, conducted in May 2017, notes that "Collaboration with wildlife agencies to identify relevant zoonoses requires strengthening", but does not provide additional information on whether there are currently surveillance activities that involve wildlife. [5] There is no additional relevant information shared via the public websites of the Ministry of Health or the Ministry of Food and Agriculture. [6, 7]

[1] National Emergency Management Agency. 30 December 2015. "Order number A344: Guideline for organizing cooperation among emergency prevention organizations and National Emergency Management Agency during communicable zoonotic diseases outbreak". [http://nema.gov.mn/wp-content/uploads/2014/06/%D0%9C%D0%B0%D0%BB-%D0%B0%D0%BC%D1%8C%D1%82%D0%BD%D1%8B-%D0%B3%D0%BE%D1%86-%D1%85%D0%B0%D0%BB%D0%B4%D0%B2%D0%B0%D1%80%D1%82-%D3%A9%D0%B2%D1%87%D0%BD%D0%B8%D0%B9-%D2%AF%D0%B5%D0%B4%D1%80.pdf]. Accessed 23 November 2020.
[2] Ministry of Health. 17 November 2016. "Order number A121: Surveillance Rule for Communicable Disease". [https://www.mohs.mn/uploads/files/52b3495bd22aa6ff20c2233282242167.PDF]. Accessed 23 November 2020.
[3] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 23 November 2020.
[4] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 24 March 2019.
[5] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 23 November 2020.
[6] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[7] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/blog/7/240]. Accessed 23 November 2020.

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: 62.88

2018

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 25.98

2018

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 insufficient evidence that the national plan on zoonotic disease includes mechanisms for working with the private sector in controlling or responding to zoonoses.

The Joint External Evaluation for Mongolia, conducted in May 2017, makes no mention of public-private mechanisms for controlling or responding to zoonoses, except to note that "coordination needs to be improved with non-health sectors,

including community organizations, private sector, and others." [1]

The National Center of Zoonotic Disease has one article on its website describing the private sector's cooperation in combatting mites, but there is no evidence of a mechanism for collaboration between the public and private sectors in controlling or responding to zoonoses. [2]

There is no mention of mechanisms for working with the private sector in controlling or responding to zoonoses on the websites of the Ministry of Food, Agriculture and Light Industry, National Emergency Management Agency, Ministry of Health, or Ministry of Nature, Environment and Tourism. [3,4,5,6] The websites of the National Public Health Institute and Veterinary and Animal Breeding Agency are inaccessible.

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 23 November 2020.
[2] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 23 November 2020.
[3] Ministry of Food, Agriculture, and Light Industry (MOFA). [http://mofa.gov.mn/exp/]. Accessed 23 November 2020.
[4] National Emergency Management Agency (NEMA). [https://nema.gov.mn/]. Accessed 23 November 2020.
[5] Ministry of Health. [http://www.mohs.mn/home]. Accessed 23 November 2020.
[6] Ministry of Nature, Environment, and Tourism. [https://www.mne.mn/]. Accessed 23 November 2020.

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: 1

There is evidence that Mongolia has in place a record, updated within the past five years of the facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of those facilities. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states "there are good efforts to securely store and maintain records of dangerous pathogens at national level" but does not specify the places or locations. [1] VERTIC database does not provide further evidence. [2] Although Mongolia is a party to the Biological Weapons Convention (BWC), it has not submitted publicly available Confidence Building Measure reports in accordance with decisions of BWC Review Conferences since 1995. [3]

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 26 November 2020.
[2] Verification Research, Training and Information Center (VERTIC). "Legislation database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 26 November 2020
[3] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-

ecbm.unog.ch/state/mongolia]. Accessed 26 November 2020.

1.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Mongolia has in place legislation and/or regulations related to biosecurity that address requirements such as physical containment, operation practices, failure reporting systems, and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed.

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not contain relevant information, except to say that biosecurity is "recognized as an important component of the laboratory system". The JEE gives Mongolia a score of just 2 for its biosecurity systems and its biosecurity training and practices. [1, 2]

Neither the Ministry of Health; the Ministry of Food and Agriculture; the Ministry of Defense; the Ministry of Education, Culture, Science, and Sports; nor the laboratories of the National Center for Communicable Disease and the National Center for Zoonotic Disease share additional relevant information via a public website. [3, 4, 5, 6, 7, 8]

Although Mongolia's 2007 Law on Genetically Modified Organisms (GMOs) contains biosecurity requirements such as physical containment, operation practices and failure reporting systems, the law applies exclusively to GMOs and not biosecurity as it relates to dangerous pathogens and toxins. [9]

No other relevant legislation is listed on the VERTIC Biological Weapons Convention (BWC) Legislation database. [10] Although Mongolia is a party to the Biological Weapons Convention, it has not submitted publicly available Confidence-Building Measure reports in accordance with decisions of BWC Review Conferences since 1995. [11] The National Public Health Institute does not have a functioning website.

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 23 November 2020.
[2] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 23 November 2020.
[3] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[4] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/#]. Accessed 23 November 2020.
[5] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 23 November 2020.
[6] Ministry of Education, Culture, Science, and Sports. [https://mecss.gov.mn/]. Accessed 23 November 2020.
[7] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 23 November 2020.
[8] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 23 November 2020.
[9] Government of Mongolia. 2007. "Law on Genetically Modified Organisms". [http://www.legalinfo.mn/law/details/536]. Accessed 23 November 2020.
[10] Verification Research, Training and Information Center (VERTIC). "Legislation database".

[http://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 23 November 2020.
[11] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 23 November 2020.

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 public evidence that Mongolia has in place relevant legislation and/or regulations related to biosecurity, let alone an established agency responsible for their enforcement.

Mongolia's 2007 Law on Genetically Modified Organisms (GMOs) contains biosecurity requirements such as physical containment, operation practices, and failure reporting systems, and also designates a Biosecurity National Committee as being in charge of these activities. However, the law applies exclusively to GMOs and not biosecurity as it relates to dangerous pathogens and toxins. [1]

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not contain relevant information, except to say that biosecurity is "recognized as an important component of the laboratory system". The JEE gives Mongolia a score of just 2 for its biosecurity systems and its biosecurity training and practices. [2,3]

Neither the Ministry of Health; the Ministry of Food and Agriculture; the Ministry of Defense; the Ministry of Education, Culture, Science, and Sports; the Public Health Institute; nor the laboratories of the National Center for Communicable Disease and the National Center for Zoonotic Disease share additional relevant information via a public website. [4,5,6,7,8,9]

No other relevant legislation is listed on the VERTIC Biological Weapons Convention (BWC) Legislation database. [10] Although Mongolia is a party to the Biological Weapons Convention, it has not submitted publicly available Confidence-Building Measure reports in accordance with decisions of BWC Review Conferences since 1995. [11]

[1] Government of Mongolia. 2007. "Law on Genetically Modified Organisms". [http://www.legalinfo.mn/law/details/536]. Accessed 23 November 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 23 November 2020.
[3] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 23 November 2020.
[4] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[5] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/]. Accessed 23 November 2020.
[6] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 23 November 2020.
[7] Ministry of Education, Culture, Science, and Sports. [https://mecss.gov.mn/]. Accessed 23 November 2020.
[8] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 23 November 2020.
[9] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 23 November 2020.
[10] Verification Research, Training and Information Center (VERTIC). "Legislation database". [http://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 23

November 2020.
[11] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 23 November 2020.

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 shows that Mongolia has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities.

While the National Center for Zoonotic Disease (NCZD) has records of each year's dangerous pathogens and toxins, there is insufficient evidence to conclude that they have consolidated their inventories. Neither the NCVL or the NCZD share relevant information via their public websites. [1]

Also of note, the Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states "there are good efforts to securely store and maintain records of dangerous pathogens at a national level", but does not comment on whether they have been consolidated. Additionally, the JEE gives Mongolia a score of just 2 for its biosecurity systems and its biosecurity training and practices. [2,3]

Neither the Ministry of Health; the Ministry of Food and Agriculture; the Ministry of Defense; the Ministry of Education, Culture, Science, and Sports; the Public Health Institute; nor the laboratory of the National Centre for Communicable Disease shares additional relevant information via a public website. [4,5,6,7,8]

Although Mongolia's 2007 Law on Genetically Modified Organisms (GMOs) contains biosecurity requirements such as physical containment, operation practices, failure reporting systems, the law applies exclusively to GMOs and not biosecurity as it relates to dangerous pathogens and toxins. [9]

No other relevant legislation is listed on the VERTIC Biological Weapons Convention (BWC) Legislation database [10]. Although Mongolia is a party to the BWC, it has not submitted publicly available Confidence-Building Measure reports in accordance with the decisions of the BWC Review Conferences since 1995 [11].

[1] National Center for Zoonotic Disease (NCZD). 2018. "Laboratory website". [http://www.nczd.gov.mn/]. Accessed 23 November 2020.
[2] World Health Organization (WHO). November 2020. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 23 November 2020.
[3] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 23 November 2020.
[4] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[5] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/#]. Accessed 23 November 2020.
[6] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 23 November 2020.
[7] Ministry of Education, Culture, Science, and Sports. [https://mecss.gov.mn/]. Accessed 23 November 2020.

[8] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 23 November 2020.
[9] Government of Mongolia. 2007. "Law on Genetically Modified Organisms". [http://www.legalinfo.mn/law/details/536]. Accessed 23 November 2020.
[10] Verification Research, Training and Information Center (VERTIC). "Legislation database". [http://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 23 November 2020.
[11] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 23 November 2020.

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 insufficient public evidence to confirm the existence of in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax or Ebola in Mongolia. Health Minister's order A 160, Annex 2 contains anthrax laboratory analysis - section 8.4; table 3 specifies stages and methods of laboratory analysis where under the stages it mentions "accelerated PCR"[1] .There is no mention of Ebola. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not contain relevant information. [2]. The Ministry of Food, Agriculture and Light Industry has an instruction for combating anthrax but it does not mention PCR diagnostic testing [3]. The Ministry of Defense; the laboratories of the National Center for Communicable Disease and the National Center for Zoonotic Disease do not have relevant information [4,5,6].

[1] Ministry of Health. 2017. "Health Minister's order A 160, 21 April 2017. Annex No. 2" [https://www.mohs.mn/uploads/files/a72329c531b1b9d882e3c3784d1ec1bb4c71379e.pdf]. Accessed 23 November 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 23 November 2020.
[3] Ministry of Food, Agriculture and Light Industry (MOFA). "Instructions for combating anthrax". [https://www.mofa.gov.mn/exp/ckfinder/userfiles/files/tosol1849.pdf]. Accessed 23 November 2020.
[4] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 23 November 2020.
[5] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 23 November 2020.
[6] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 23 November 2020.

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 trainthe-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of a standardized, required approach to biosecurity training for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states that "training in biosafety and biosecurity practices are mainly ad-hoc or project-based and a better understanding of training needs is required." [1]. News on the website of the Ministry of Environment and Tourism inform that Mongolia has held or participated in biosecurity trainings for personnel working in such facilities in cooperation with the European Union (EU) Chemical, Biological, Radiological and Nuclear (CBRN) Risk Mitigation Centers of Excellence (CoE) Initiative. The Ministry of Environment and Nature of Mongolia and CBRN CoE Initiative implemented the project "Improving the National Legal Environment for Biosafety and Biosecurity in Central Asia and Organizing Professional Training “regional P53 project in 2017-2019. [2]. The news on the website of National Center for Zoonotic Disease (NCZD) informs that in the framework of Regional P53 project two NCZD staff enrolled in the training organized by the Public Health Institute in England [3]. The news on the Customs of Mongolia website informs that one staff from customs participated in the "Biosafety and Biosecurity training" organized by the Ministry of Nature and Environment, Biosecurity Committee and the Ministry of Foreign Affairs within the framework of EU CBRN CoE Initiative Regional P53 project [4]. Neither the Ministry of Health [5]; the Ministry of Food and Agriculture [6]; the Ministry of Defense [7]; the Ministry of Education, Culture and Science [8]; National Center for Communicable Disease [9] share additional relevant information. Mongolia has not submitted publicly available Confidence-Building Measure reports in accordance with decisions of Biological Weapons Convention (BWC) Review Conferences since 1995. [10]. Finally, no evidence was found via the Verification, Research, Training and Information Center (VERTIC) database. [11]

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 26 November 2020.
[2] Ministry of Environment and Tourism. 15 January 2019. "Interactive Laboratory training on biosecurity and biosafety". [https://www.mne.mn/?p=7215]. Accessed 26 November 2020; 25 January 2019. "The national committee for biosecurity is working with the British Health Institute". [https://www.mne.mn/?p=7279]. Accessed 26 November 2020; 01 December 2017. "12 biosafety teachers trained". [https://www.mne.mn/?p=3119]. Accessed 26 November 2020.
[3] National Center for Zoonotic Disease (NCZD). 29 January, 2019.[https://nczd.gov.mn/?p=10740]. Accessed 26 November 2020. Ministry of Health. [http://mohs.mn/]. Accessed 26 November 2020.
[4] Customs of Mongolia. 08 May 2018. "News". [https://customs.gov.mn/zamiin-uud/index.php/2014-01-11-04-32-35/492-2018-05-08-03-50-46]. Accessed 26 November 2020
[5] Ministry of Health. [https://www.mohs.mn]. Accessed 26 November 2020.
[6] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/]. Accessed 26 November 2020.
[7] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 26 November 2020.
[8] Ministry of Education and Science.[https://www.meds.gov.mn]. Accessed 26 November 2020.
[9] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 26 November 2020.
[10] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 26 November 2020.
[11] Verification Research, Training and Information Center (VERTIC). "Legislation database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 26 November 2020.

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

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

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

Current Year Score: 0

There is insufficient evidence to confirm that regulations or licensing conditions specify 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.

Mongolian regulations do show an awareness of some of these concerns, but there is no evidence that they actually impose checks or other requirements. For example, the law of Mongolia states that workers should "keep work security, hygiene, and cleanliness" There is no mention of psychology or mental health [1,2].

Neither the Ministry of Health; the Ministry of Food and Agriculture; the Ministry of Defense; the Ministry of Education, Culture, Science, and Sports; the Public Health Institute; nor the laboratories of the National Center for Communicable Disease and the National Center for Zoonotic Disease share additional relevant information via a public website. [2,3,4,5,6]

Although Mongolia is a party to the Biological Weapons Convention (BWC), it has not submitted publicly available Confidence-Building Measure reports in accordance with the decisions of BWC Review Conferences since 1995 [7].

[1] Legal Info. 22 May. 2008 "Occupational safety and hygiene."[https://www.legalinfo.mn/law/showPrint/564]. Accessed 24 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 24 November 2020.
[3] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/#]. Accessed 24 November 2020.
[3] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 24 November 2020.
[4] Ministry of Education, Culture, Science, and Sports. [https://mecss.gov.mn/]. Accessed 24 November 2020.
[5] National Center for Communicable Diseases (NCCD).
[https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 24 November 2020.
[6] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 24 November 2020.
[7] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 24 November 2020.

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: 0

Mongolia has no publicly available information on national regulations on the safe and secure transport of infectious substances. The Civil Aviation Authority's "Dangerous Luggage Transportation Rule" states that "Categories A and B are defined by UN codes, therefore, UN code rules must be applied"; however, the import of this passage is unclear. [1] Neither the Ministry of Health; the Ministry of Food and Agriculture; the Ministry of Defense; the Ministry of Road and Transport Development; the Public Health Institute; nor the laboratories of the National Center for Communicable Disease and the National Center for Zoonotic Disease share additional relevant information via a public website. [2,3,4,5,6] No other relevant legislation is listed on the Verification, Research, Training and Information Center (VERTIC) Biological Weapons Convention (BWC) Legislation database. [7] Although Mongolia is a party to the BWC, it has not submitted publicly available Confidence-Building Measure reports in accordance with the decisions of the BWC Review Conferences since 1995. [8] There is no evidence of relevant studies or media articles.

[1] Civil Aviation Authority of Mongolia. 2018. "Dangerous Luggage Transportation Rule". [http://www.mcaa.gov.mn/wp-content/uploads/2018/03/1a.-IND-92.pdf]. Accessed 27 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 27 November 2020.
[4] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/#]. Accessed 27 November 2020.
[3] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 27 November 2020
[4] Ministry of Road and Transport Development. [http://mrtd.gov.mn/eng/]. Accessed 27 November 2020.
[5] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 27 November 2020.
[6] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 27 November 2020.
[7] Verification Research, Training and Information Center (VERTIC). "Legislation database". [http://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 27 November 2020
[8] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 27 November 2020

1.3.5 Cross-border transfer and end-user screening

1.3.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient publicly available evidence to conclude that Mongolia national legislation, regulation, or other guidance in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential.

The Dangerous Luggage Transportation Rule of the Civil Aviation Authority of Mongolia and Ministry of Environment and Tourism's Regulation to Import and Export Chemical and Dangerous Substances govern cross-border transfer of dangerous pathogens but do not cover end-user screening [1,2].

Neither the Ministry of Health; Ministry of Food and Agriculture; Ministry of Defense; Ministry of Education, Culture, Science, and Sports; nor the Ministry of Mining and Heavy Industry shares additional relevant information via a public website. [3,4,5,6,7]

No other relevant legislation is listed on the Verification, Research, Training and Information Center (VERTIC) Biological Weapons Convention (BWC) Legislation database. [8] Although Mongolia is a party to the BWC, it has not submitted publicly available Confidence-Building Measure reports in accordance with the decisions of the BWC Review Conferences since 1995. [9] There is no evidence of relevant studies or media reports.

[1] Civil Aviation Authority of Mongolia. 2018. "Dangerous Luggage Transportation Rule - updated". [http://www.mcaa.gov.mn/wp-content/uploads/2018/03/1a.-IND-92.pdf]. Accessed November 28 2020.
[2] Ministry of Environment and Tourism. 2009. Order 334 of Minister of Environment. "Regulation to import and export chemical and dangerous substances". [http://www.mne.mn/wp-content/uploads/2018/06/%D0%AD%D0%BA%D1%81%D0%BF%D0%BE%D1%80%D1%82%D0%BB%D0%BE%D1%85-%D0%B8%D0%BC%D0%BF%D0%BE%D1%80%D1%82%D0%BB%D0%BE%D1%85-%D0%B6%D1%83%D1%80%D0%B0%D0%BC%D0%B4-%D3%A9%D3%A9%D1%80%D1%87%D0%BB%D3%A9%D0%BB%D1%82-%D0%BE%D1%80%D1%83%D1%83%D0%BB%D0%B0%D1%85-%D1%82%D3%A9%D1%81%D3%A9%D0%BB.pdf]. Accessed November 28 2020.
[3] Ministry of Health. [http://mohs.mn/]. Accessed 28 November 2020.
[4] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/#]. Accessed 28 November 2020.
[5] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 28 November 2020.
[6] Ministry of Education, Culture, Science, and Sports. [https://mecss.gov.mn/]. Accessed 28 November 2020.
[7] Ministry of Mining and Heavy Industry. [https://www.mmhi.gov.mn/]. Accessed 28 November 2020.
[8] Verification Research, Training and Information Center (VERTIC). "Legislation database". [http://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 28 November 2020.
[9] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 28 November 2020.

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

Does the country have in place national biosafety legislation and/or regulations?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Mongolia has in place legislation and/or regulations related to national biosafety regulations related to dangerous pathogens and toxins. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not contain relevant information, except to say that biosafety is "recognized as an important component of the laboratory system". [1]. Neither the Ministry of Health [2]; the Ministry of Food and Agriculture [3]; nor the National Center for Communicable Disease [4] and the National Center for Zoonotic Disease [5] share additional relevant information. Although Mongolia's 2007 Law on Genetically Modified Organisms (GMOs) contains biosafety rules, the law applies exclusively to GMOs and does not relate to dangerous pathogens and toxins [6]. Although Mongolia is a party to the Biological Weapons Convention (BWC), it has not submitted publicly available Confidence-Building Measure reports in accordance with the decisions of the BWC Review Conferences since 1995. [7]. There is no relevant information on the Verification, Research, Training and Information Center (VERTIC) website [8].

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 28 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 28 November 2020.
[3] Ministry of Food and Agriculture website. [http://mofa.gov.mn/exp/]. Accessed 28 November 2020.
[4] National Center for Communicable Disease website. [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 28 November 2020.
[5] National Center for Zoonotic Disease website. [https://nczd.gov.mn/]. Accessed 28 November 2020.
[6] Legal Info website. 2007. "Law on Genetically Modified Organisms". [http://www.legalinfo.mn/law/details/536]. Accessed 28 November 2020.
[7] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 28 November 2020.
[8] Verification Research, Training and Information Center (VERTIC). "Legislation database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 28 November 2020.

1.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Mongolia has in place legislation and/or regulations related to national biosafety regulations related to dangerous pathogens and toxins. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not contain relevant information, except to say that biosafety is "recognized as an important component of the laboratory system". The JEE gives Mongolia a score of just 2 for its biosafety systems and its biosafety training and practices. [1]. Neither the Ministry of Health [2] ; Ministry of Food and Agriculture [3]; nor the National Center for Communicable Disease [4] and National Center for Zoonotic Disease [5] share additional relevant information. Although Mongolia's 2007 Law on Genetically Modified Organisms (GMOs) contains biosafety rules, and states that Biosecurity National Committee is in charge of securing and organizing biosafety activities, the law applies exclusively to GMOs. [7]. Mongolia is a party to the Biological Weapons Convention (BWC), but it has not submitted publicly available Confidence-Building Measure reports in accordance with the decisions of the BWC Review Conferences since 1995. [8]. There is no relevant information on the Verification, Research, Training and Information Center (VERTIC) website [9].

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 25 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 25 November 2020.
[3] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/#]. Accessed 25 November 2020.
[5] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed25 November 2020.
[6] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 25 November 2020.
[7] Legal info website. 2007. "Law on Genetically Modified Organisms". [http://www.legalinfo.mn/law/details/536]. Accessed 25 November 2020.
[8] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 25 November 2020.
[9] Verification Research, Training and Information Center (VERTIC). "Legislation database".

[https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]

1.4.2 Biosafety training and practices

1.4.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient publicly available evidence to confirm that Mongolia requires 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. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states that "training in biosafety and biosecurity practices are mainly ad-hoc or project-based and a better understanding of training needs is required. [1]. The National Committee for Bio Security organized in cooperation with the European Union (EU) Chemical, Biological, Radiological and Nuclear (CBRN) Risk Mitigation Centers of Excellence (CoE) Initiative several training withing the framework of P53 project.[2,3]. There is no additional information found in the Verification Research, Training and Information Center (VERTIC) website [4].

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 29 November 2020.
[2] Ministry of Environment and Tourism. News 15 January 2019. "Interactive Laboratory Training on Biosecurity and Biosafety". [https://www.mne.mn/?p=7215] Accessed 29 November 2020.
[3] Ministry of Environment and Tourism. News 25 January 2020. "The National Committee for Biosafety is working with the British Public Health Institution." [https://www.mne.mn/?p=7279] Accessed 29 November 2020.
[4]. Verification Research, Training and Information Center (VERTIC). "Legislation database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 29 November 2020.

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 Mongolia has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential, or other dual-use research. There is no evidence of such an assessment on the websites of the Ministry of Health, Ministry of Defense or Ministry of Food, Agriculture and Light Industry, nor the National Center for Communicable Disease. [1,2,3,4] Although Mongolia is a

party to the Biological Weapons Convention (BWC), it has not submitted publicly available Confidence-Building Measure reports in accordance with the decisions of the BWC Review Conferences since 1995. [5] There are research articles available publicly regarding toxic heavy metals in soils of major cities in Mongolia [6,7]. There is no evidence on the type of assessment of dangerous pathogens, toxins, pathogens with pandemic potential, and/or other dual-use research on the Verification Research, Training and Information Center (VERTIC) website [8].

[1] Ministry of Health. 2020. [https://www.mohs.mn/]. Accessed November 25 2020.
[2] Ministry of Defense.November 29 2020.
[3] Ministry of Food, Agriculture and Light Industry (MOFA). 2020. [http://mofa.gov.mn/exp/]. Accessed November 25 2020.
[4] National Center for Communicable Diseases (NCCD). 2020. [https://www.nccd.gov.mn/]. Accessed November 25 2020.
[5] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed November 25 2020.
[6] Chonokhuu Sonomdagva, et al. July 2019. "Contamination and Health Risk Assessment of Heavy Metals in the Soil of Major Cities in Mongolia." International Journal of Environmental Research and Public Health. [https://www.researchgate.net/publication/334527410_Contamination_and_Health_Risk_Assessment_of_Heavy_Metals_in_the_Soil_of_Major_Cities_in_Mongolia] Accessed 25 November 2020.
[7] Enkhchimeg Battsengel et al. 29 June 2020. "Ecological and Human Health Risk Assessment of Heavy Metal Pollution in the Soil of the Ger District in Ulaanbaatar, Mongolia". International Journal of Environmental Research and Public Health. [https://www.mdpi.com/1660-4601/17/13/4668/html]. Accessed 25 November 2020.
[8] Verification Research, Training and Information Center (VERTIC). "Legislation database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 25 November 2020.

1.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of a national policy requiring oversight of dual-use research. There is no mention of such a legislation on the websites of Ministry of Health [1], Ministry of defense[2] or Ministry of Food, Agriculture and Light Industry [3] websites, nor on the National Center for Communicable Disease (NCCD) website [4] and State Central Veterinary Laboratory website [5]. The law on GMOs deals with biosecurity and biosafety, however, the law doesn't mention about dual-use research. [6] Although Mongolia is a party to the Biological Weapons Convention (BWC), it has not submitted publicly available Confidence-Building Measure reports in accordance with the decisions of the BWC Review Conferences since 1995. [7]. Law on toxic and hazardous chemicals doesn't mention research on toxic and hazardous chemicals [8]. National Chemicals Management Profile, Mongolia, conducted by the United Nations Institute for Training and Research (UNITAR) and Ministry of Nature and Environment of Mongolia, do not provide information on dual-use research [9]. There is no relevant information on the Verification Research, Training and Information Center (VERTIC) website [10].

[1] Ministry of Health website. [https://www.mohs.mn/]. Accessed 28 November 2020.
[2] Ministry of Defense website. [www.mod.gov.mn]. Accessed 28 November 2020.
[3] Ministry of Food, Agriculture and Light Industry website. [http://mofa.gov.mn/exp/]. Accessed 28 November 2020.
[4] National Center for Communicable Disease website. [https://www.nccd.gov.mn/]. Accessed 28 November 2020.
[5] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 28 November 2020.
[6] Legal Info website. 2007. "Law on GMO. [http://www.legalinfo.mn/law/details/536]. Accessed 28 November 2020.

[7] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 28 November 2020.
[8] Legal Info website. 2006. "Law on Toxic and Dangerous Chemicals". [https://www.legalinfo.mn/law/details/526]. Accessed 28 November 2020.
[9] United Nationsl Institute for Training and Research (UNITAR). 2008. "National Chemicals Management Profile, Mongolia". [https://cwm.unitar.org/national-profiles/publications/cw/np/np_pdf/Mongolia_National_Profile_2009.pdf] Accessed 28 November 2020.
[10] Verification Research, Training and Information Center (VERTIC). "Legislation database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 25 November 2020.

1.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of an agency responsible for oversight of dual-use research. There is no mention of such a legislation on the Ministry of Health [1], Ministry of Defense [2] or Ministry of Food, Agriculture and Light Industry [3] websites, nor on the National Center for Communicable Disease (NCCD) website [4] and State Central Veterinary Laboratory website. [5]. The Law on GMOs deals with biosecurity and biosafety, however, the law doesn't mention about dual-use research. [6]. Although Mongolia is a party to the Biological Weapons Convention (BWC), it has not submitted publicly available Confidence-Building Measure reports in accordance with the decisions of the BWC Review Conferences since 1995. [7]. The Law on toxic and hazardous chemicals doesn't specify research [8]. A National Council under the Prime Minister takes responsibility for making professional judgments and conclusions on the policy and regulation of hazardous and toxic chemicals (6.2. section of the law). The Ministry of Environment and Tourism of Mongolia conducted Minamata (Mercury) Initial Assessment 2019 [9]. There is no relevant information on the Verification, Research, Training and Information Center (VERTIC) website [10].

[1] Ministry of Health website. 2020. [https://www.mohs.mn/]. Accessed 28 November 2020.
[2] Ministry of Defense website. 2020. [www.mod.gov.mn]. Accessed 28 November 2020.
[3] Ministry of Food, Agriculture, and Light Industry website. 2020. [http://mofa.gov.mn/exp/]. Accessed 28 November 2020.
[4] National Center for Communicable Disease website. 2020. [https://www.nccd.gov.mn/]. Accessed 28 November 2020
[5] State Central Veterinary Laboratory. 2018. [http://scvl.gov.mn/]. Accessed 28 November 2020.
[6] Government of Mongolia. 2007. "Law on GMO". [http://www.legalinfo.mn/law/details/536]. Accessed 28 November 2020.
[7] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 28 November 2020.
[8] Legal Info website. 2006. "Law about Toxic and Hazardous chemicals". [https://www.legalinfo.mn/law/details/526]. Accessed 28 November 2020.
[9] Minamata Initial Assessment. 2019. "Mongolia Report". [http://www.mercuryconvention.org/Portals/11/documents/MIAs/Mongolia-MIA-2019.pdf]. Accessed 28 November 2020.
[10] Verification Research, Training and Information Center (VERTIC). "Legislation databse". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 28 November 2020.

1.5.2 Screening guidance for providers of genetic material

1.5.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a national legislation, regulation, policy, or other guidance, requiring the screening of synthesized DNA before it is sold. There is no mention of such a legislation on the publicly available websites of the Ministry of Road and Transport Development; Ministry of Health; Ministry of Defense; Ministry of Food and Agriculture; Public Health Institute; the laboratories of the National Center for Communicable Disease and National Center for Zoonotic Disease; State Central Veterinary Laboratory; or Ministry of Education, Culture, and Science. [1,2,3,4,5,6,7,8] Although Mongolia is a party to the Biological Weapons Convention (BWC), it has not submitted publicly available Confidence-Building Measure reports in accordance with the decisions of the BWC Review Conferences since 1995. [9]. There are articles and news on GMO products and a blacklist of GMO products [10,11,12,13]. There is no relevant information on the Verification Research, Training and Information Center (VERTIC) website [14].

[1] Ministry of Road and Transport Development. [http://mrtd.gov.mn/eng/]. Accessed 25 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 25 November 2020.
[3] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 25 November 2020.
[4] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/#]. Accessed 25 November 2020.
[5] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 25 November 2020.
[6] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 25 November 2020.
[7] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 25 November 2020.
[8] Ministry of Education, Culture, Science, and Sports. [https://mecss.gov.mn/]. Accessed 25 November 2020.
[9] United Nations Office at Geneva. Biological Weapons Convention. "Confidence-Building Measures". [https://bwc-ecbm.unog.ch/state/mongolia]. Accessed 25 November 2020.
[10] Article: Relationship between GMO and economy [https://ikon.mn/n/rfv]. Accessed 25 November 2020.
[11] Article: Danger of GMO products [http://www.olloo.mn/n/55283.html]. Accessed 25 November 2020.
[12] Article: GMO and biosafety.[https://www.ugluu.mn/254021.html]. Accessed 25 November 2020.
[13] Article: VERTIC concludes work on EU CBRN CoE Project 53 on biosafety and biosecurity in Central Asia [https://www.vertic.org/2019/12/06/vertic-concludes-work-on-eu-cbrn-coe-project-53-on-biosafety-and-biosecurity-in-central-asia/]. Accessed 25 November 2020.
[14] Verification Research, Training and Information Center (VERTIC). "Legislation databse". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/m/]. Accessed 25 November 2020.

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: 1

2020

OIE WAHIS database

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

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

Does the national laboratory system have the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests?

Evidence they can conduct 5 of the 10 core tests and these tests are named = 2, Evidence they can conduct 5 of the 10 core tests and the tests are not named = 1, No evidence they can conduct 5 of the 10 core tests = 0

Current Year Score: 2

The national laboratory system has the capacity to conduct diagnostic tests for 6 of the 10 World Health Organization (WHO)-defined core tests. Influenza virus is tested by polymerase chain reaction (PCR). [1] These tests are as follows: Virus culture for poliovirus (polio); serology for HIV; microscopy for mycobacterium tuberculosis (tuberculosis/TB); rapid diagnostic testing for plasmodium spp. (malaria); and bacterial culture for Salmonella enteritidis serotype Typhi (typhoid). These are tested by the above methods at the National Center for Communicable Disease. [2] The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, assigns a score of 4 to the national laboratory system and states, "[The] National laboratory system is capable of conducting six core tests identified by the International Health Regulations plus at least four tests for national priority diseases." [3]

[1] Naranzul Tsedenbal, et al. 2018. "Influenza B viruses circulated during last 5 years in Mongolia". PLOS ONE. [https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0206987] Accessed 28 November 2020.
[2] National Center for Communicable Diseases (NCCD).

[https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 28 November 2020.
[3] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf]. Accessed 28 November 2020.

2.1.1b

Is there a national plan, strategy or similar document for conducting testing during a public health emergency, which includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing?

Yes, there is evidence of a plan, and it includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing = 2, Yes, there is evidence of a plan, but there is insufficient evidence that it includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing = 1, No evidence of a plan = 0

Current Year Score: 0

There is insufficient publicly available evidence to confirm that Mongolia has a plan, strategy, or similar document for conducting testing for novel pathogens, scaling capacity, and defining goals for testing.

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, recommended to "Revise, implement and monitor the national Plan for Emerging Communicable Diseases and Public Health Emergencies to take into consideration the recommended priority actions from the JEE mission, as guided by the Asia Pacific Strategy for Emerging Diseases (APSED) and Public Health Emergencies [1]. Mongolia has a prevention and monitoring plan for communicable diseases for 2017-2020. [2]; and had a plan for new and emerging infectious diseases for 2012-2015, [3]. According to the National Center for Zoonotic Diseases website, there is a procedure for organizing inter-sectoral information exchange, immediate response and approval of risk evaluation methodology in the event of a potential disaster or public health emergency, however it doesn't have a plan for testing novel pathogens, scaling capacity and defining goals for testing [4].

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf? sequence=1. Accessed 30 November 2020.
[2] Ministry of Health. [https://www.mohs.mn/uploads/files/7f9f0d5246f54e0824131295bfd0037e.pdf]. Accessed 30 November 2020.
[3] Ministry of Health. [https://www.mohs.mn/uploads/files/4bc6815e17d81e9ad0cde13abf1b2228.pdf]. Accessed 30 November 2020.
[4] National Center for Zoonotic Diseases (NCZD). 2 November 2017. "Order of Chair for Permanent Committee for Earthquake Disaster Prevention". [https://nczd.gov.mn/Legal/2017_08.pdf]. Accessed 30 November 2020.

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 publicly available evidence to confirm that there is a national laboratory that serves as a reference facility that is accredited.

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states that the laboratory of the National Center for Communicable Disease (NCCD) "has been accredited as ISO15189". [1] According to the website of the NCCD, its laboratory serves as a reference facility for Mongolia. [2] Sukhbaatar District Health center's laboratory has also been accredited to international standard 15189 (17 October 2019) [3].

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 29 Nov 2020.
[2] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/22-laboratoy]. Accessed 29 November 2020.
[3] Sukhbaatar District Health Centre. [http://sbemt.ub.gov.mn/?p=5412]. Accessed 29 November 2020.

2.1.2b

Is there a national laboratory that serves as a reference facility which is subject to external quality assurance review?
Yes = 1 , No = 0

Current Year Score: 1

There is publicly available evidence to confirm that there is a national laboratory that serves as a reference facility which is subject to external quality assurance review [1, 2]. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, while not specifically naming the NCCD in this capacity, states that Mongolian reference laboratories "participate in EQA at international level"[1]. Sukhbaatar District Health center has been accredited to international standard 15189, which require external quality assurance [3].

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 29 Nov 2020.
[2] National Centre for Communicable Diseases (NCCD).. [https://www.nccd.gov.mn/index.php/22-laboratoy]. Accessed 29 November 2020.
[3] Sukhbaatar District Health Centre. [http://sbemt.ub.gov.mn/?p=5412]. Accessed 29 November 2020.
[4] National Agency for Standardization and Metrology. [https://masm.gov.mn/masmj/эмнэлгийн-лаборатор/]. Accessed 29 November 2020.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

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

Current Year Score: 0

Although there is evidence that Mongolia has a specimen transport system, there is insufficient publicly available information to confirm that it is nationwide. The Regulation on Taking, Storing, and Transporting Specimen, a 2011 rule, establishes

parameters for the specimen transport system, but the original text is not available online. [1] The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states that "challenges with specimen referral are often outside the control of laboratories and related to infrastructure, couriers, administrative procedures and cost". It adds that "limited availability of certified shippers and shipping materials". [2] Together, these statements indicate that whatever specimen transport system exists falls short of being nationwide. Further, the JEE gives Mongolia a score of just 3 for its specimen referral and transport system, indicating that a system "is in place to transport specimens to national laboratories from 50- 80% of intermediate level/districts within the country for advanced diagnostics". [2,3] Neither the Ministry of Health; the Ministry of Food and Agriculture; the laboratories of the National Center for Communicable Disease and the National Center for Zoonotic Disease; the State Central Veterinary Laboratory; nor the Public Health Institute share relevant information via a publicly available website. [4,5,6,7,8]

[1] Legal info website. 2011. "Order No.19 of Vice Minister of Mongolia".
[http://www.legalinfo.mn/annex/details/6721?lawid=11018]. Accessed 28 November 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia".
[https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 28 November 2020.
[3] World Health Organization (WHO). 2016. "Joint External Evaluation Tool".
[https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1].Accessed 28 November 2020.
[4] Ministry of Health. [http://mohs.mn/]. Accessed 28 November 2020.
[5] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/#]. Accessed 28 November 2020.
[6] National Center for Communicable Diseases (NCCD).
[https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 28 November 2020.
[7] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/].Accessed 28 November 2020.
[8] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 28 November 2020.

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 public evidence available to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak. There is publicly available regulation on the requirements for documents to be submitted for obtaining a license [1]. The national program for "Prevention and control of infectious diseases" doesn't contain information on laboratory licensing processes [2] nor does the action plan for implementation of the "Prevention and control of infectious diseases" program. [3] The Joint External Evaluation (JEE) of IHR core capacities of Mongolia recommends increasing funding for the national laboratory system [4]. Finally, no evidence was found via the Ministry of Health. [5]

[1] Ministry of Health. Health Minister order, 24 April, 2013." Approval of requirements for documents to be submitted for obtaining a license, license services fee, license services cost estimation sample".
[https://www.mohs.mn/uploads/files/5f07ad30010883d07783f90453edbbcd.pdf. Accessed 29 November 2020.
[2] Legal info website. "Prevention and control of infectious diseases"
[https://www.legalinfo.mn/annex/details/7593?lawid=12442]. Accessed 29 November 2020.

[3] Ministry of Health. "Action plan for implementation of the "Prevention and control of communicable diseases" program" [https://www.mohs.mn/uploads/files/7f9f0d5246f54e0824131295bfd0037e.pdf] Accessed 29 November 2020.
[4] World Health Organization. May 2017. "Joint External Evaluation of IHR core capacities of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1] Accessed 29 November 2020.
[5] Ministry of Health. [https://www.moh.gov.mn/] Accessed 29 November 2020

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: 1

There is evidence to confirm that Mongolia is conducting ongoing event-based surveillance (EBS) and analysis for infectious disease, but it is not clear if this is analyzed on a daily basis. The website of the National Center for Communicable Diseases (NCCD) states that it has an EBS unit, but does not provide details on the nature of its activities. [1,8]. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states that Mongolia "has a comprehensive surveillance system consisting of both Indicator based surveillance (IBS) and EBS, managed by NCCD and the National Center for Zoonotic Disease (NCZD). EBS findings are shared through NCCD at the Emergency Operations Center (EOC) weekly meetings and through an email distribution list.". [2] The JEE also notes that "vertical surveillance systems... are managed by a number of organizations or are project-based," and that there are email addresses and hotline numbers for reporting both animal and human disease outbreaks as part of an EBS regime. [2,3] . Neither the Ministry of Health; the Ministry of Food, Agriculture and Light Industry; the laboratories of the NCCD and the NCZD; the State Central Veterinary Laboratory; nor the National Statistical Database share relevant information via a publicly available website. [4,5,6,7,8] . According to Joint External Evaluation, Mongolia, the NCCD is recognized as the primary place for coordination of surveillance, joint risk assessment, risk communication, and response functions.

[1] National Center for Communicable Diseases (NCCD). 2018. [https://www.nccd.gov.mn/] Accessed 29 November 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia" [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 29 November 2020.
[3] World Health Organization (WHO). 2016. "Joint External Evaluation Tool" [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 29 November 2020.[4] Ministry of Health. [http://mohs.mn/]. Accessed 29 November 2020.
[5] Ministry of Food, Agriculture and Light Industry (MOFA). [http://mofa.gov.mn/exp/#]. Accessed 29 November 2020.
[6] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 29 November 2020.
[7] National Center for Zoonotic Disease (NCZD) [https://nczd.gov.mn/]. Accessed 29 November 2020.
[8] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 29 November 2020.
[8] National Statistical Database [www.1212.mn]. Accessed 29 November 2020.

2.3.1b

Is there publicly available evidence that the country reported a potential public health emergency of international concern (PHEIC) to the WHO within the last two years?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Mongolia has reported a potential public health emergency of international concern (PHEIC) to the World Health Organization within the last two years including for Covid-19.

The WHO Disease Outbreak News site reports no recent outbreaks of reportable diseases. [1] There is no additional information shared via a public website by the Ministry of Health. [2] The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, noted that "surveillance systems have been pivotal in detecting outbreaks such as measles in 2015" but provides no other relevant information. [3]

[1] World Health Organization (WHO). "Disease Outbreak News: Mongolia". [https://www.who.int/csr/don/archive/country/mng/en/]. Accessed 30 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 30 November 2020.
[3] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf]. Accessed 30 November 2020.

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 that operates at both the national and sub-national levels. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, gives Mongolia a score of 3 for its "interoperable, interconnected, electronic real-time reporting system", indicating that an electronic reporting system exists but is not capable of sharing data in real-time. The JEE states that operational guidelines for the Emergency Operations Center (EOC) exist during peacetime and during public health emergencies, including for information sharing [1]. The JEE does not include any information on the system's coverage, though it does recommend that the existing reporting system be upgraded "using modernized information and communication technology (ICT) for a unified web-based, timely reporting system" [1]. Neither the Ministry of Health [2] ; the laboratories of the National Center for Communicable Disease (NCCD) [3] and the National Center for Zoonotic Disease (NCZD) [4]; the State Central Veterinary Laboratory [5] share relevant information via a publicly available website. [5].

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 1 December 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 1 December 2020.
[3] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 1 December 2020.
[4] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 1 December 2020.

[5] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 1 December 2020.

2.3.2b

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

Yes = 1 , No = 0

Current Year Score: 0

The government of Mongolia operates an electronic reporting surveillance system, but there is no publicly available evidence that it collects real-time laboratory data. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, gives Mongolia a score of 3 for its "interoperable, interconnected, electronic real-time reporting system", indicating that an electronic reporting system exists but is not capable of sharing data in real-time. [1,2] The JEE does not provide any details about this system, though it does recommend that the existing reporting system be upgraded "using modernized information and communication technology (ICT) for a unified web-based, timely reporting system". [1] Neither the Ministry of Health; the laboratories of the National Center for Communicable Disease (NCCD) and the National Center for Zoonotic Disease; the State Central Veterinary Laboratory; nor the Public Health Institute share relevant information via a publicly available website. [3,4,5,6]

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 28 November 2020.
[2] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 28 November 2020.
[3] Ministry of Health. [https://www.moh.gov.mn/]. Accessed 28 November 2020.
[4] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 28 November 2020.
[5] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 28 November 2020.
[6] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 28 November 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: 0

There is insufficient public evidence of electronic health records in use. The Ministry of Health announced in 2018 that "all citizens of Mongolia will have an electronic health register" once the E-Health project will be completed [1, 2]. The Government of Mongolia and the International Development Agency of the World Bank had signed a financing agreement in 2015 for implementation of the E-Health Project during 2015-2020. The objective of the E-Health Project for Mongolia is to contribute to the Government of Mongolia's efforts to utilize public sector resources more effectively in the health sector by improving integration and utilization of health information and e-health solutions. Components of the E-health project are: 1) laying the foundations for successful deployment of e-health solutions and developing the pre-requisites needed for greater

integration of health information between health facilities, the health insurance agency, public health agencies, private sector, etc.; 2) clinical data collection, access and sharing to establish a basis for standardized data and medical image exchange between healthcare providers and users, develop the mechanism for such data exchange and pilot this mechanism in selected sites; 3) establish National Health Information Center to oversee all aspects of e-health in Mongolia; 4) invests in the human capacity for the successful implementation and institutionalization of e-health in Mongolia.[3] However, there is no evidence on the progress and results of the E-health project [4].

[1] Ministry of Health. 26 September 2018. "All citizens will have an electronic health register." [https://www.mohs.mn/news/3127]. Accessed 30 September 2020.
[2] E-Health Project Mongolia. 13 January 2020. "Opening of the E-Health Training Center". [http://ehp.mn/eng/12/item/44]. Accessed 30 November 2020.
[3] World Bank. "E-Health project document". [https://documents.worldbank.org/en/publication/documents-reports/documentdetail/138581468053970694/mongolia-e-health-project]. Accessed 30 November 2020.
[4] E-Health Project Mongolia. 29 January 2020."Health Data, information technology standards". [http://ehp.mn/eng/12/item/45]. Accessed 30 November 2020.

2.4.1b

Does the national public health system have access to electronic health records of individuals in their country?
Yes = 1 , No = 0

Current Year Score: 0

There is not enough publicly available evidence to confirm that electronic health records are commonly in use in Mongolia, let alone that the public health system has access to such records of individuals.

The Ministry of Health makes reference to a "Cyber Health Strategy", but does not make the document available via its public website, so its contents are impossible to confirm. [1] A program for e-health was implemented in January 2017 and funded by the World Bank, but it is unclear what its implications are for health records. There are several other E-Health projects in Mongolia, but their correlation is lacked and not properly implemented. [2]

Neither the Ministry of Health; the laboratories of the National Center for Communicable Diseases (NCCD); the National Center for Zoonotic Disease; the State Central Veterinary Laboratory; nor the Public Health Institute share relevant information via a publicly available website. [3,4,5,6] The Intermed Hospital in Ulaanbaatar, which is a major hospital with the most robust internet presence, does not share any relevant information via a public website. [7] Mongolia is only starting to implement E-Health training.

[1] E-Health Project Mongolia. 13 January 2020. "Opening of the E-Health Training Center". [http://ehp.mn/eng/12/item/44]. Accessed 30 November 2020.
[2] Ministry of Health. December 2017. "E-health Conference News". [http://www.mohs.mn/news/2500]. Accessed 30 November 2020.
[3] Ministry of Health. [http://mohs.mn/]. Accessed 30 November 2020.
[4] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 30 November 2020.
[5] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 30 November 2020.
[6] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 30 November 2020.
[7] Intermed Hospital. [http://www.intermed.mn/eng/about/%D1%8D%D1%80%D1%85%D1%8D%D0%BC-

%D0%B7%D0%BE%D1%80%D0%B8%D0%BB%D0%B3%D0%BE]. Accessed 30 November 2020.

2.4.1c

Are there data standards to ensure data is comparable (e.g., ISO standards)?

Yes = 1 , No = 0

Current Year Score: 0

There is not enough publicly available evidence to confirm that electronic health records are commonly in use in Mongolia, let alone that there are data standards to ensure such data is comparable. The Ministry of Health makes reference to a "Cyber Health Strategy", but does not make the document available via its public website, so its contents are impossible to confirm. [1] A program for e-health was implemented in January 2017 and funded by the World Bank, but it is unclear what its implications are for health records. There are several other E-Health projects in Mongolia, but their correlation is lacked and not properly implemented. [2] Neither the Ministry of Health; the laboratories of the National Center for Communicable Diseases (NCCD) and the National Center for Zoonotic Diseases (NCZD) nor the State Central Veterinary Laboratory share relevant information . [3,4,5,6] The Intermed Hospital in Ulaanbaatar, which is the major hospital with the most robust internet presence, does not share any relevant information via a public website. [7].

[1] Ministry of Health. 2009. "Cyber Health Strategy".
[https://www.mohs.mn/uploads/files/cad776faf19de1ea6e73f317c75730b6.pdf]. Accessed 28 November 2020.
[2] Ministry of Health. December 2017. "E-health Conference News". [http://www.mohs.mn/news/2500]. Accessed 28 November 2020.
[3] Ministry of Health. [http://mohs.mn/]. Accessed 28 November 2020.
[4] National Center for Communicable Diseases (NCCD).
[https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 28 November 2020.
[5] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 28 November 2020.
[6] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 28 November 2020.
[7] Intermed Hospital. [http://www.intermed.mn/eng/about/%D1%8D%D1%80%D1%85%D1%8D%D0%BC-%D0%B7%D0%BE%D1%80%D0%B8%D0%BB%D0%B3%D0%BE]. Accessed 28 November 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: 1

There is evidence of established mechanisms to share data at the relevant ministerial organizations responsible for animal, human, and wildlife surveillance [1].

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, provides little direct evidence about information sharing between ministries, although it notes that "reports from all surveillance systems from all sectors are routinely shared at the inter-sectoral weekly surveillance meetings" through emergency operations center (EOC) and emergency operations points (EOPs). Further, the JEE gives Mongolia a score of 4 for "integration and analysis of surveillance data", which includes

an evaluation of whether the Ministry of Health shares laboratory data with other ministries. A score of 4 indicates that there is "annual or monthly reporting". [2,3].

[1] National Emergency Management Agency. 30 December 2015. Order no 434. "Order of Director of the National Emergency Management Agency". [http://nema.gov.mn/wp-content/uploads/2014/06/%D0%9C%D0%B0%D0%BB-%D0%B0%D0%BC%D1%8C%D1%82%D0%BD%D1%8B-%D0%B3%D0%BE%D1%86-%D1%85%D0%B0%D0%BB%D0%B4%D0%B2%D0%B0%D1%80%D1%82-%D3%A9%D0%B2%D1%87%D0%BD%D0%B8%D0%B9-%D2%AF%D0%B5%D0%B4%D1%80.pdf]. Accessed 24 November 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 24 November 2020.
[3] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 24 November 2020.

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 no evidence that Mongolia makes de-identified health surveillance data on disease outbreaks publicly available via reports (or other formats) on government websites.

Neither the Ministry of Health; Ministry of Food and Agriculture; laboratories of the National Center for Communicable Disease (NCCD) and National Center for Zoonotic Disease (NCZD); State Central Veterinary Laboratory; nor the Public Health Institute share relevant information via a publicly available website. [1,2,3,4,5]

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not contain any relevant information. [6] Note that statistical data of the National Statistical Database, Health Development Center and NCZD are general and de-identified [7, 8,9].

[1] Ministry of Health. [http://mohs.mn/]. Accessed 24 November 2020.
[2] Ministry of Food and Agriculture. [http://mofa.gov.mn/exp/#]. Accessed 24 November 2020.
[3] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 24 November 2020.
[4] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 24 November 2020.
[5] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 24 November 2020.
[6] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 24 November 2020.
[7] National Statistical Database. [https://www.1212.mn/tables.aspx?TBL_ID=DT_NSO_2100_020V2]. Accessed 24 November 2020.
[8] Health Development Center. "Monthly health data". [http://www.hdc.gov.mn/file-category/25/]. Accessed 24 November 2020.
[9] National Center for Zoonotic Disease (NCZD). "Yearly statistical data". [https://nczd.gov.mn/?p=8496]. Accessed 24

November 2020.

2.4.3b

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

Yes = 1 , No = 0

Current Year Score: 1

Mongolia makes 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) [1]. The Ministry of Health has publicly available information on Covid-19, such as daily case count, mortality rate, up-to-date news, and a live chat.[1] The National Center for Zoonotic Disease has publicly available up to date reports and news on Covid-19 [2].

[1] Ministry of Health. "Covid-19". [https://covid19.mohs.mn/]. Accessed 30 November 2020.
[2] National Center for Zoonotic Disease (NCZD). "Covid-19". [https://monmap.maps.arcgis.com/apps/opsdashboard/index.html?fbclid=IwAR2gSa7onWrdsDsHJZZtTT3H6oQAhjWbIEcZWBdsS6b5bzLc2luSLu13vfk#/eecba9e1c0cc4aa9a95c2429abd0c4fa]. Accessed 30 November 2020.

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

Mongolia has a law that safeguards the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities. Mongolia's Privacy Law is explicitly inclusive of personal health information. Article 4.2.2 of Mongolia's Privacy Law states that health confidentiality applies to specific diseases and conditions for humans [1] The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not contain information on privacy protection or safeguards that apply to health data. [2]

[1] Government of Mongolia. 21 April 21 1995. "Privacy Law". [http://www.legalinfo.mn/law/details/537]. Accessed 30 November 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 30 November 2020.

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 health information on cybersecurity regulations has been updated. Mongolia has a regulation safeguarding the confidentiality of identifiable health information for individuals against cyber attacks. Ministry of Health's 2019 Health Information Cyber Security Regulation protects the health information of individuals from cyber attacks.[1] Mongolia's Privacy Law also states that health confidentiality applies to specific diseases and conditions for humans. However, this law does not mention cyber attacks or cyber security. [2]

[1] Ministry of Health. 2009. "Order no.357, Health Information Cyber Security Regulations". [https://www.mohs.mn/uploads/files/1d97ad7a21eebb563ad2f4d9351522816ff83833.pdf] Accessed 30 November 2020.
[2] Government of Mongolia. 21 April 1995. "Privacy Law". [http://www.legalinfo.mn/law/details/537]. Accessed 30 November 2020.

2.4.5 International data sharing

2.4.5a

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

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

Current Year Score: 0

There is no evidence that the government of Mongolia made a commitment via public statements, legislation, and/or a cooperative agreement to share surveillance data for one or more than one diseases during a public health emergency with other countries in the region. Neither the Ministry of Health, the laboratories of the National Center for Communicable Disease (NCCD), the National Center for Zoonotic Disease (NCZD) nor the State Central Veterinary Laboratory [4] have relevant information [1, 2,3,4]. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not contain any relevant information [5].

[1] Ministry of Health. [http://mohs.mn/]. Accessed 1 December 2020.
[2] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 1 December 2020.
[3] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 1 December 2020.
[4] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 1 December 2020.
[5] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 1 December 2020.

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 no evidence of 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 an active or future public health emergency. No evidence was found in documents related to the National Program on Prevention and Control of Communicable Diseases. [1, 2]. There is also no evidence on the websites of the National Emergency Management Agency (NEMA) [3]; and the Ministry of Agriculture and Light Industry (MOFA). [4]

[1] Legal info website. Government resolution 11, 11 January 2017. "Approval of the National program on "Prevention and Control of Communicable Diseases"". [https://www.legalinfo.mn/law/details/12442]. Accessed 25 November, 2025.
[2] Legal info website. Government Resolution 129, June 28, 2002. "Approval of the National program on "Combating Communicable Diseases"". [https://www.legalinfo.mn/law/details/4960]. Accessed 25 November 2020.
[3] National Emergency Management Agency (NEMA). "Emergency preparedness trainings". [https://nema.gov.mn/uridchilan/belenbai]. Accessed 25 November 2020.
[4] Ministry of Food, Agriculture and Light Industry (MOFA). [https://www.mofa.gov.mn/exp/] Accessed 25 November 2020.

2.5.1b

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

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

Current Year Score: 0

There is no evidence publicly available that Mongolia 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 [1, 2]. There is a publicly available guidance for self-isolation for those who return from abroad or suspect they may be infected [1,3]. There is no evidence of economic support such as paycheck, or job security on the Ministry of Health or National Center for Communicable Disease websites. [1,2].

[1] Ministry of Health. [https://www.mohs.mn]. Accessed 25 November 2020.
[2] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn]. Accessed 25 November 2020.
[3] Ministry of Health. [https://mohs.mn/uploads/userfiles/files/205.pdf]. Accessed 25 November 2020.
[3] Ulaanbaatar City Municipality. [http://ulaanbaatar.mn/Home/newsdetail?dataID=48731]. Accessed 25 November 2020.

2.5.1c

Does the country make de-identified data on contact tracing efforts for COVID-19 (including the percentage of new cases from identified contacts) available via daily reports (or other format) on government websites (such as the Ministry of Health, or similar)?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Mongolia collates de-identified data on contact tracing efforts for COVID 19 according to the Ministry of Health and other national websites [1,2,3,4]. A two-stage post-treatment study was conducted involving 147 people who were treated for a corona virus infection during 10 March - 25 August for post-treatment and psychological

counseling was provided to them [2].

[1] Ministry of Health. [https://covid19.mohs.mn/p/cat/post/57/]. Accessed 26 November 2020.
[2] Ministry of Health. "Covid post-treatment study". [https://nccd.gov.mn/index.php/2020-01-25-09-02-10/2020-01-30-02-47-48/285-covid-19-2020-04-20]. Accessed 26 November 2020.
[3] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn]. Accessed 26 November 2020.
[4] National Emergency Management Agency (NEMA). "Article on control regimes maintenance at the rapid diagnostics points". [https://nema.gov.mn/n/109687]. Accessed 26 November 2020.

2.5.2 Point of entry management

2.5.2a

Is there a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of a public health emergency?

Yes, plan(s)/agreement(s) are in place to prepare for future public health emergencies = 2, Yes, but plan(s)/agreement(s) are in place only in response to active public health emergencies = 1, No = 0

Current Year Score: 0

There is no publicly available evidence of having a joint plan or cooperative agreement between the public health system and border control authorities in place to prepare for active or future public health emergencies. Neither Ministry of Health, General Authority for Border Protection nor National Emergency Management Agency have any relevant information on their websites [1, 2, 3]. No evidence was also found in the Joint External Evaluation (JEE) for Mongolia, conducted in May 2017. [4].

[1] Ministry of Health. [https://www.mohs.mn] Accessed 27 November 2020.
[2] General Authority for Border Protection. [http://bpo.gov.mn/content/568]. Accessed 27 November 2020.
[3] National Emergency Management Agency (NEMA). "Members of State Special Commission". [https://nema.gov.mn/n/18183]. Accessed 27 November 2020.
[4] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 1 December 2020.

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: 1

There is evidence that Mongolia has an applied epidemiology training program (such as the Field Epidemiology Training Program (FETP)) is available in-country.

In 2009 the Ministry of Health established the Mongolian Field Epidemiology Training Program (M-FETP) in Mongolia with support from World Health Organization (WHO). The one-year program ensures that the country meets basic requirements of minimum core capacities for communicable disease surveillance and adheres to the international health regulations of 2005. [1]

Both the Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, and the website of the Training Program in Epidemiology and Public Health Interventions Network (TEPHINET) confirm the existence and operation of M-FETP. [2,3]

There is no public evidence that resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs. Neither the JEE nor the TEPHINET website provide any relevant information. [2,3] The Mongolian Field Epidemiology Training Program has its own Facebook page as well. [4]

[1] World Health Organization (WHO) Mongolia. "About FETP". [http://www.wpro.who.int/mongolia/areas/emerging_diseases/fetp_introduction/mn/]. Accessed 1 December 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 1 December 2020.
[3] Training Program in Epidemiology and Public Health Interventions Network (TEPHINET). "Mongolia Field Epidemiology Training Program". [https://www.tephinet.org/training-programs/mongolia-field-epidemiology-training-program]. Accessed 1 December 2020.
[4] Mongolian Field Epidemiology Program. "Facbook". [https://www.facebook.com/Mongolian-Field-Epidemiology-Training-Programme-216894854995332/photos]. Accessed 1 December 2020.

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: 1

There is evidence that Mongolia's applied epidemiology training program is explicitly inclusive of veterinarians.

In 2009. the Ministry of Health established the Mongolian Field Epidemiology Training Program (M-FETP) with support from World Health Organization (WHO). The one-year program ensures that the country meets basic requirements of minimum Core Capacities of communicable disease surveillance and adheres to the international health regulations of 2005. [1]

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states that the M-FETP "was extended to veterinarians in 2013". The website of the Training Program in Epidemiology and Public Health Interventions Network (TEPHINET) confirms that veterinarians are eligible for the M-FETP. [2,3]

[1] World Health Organization (WHO). Mongolia. "About FETP". [http://www.wpro.who.int/mongolia/areas/emerging_diseases/fetp_introduction/mn/]. Accessed 22 November 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia".

[https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 22 November 2020.
[3] Training Program in Epidemiology and Public Health Interventions Network (TEPHINET). "Mongolia Field Epidemiology Training Program". [https://www.tephinet.org/training-programs/mongolia-field-epidemiology-training-program]. Accessed 22 November 2020.

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: 1

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 0

In Mongolia, there is no evidence of a national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential. The National Program against Communicable Diseases only mentions the intention of creating a national public health emergency response plan. [1]. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not mention the existence of such a plan. It does mention the existence of a regulation called "Operational guideline of emergency operating center of the MOH during peacetime", which guides the operation of the emergency operations center. But the JEE does not provide details on this document and it does not appear to be shared online. [2]

Neither the Ministry of Health [3] nor the National Emergency Management Agency [4] shares additional relevant information via a publicly available website.

[1] Government of Mongolia. December 2017. Government Resolution No11, 11 January 2017. "National program on prevention and monitoring of communicable disease." [http://www.legalinfo.mn/annex/details/7593?lawid=12442]. Accessed 23 November 2020.
[2] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 23 November 2020.
[3] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[4] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 23 November 2020.

3.1.1b

If an overarching plan is in place, has it been updated in the last 3 years?

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

Current Year Score: 0

There is no national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, let alone one that has been updated in the last three years. However, the National Program against Communicable Diseases mentions the intention of creating a national public health emergency response plan. [1]

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not mention the existence of such a plan. It does mention the existence of a regulation called "Operational guideline of emergency operating center of the MOH during peacetime", which guides the operation of the emergency operations center. But the JEE does not provide details on this document and it does not appear to be shared online. [2] Neither the Ministry of Health nor the National Emergency Management Agency shares additional relevant information via a publicly available website. [3,4].

[1] Government of Mongolia. December 2017. Government Resolution No11, 11 January 2017. "National program on prevention and monitoring of communicable disease." [http://www.legalinfo.mn/annex/details/7593?lawid=12442]. Accessed 23 November 2020.
[2] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 23 November 2020.
[3] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[4] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 23 November 2020.

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

There is no national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, let alone one that includes considerations for pediatric and other vulnerable populations. However, the National Program against Communicable Diseases mentions the intention of creating a national public health emergency response plan. [1] In April 2017, the Ministry of Health (MOH) followed with an action plan for implementation of the program but there is no evidence of specific considerations for pediatric and other vulnerable populations. [2]

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not mention the existence of such a plan. It does mention the existence of a regulation called "Operational guideline of emergency operating center of the MOH during peacetime", which guides the operation of the emergency operations center. But the JEE does not provide details on this document and it does not appear to be shared online. [3] Neither the Ministry of Health nor the National Emergency Management Agency shares additional relevant information via a publicly available website. [4,5].

[1] Government of Mongolia. December 2017. "Government Resolution No11, January 11, 2017. National program on prevention and monitoring of communicable disease." [http://www.legalinfo.mn/annex/details/7593?lawid=12442]. Accessed 23 November 2020.
[2] Ministry of Health. 4 April 2017. "Action plan for implementation of the national program on prevention and monitoring of communicable disease." [http://www.mohs.mn/uploads/files/7f9f0d5246f54e0824131295bfd0037e.pdf]. Accessed 23 November 2020.
[3] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 23 November 2020.
[4] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[5] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 23 November 2020.

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 specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response. However, the National Program against Communicable Diseases mentions the intention of creating such a mechanism. [1]

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, does not mention the existence of such a plan. It does mention the existence of a regulation called "Operational guideline of emergency operating center of the Ministry of Health during peacetime", which guides the operation of the emergency operations center. But the JEE does not provide details on this document and it does not appear to be shared online. The JEE does not mention any provisions for engaging the private sector for outbreak emergency preparedness and response. [2] Neither the Ministry of Health nor the National

Emergency Management Agency shares additional relevant information via a publicly available website. [3,4].

[1] Government of Mongolia. December 2017. "11th order. National Program against Communicable Disease". [http://www.legalinfo.mn/annex/details/7593?lawid=12442]. Accessed 23 November 2020.
[2] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 23 November 2020.
[3] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[4] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 23 November 2020.

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 1

There is some publicly available evidence that the country has a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic for one disease (Covid-19) [1]. There is a publicly available only temporary guidelines for the proper use of personal protective equipment in the event of a coronavirus infection-19 [2], recommendations for COVID 19 [3]; Law on prevention, combating and reducing socio-economic impacts of COVID 19 [4], Resolutions of State Special Commission such as quarantine, schools and kindergarten closing; borders closing [5]. State Special Commission's meeting note on 25 November 2020 on taking strict measures to stop the spread of Covid-19 in the country such as restricting internal movement, closing schools, kindergarten, etc.[6]. This evidence relates only to COVID 19.

[1] Ministry of Health. [https://www.mohs.mn/home]. Accessed 25 November 2020.
[2] Ministry of Health. "Temporary guidelines for PPE use". [https://www.mohs.mn/uploads/userfiles/files/1%20-WHO-2019-nCov-IPCPPE_use-2020_1-mgl_docx-.pdf]. Accessed 25 November 2020.
[3] Ministry of Health. "Recommendations for spread preventions of COVID 19 and protections". [https://www.mohs.mn/uploads/userfiles/files/Corona%20seremjluuleg%20english%2003_11%20non.pdf]. Accessed 25 November 2020.
[4] Legal info website. Law of Mongolia. "Law on prevention, combating and reducing socioeconomic impacts of COVID 19". [https://www.legalinfo.mn/law/details/15312?lawid=15312]. Accessed 25 November 2020.
[5] National Emergency Management Agency (NEMA). "Resolution". [https://nema.gov.mn/c/resolution] Accessed 25 November 2020.
[6] National Emergency Management Agency (NEMA). "Meeting note of State Special Committee". [https://nema.gov.mn/wp-content/uploads/2020/11/Doc1-6.pdf]. Accessed 25 November 2020.

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 publicly available evidence that the Government of Mongolia activated a plan to address COVID 19 [1,2]. However, there is no publicly available evidence that Mongolia completed a national-level biological threat-focused exercise (either with World Health Organization (WHO) or separately) in the past year. Mongolia's Ministry of Health has been guided by its national Emergency Preparedness and Response Plan for Covid-19. The country conducted simulation exercises, but these are from before the research period under consideration [3]. The National Committee on Biosecurity of Mongolia and the European Union (EU) Chemical, Biological, Radiological and Nuclear (CBRN) Risk Mitigation Centers of Excellence (CoE) Initiative conducted a training on configuration, maintenance, and service of biological safety cabinet, from January 21 to February 2, 2019.[4]. There was also a "Biosafety and Biosecurity" laboratory training - workshop at the Food Safety National Reference laboratory of the State Specialized Inspection Agency January 8-10, 2019.[5].

[1] National Emergency Management Agency. "Rules, Procedures". [https://nema.dri.gov.mn/law/durem-juram/]. Accessed 28 November 2020.
[2] National Emergency Management Agency. 13 December 2017. "Disaster protection preparedness inspection arrangement and assessment procedure". [http://nema.gov.mn/wp-content/uploads/2015/01/%D0%93%D0%B0%D0%BC%D1%88%D0%B3%D0%B0%D0%B0%D1%81-%D1%85%D0%B0%D0%BC%D0%B3%D0%B0%D0%B0%D0%BB%D0%B0%D1%85-%D0%B1%D1%8D%D0%BB%D1%8D%D0%BD-%D0%B1%D0%B0%D0%B9%D0%B4%D0%BB%D1%8B%D0%B3-%D1%85%D0%B0%D0%BD%D0%B3%D0%B0%D1%85-%D2%AF%D0%B7%D0%BB%D1%8D%D0%B3-%D0%B7%D0%BE%D1%85%D0%B8%D0%BE%D0%BD-%D0%B1%D0%B0%D0%B9%D0%B3%D1%83%D1%83%D0%BB%D0%B0%D1%85-%D2%AF%D0%BD%D1%8D%D0%BB%D1%8D%D1%85-%D0%B6%D1%83%D1%80%D0%B0%D0%BC.pdf]. Accessed 5 December 2020.
[3] World Health Organization (WHO) website. "Simulation exercise". [https://extranet.who.int/sph/simulation-exercise?region=All&country=347]. Accessed 28 November 2020.
[4] National News Agency MONTSAME. 29 January 2019. [https://montsame.mn/en/read/178827]. Accessed 28 November 2020.
[5] CBRN Centers of Excellence (CoE) website. "News: Project 53 conducts a "Biosafety and Biosecurity" laboratory training for Mongolian professionals".[http://coe-project53.istc.int/activity/project-53-conducts-a-biosafety-and-biosecurity-laboratory-training-for-mongolian-professionals]. Accessed 28 November 2020.

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 insufficient publicly available evidence to confirm that Mongolia has, in the past year, 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. A self-assessment exercise of Mongolia's implementation of the International Health Regulations (IHR) was conducted on1-2 February 2017 in Ulaanbaatar. The exercise included "sixty professionals from human and animal health sectors, national disaster prevention and health emergency response organizations, professional inspection, border control and representatives from the World Health Organization (WHO) and other international and development organizations. Nine technical multi-sectoral groups organized by the Health Minister's order have worked together to review the progress in each sector, identify gaps and inform on priority actions to strengthen the national health security". [1] However, there is no publicly available self-assessment report nor a list of gaps and best practices identified. There is no data or any information on WHO website" After-action reviews for Mongolia". [2] Neither the Ministry of Health nor the National Emergency Management Agency shares additional relevant information via a publicly available website. [3,4].

[1] World Health Organization (WHO) Mongolia. 2017. "Mongolia conducted self-assessment of IHR implementation, identified gaps and set up priority action areas". [http://www.wpro.who.int/mongolia/mediacentre/releases/20170207-IHR-self-assessment/en/]. Accessed 23 November 2020.
[2] World Health Organization (WHO). "After Action Review". [https://extranet.who.int/sph/after-action-review]. Accessed 23 November 2020.
[3] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[4] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 23 November 2020.

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 publicly available evidence that Mongolia has, in the past year, undergone a national-level biological threat-focused exercise that has included private sector representatives. No evidence was found via the Ministry of Health, Ministry of Food, Agriculture and Light Industry, or the World Health Organization. [1,2,3, 4]. Only representatives of state and government agencies and institutions participated in the biosafety training workshops. There is no publicly available evidence that private sector representatives participated in the biosafety training workshops [5, 6].

[1] Ministry of Health. [https://www.mohs.mn/home]. Accessed 28 November 2020.
[2] Ministry of Food, Agriculture and Light Industry (MOFA). [https://mofa.gov.mn/exp/. Accessed 28 November 2020.
[3] World Health Organization (WHO) "After Action Review".[https://extranet.who.int/sph/after-action-

review?region=All&country=347]. Accessed 28 November 2020.
[4] World Health Organization (WHO). "Simulation exercise". [https://extranet.who.int/sph/simulation-exercise?region=All&country=347]
[5] Ministry of Nature, Environment and Tourism. 15 January 2019."Interactive Laboratory Training on Biosecurity and Biosafety." [https://www.mne.mn/?p=7215]. Accessed 28 November 2020.
[6] CBRN Centers of Excellence. "Project 53 conducts a "Biosafety and Biosecurity" laboratory training for Mongolian professionals". [http://coe-project53.istc.int/activity/project-53-conducts-a-biosafety-and-biosecurity-laboratory-training-for-mongolian-professionals]. Accessed 28 November 2020.

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

Mongolia has in place an Emergency Operations Center (EOC), which is administered by the National Emergency Management Agency (NEMA). [1]

According to the Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, since 2014, an EOC has been located within the Ministry of Health with full-time staff and part-time backup staff, necessary infrastructure/equipment, internet connection and the ability to connect to videoconferencing. There are also EOC branches named Emergency Operation Points (EOPs) at the National Center for Communicable Disease, the National Center for Zoonotic Disease, the National Public Health Center and selected provinces, which are connected for weekly meetings. The Ministry of Health EOC is "functional during 'peace-time'" for surveillance meetings that occur every day. It also operates to prepare, plan, conduct risk assessments, and to respond during public health emergencies. [2].

[1] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 23 November 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 23 November 2020.

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: 1

There is insufficient evidence that the Emergency Operations Center (EOC) is required to conduct a drill at least once per year. However, there is evidence that, every year, the National Emergency Management Agency (NEMA) and EOCs of specific provinces of Mongolia and districts of Ulaanbaatar organize a "complete emergency drill" which covers earthquake, human and animal diseases, blizzard, and forest and steppe fire. [1,2,3]

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, confirms that "exercises are conducted regularly to

test the functionality of Ministry of Health EOC and emergency operations points (EOP) at both local and national levels". However, the JEE does not offer additional information about which regulations require that these be conducted. [4] There is no further information available on the frequency of such drills.

[1] National Emergency Management Agency. 27 September 2018. "Complete emergency drill is conducted" news. [https://nema.gov.mn/?p=41420]. Accessed 28 November 2020.
[2] Bayanzurkh district emergency unit. 2018. "Complete emergency drill is conducted" news. [http://bzdobh.ub.gov.mn/?p=1198]. Accessed 28 November 2020.
[3] Olloo news portal. 13 September 2017. "Complete emergency drill is started". [http://www.olloo.mn/n/46527.html] Accessed 28 November 2020.
[4] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 28 November 2020.

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 insufficient public evidence to show that the Emergency Operations Center (EOC) can conduct, or has conducted within the last year, a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. The EOC conducts drills at least yearly, but the timing of these drills is not clear. Each year, the National Emergency Management Agency (NEMA) and EOCs of specific provinces of Mongolia and districts of Ulaanbaatar organize a "complete emergency drill" which covers earthquake, human and animal diseases, blizzard, and forest and steppe fire. [1,2,3] The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, confirms that "exercises are conducted regularly to test the functionality of Ministry of Health EOC and emergency operations points (EOPs) at both local and national levels". However, the JEE does not offer additional information about the timing of these drills. [4] Neither the Ministry of Health nor the NEMA provides additional relevant information via a public website. [5,6]

[1] National Emergency Management Agency (NEMA). 27 September 2018. "Complete emergency drill is conducted" news. [https://nema.gov.mn/?p=41420]. Accessed 28 November 2020.
[2] Bayanzurkh district emergency unit. 2018. "Complete emergency drill is conducted" news. [http://bzdobh.ub.gov.mn/?p=1198]. Accessed 28 November 2020.
[3] Olloo news portal. 13 September 2017. "Complete emergency drill is started". [http://www.olloo.mn/n/46527.html] Accessed 28 November 2020.
[4] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 28 November 2020.
[5] Ministry of Health. [http://mohs.mn/]. Accessed 28 November 2020.
[6] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 28 November 2020.

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 publicly available evidence that authorities have carried out an exercise to respond to a potential deliberate biological event, nor are there publicly available standard operating procedures, guidelines, MOUs, or other agreements between the public health and security authorities to respond to a potential deliberate biological event.

Neither the National Security Council nor the National Center for Public Health have evidence of such an exercise. [1,2] The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, notes that there is a lack of standard operating procedures for responding to deliverable biological events, and that "there are no routine exercises conducted jointly between the public health and law enforcement/security sectors, specifically for deliberate biological events." [3] Neither the Ministry of Health nor the National Emergency Management Agency (NEMA) provides additional relevant information via a public website. [4,5].

[1] National Security Council. 2018. [http://www.nsc.gov.mn/?q=home] Accessed 23 November 2020.
[2] National Center for Public Health. 2018. [http://www.nsc.gov.mn/?q=home] Accessed 23 November 2020.
[3] World Health Organization (WHO). 2016. "Joint External Evaluation Tool". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 23 November 2020.
[4] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[5] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 23 November 2020.

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: 0

Although there is publicly available evidence to confirm that Mongolia has risk communication guidelines specifically intended for use during a public health emergency, there is no evidence that they outline how messages will reach populations and sectors with different communications needs (e.g. different languages, location within the country, media reach. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, notes that there are "laws and regulations are in place that establish the requirement for risk communication as part of an emergency response for public health outbreaks and disasters" and that there exist "detailed risk communication guidelines for infectious disease outbreaks that outline roles and responsibilities across sectors". However, there is no indication that these risk communication guidelines are integrated into a national public health emergency response plan, and elsewhere the JEE emphasizes the deficiencies in risk communication planning. For example, the JEE states that "risk communication activities in general are not evaluated for effectiveness", and that risk communication planning lacks funding. Further, the JEE notes that it is not clear whether risk communication activities reach their intended audiences. [1] Additionally, these plans and regulations do not appear to be available via a public website, so it is not possible to verify their scope, or whether they provide not just the requirement for risk communication, but plans on how it should be executed, in relation to public health emergencies. Neither the Ministry of Health nor the NEMA provides additional relevant information via a public website. [2,3]

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 23 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[3] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 23 November 2020.

3.5.1 Risk communication planning

3.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is not enough publicly available evidence to confirm that there exists a national public health emergency response planning addressing multiple communicable diseases with pandemic potential that has a section detailing a risk communication plan. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, notes that there are "laws and regulations are in place that establish the requirement for risk communication as part of an emergency response for public health outbreaks and disasters" and that "detailed risk communication guidelines for infectious disease outbreaks that outline roles and responsibilities across sectors". However, there is no indication that these risk communication guidelines are integrated into a national public health emergency response plan, and elsewhere the JEE emphasizes the deficiencies in coordination for risk communication planning. For example, the JEE states that "risk communication activities in general are not evaluated for effectiveness", and that risk communication planning lacks funding. [1] Further, these plans and regulations do not appear to be available via a public website, so it is not possible to verify their scope, or whether they provide not just the requirement for risk communication, but plans on how it should be executed, in relation to public health emergencies. [1] Neither the Ministry of Health nor the National Emergency Management Agency (NEMA) provides additional relevant information via a public website. [2,3]

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 23 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.

[3] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 23 November 2020.

3.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient publicly available evidence to confirm that there exists a national public health emergency response planning addressing multiple communicable diseases with pandemic potential that has a section detailing a risk communication plan, let alone evidence of a designated primary spokesperson for public health emergency communication. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, notes that there are "laws and regulations are in place that establish the requirement for risk communication as part of an emergency response for public health outbreaks and disasters" and that "detailed risk communication guidelines for infectious disease outbreaks that outline roles and responsibilities across sectors". However, there is no indication that these risk communication guidelines are integrated into a national public health emergency response plan, and elsewhere the JEE emphasizes the deficiencies in coordination for risk communication planning. For example, the JEE states that "risk communication activities in general are not evaluated for effectiveness", and that risk communication planning lacks funding. [1] Further, these plans and regulations do not appear to be available via a public website, so it is not possible to verify their scope, or whether they provide not just the requirement for risk communication, but plans on how it should be executed, in relation to public health emergencies. [1] Neither the Ministry of Health nor the NEMA provides additional relevant information via a public website. [2,3]

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 23 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 23 November 2020.
[3] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 23 November 2020.

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

There is 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. The Joint External Evaluation report on IHR core capacities of Mongolia states that "Mongolia uses several public communications channels during outbreaks and emergencies, including traditional media, social media, online content and a free public telephone hotline. However, these activities are not guided by research and there is limited evidence available on audience information needs, trusted sources and communication channel preferences. Traditional and social media sources,

public telephone hotline and email enquiry account are used to monitor for misinformation, unsubstantiated rumors and indications of public perception during outbreaks and emergencies. Errors, misinformation, and information gaps are addressed, when possible, but largely in an ad hoc manner and the effectiveness of these interventions is not assessed".[1]. There is publicly available evidence that health public system has actively shared messages via online media platforms to inform the public about ongoing public health concerns and/or dispel rumors, misinformation or disinformation, including Covid-19 related messaging and updates beyond emergency situations [2, 3, 4,5,6,7,8,9,10, 11, 12,13]. The websites of Ministry of Health (MoH), National Emergency Management Agency (NEMA), National Center for Communicable Diseases (NCCD), National Center for Zoonotic Diseases (NCZD) , have "News" category.[2, 5,8, 10]. MoH website is being updated several times a day [2] and has links to their Facebook page [3] and Twitter [4]. Both, Facebook and Twitter pages of MoH are updated. NEMA website and Facebook page updates on daily basis and features weekly news [5,6], Twitter account is not updated [7]. NCCD website updates 2-3 times a week [8], Facebook page updates few times a week [9]. NCZD's "News" category is updated 2-3 times a week [10], it has links to their Facebook page [11], Twitter [12] and YouTube channel with their videos. [13].

[1] World Health Organization (WHO). 12-19 May 2017. "Joint External Evaluation of IHR Core Capacities of Mongolia" [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf;jsessionid=A5C7E5223A0C83BE4D10982C9A9DC989?sequence=1]. Accessed 30 November 2020.
[2] Ministry of Health. [https://www.mohs.mn/index.php/news/t/1]. Accessed 30 November 2020.
[3] Ministry of Health. "Facebook". [https://www.facebook.com/www.mohs.mn/]. Accessed 30 November 2020.
[4] Ministry of Health. "Twitter. [https://twitter.com/EruulMendiinYam]. Accessed 30 November 2020.
[5] National Emergency Management Agency (NEMA). "Daily news". [https://nema.gov.mn/c/daily]. Accessed 30 November 2020.
[6] National Emergency Management Agency (NEMA). "Facebook". [https://www.facebook.com/Онцгой-байдлын-ерөнхий-газар-588990477781350/]. Accessed 30 November 2020.
[7] National Emergency Management Agency (NEMA). "Twitter". [https://twitter.com/nemamongolia]. Accessed 30 November 2020.
[8] National Center for Communicable Diseases (NCCD). "News, Information". [https://www.nccd.gov.mn/index.php/information/2018-08-24-03-43-19]. Accessed 30 November 2020.
[9] National Center for Communicable Diseases (NCCD). "Facebook". [https://www.facebook.com/nccdgov]. Accessed 30 November 2020.
[10] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn]. Accessed 30 November 2020.
[11] National Center for Zoonotic Disease (NCZD). "Facebook". [https://www.facebook.com/nczd.gov/?fref=ts]. Accessed 30 November 2020.
[12] National Center for Zoonotic Disease (NCZD). "Twitter". [https://twitter.com/nczd_1931]. Accessed 30 November 2020.
[13] National Center for Zoonotic Disease (NCZD). "YouTube". [https://www.youtube.com/channel/UCNHFlTz9R9zRlMaaaCuRPtw/featured?disable_polymer=1]. Accessed 30 November 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: 1

There is no publicly available evidence neither on the Ministry of Health news website nor NEMA that presidents or ministers have shared misinformation or disinformation on infectious diseases in the past 2 years. [1,2] There is no publicly available

evidence neither on the MONTSAME News Agency, News.mn and Medee.mn that presidents or ministers have shared misinformation or disinformation on infectious disease in the past 2 years. [3,4,5] The Government of Mongolia has stated that "Misleading the public by false information in the event of a disaster, catastrophe, infectious disease, accident or danger shall be punished by a fine." [6].

[1] Ministry of Health. [https://moh.gov.mn/]. Accessed 30 November.
[2] National Emergency Management Agency (NEMA). [https://nema.gov.mn/c/dotood-medee]. Accessed 30 November 2020.
[3] National News Agency MONTSAME. [https://www.montsame.mn/mn/search?keyword=%D1%85%D1%83%D0%B4%D0%B0%D0%BB+%D0%BC%D1%8D%D0%B4%D1%8D%D1%8D%D0%BB%D1%8D%D0%BB]. Accessed 30 November 2020.
[4] News.mn. [https://news.mn/search/?q=%D1%85%D1%83%D0%B4%D0%B0%D0%BB+%D0%BC%D1%8D%D0%B4%D1%8D%D1%8D%D0%BB%D1%8D%D0%BB]. Accessed 30 November 2020.
[5] Medee.mn [https://medee.mn/search/x%D1%83%D0%B4%D0%B0%D0%BB%20%D0%BC%D1%8D%D0%B4%D1%8D%D1%8D%D0%BB%D1%8D%D0%BB#]. Accessed 30 November 2020.
[6] Legal Info. 11 May 2015. "About Violations." [https://www.legalinfo.mn/law/details/12695]. Accessed 30 November 2020.

3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a

Percentage of households with Internet

Input number

Current Year Score: 51.08

2019

International Telecommunication Union (ITU)

3.6.2 Mobile subscribers

3.6.2a

Mobile-cellular telephone subscriptions per 100 inhabitants

Input number

Current Year Score: 137.01

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: 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: 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: 1

There is no publicly available information that Mongolia issued a restriction, without international/bilateral support, on the export/import of medical goods such as medicines, oxygen, medical supplies due to an infectious disease outbreak. No evidence was found via the websites of the Ministry of Health, Ministry of Food, Agriculture and Light Industry, and the Ministry of Foreign Affairs [1,2,3]. Nor was evidence found via a media search.

[1] Ministry of Health. [https://www.mohs.mn/home]. Accessed 01 December 2020.
[2] Ministry of Food, Agriculture and Light Industry (MOFA). [https://mofa.gov.mn/exp/article/new]. Accessed 01 December 2020.
[3] Ministry of Foreign Affairs. [http://www.mfa.gov.mn]. Accessed 01 December 2020.

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: 1

There is no publicly available information that Mongolia 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. No evidence was found via the websites of the Ministry of Health, Ministry of Food, Agriculture and Light Industry, and the Ministry of Foreign Affairs [1,2,3]. No evidence was also found via a media search.

[1] Ministry of Health. [https://www.mohs.mn/home]. Accessed 01 December 2020.
[2] Ministry of Food, Agriculture and Light Industry (MOFA). [https://mofa.gov.mn/exp/article/new]. Accessed 01 December 2020.
[3] Ministry of Foreign Affairs. [http://www.mfa.gov.mn]. Accessed 01 December 2020.

3.7.2 Travel restrictions

3.7.2a

In the past year, has the country implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak?

Yes = 0 , No = 1

Current Year Score: 0

There is publicly available evidence that Mongolia has implemented a ban without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak, and there is no evidence of international/bilateral support for these bans. Due to Covid-19, the country has implemented air travel restrictions at different intervals, sometimes extending the bans. In February 2020, the Mongolian government implemented an entry ban on foreign nationals arriving from mainland China, Macao, Hong Kong, and Taiwan until March 2 due to the Covid-19 outbreak. There is no other relevant evidence on the World Health Organization (WHO) Disease Outbreak News. [2]

[1] Garda World. 25 February 2020. "Mongolia: Authorities implement new entry restrictions until at least March 2 /update 3." [https://www.garda.com/crisis24/news-alerts/317281/mongolia-authorities-implement-new-entry-restrictions-until-at-least-march-2-update-3] Accessed 01 December 2020.
[2] World Health Organization (WHO). "Disease Outbreak News". [https://www.who.int/csr/don/archive/year/2019/en/]. Accessed 01 December 2020.

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: 285.92

2016

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 389.38

2018

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 publicly available evidence that Mongolia has a health workforce strategy in place to identify fields where there is an insufficient workforce and strategies to address these shortcomings. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states that, while there is a national policy on the health workforce that is part of the State Policy on Health (2017-2026), "public health workforce strategy or action plan is not fully developed". [1] Neither the Ministry of Health; the Ministry of Population Development and Social Protection (equivalent to a ministry of labor); nor the Ministry of Education, Culture, Science, and Sports shares relevant information via a public website. [2,3,4]. There is "National Health Workforce Estimates and Key 78 Indicators" a data readiness report, 2020 conducted by Health Development Center (HDC) [5]. The report doesn't contain information on fields where is insufficient workforce and strategies to address the shortcomings, it discuses on importance of developing National Health Workforce Accounts (NHWA), and concludes that out

of the 78 indicators, 33 were assessed as feasible and 45 were assessed as unaccountable in the current situation. [5].

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 22 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 22 November 2020.
[3] Ministry of Population Development and Social Protection. [http://zasag.mn/en/m/mpdsw]. Accessed 22 November 2020.
[4] Ministry of Education and Science. [https://www.meds.gov.mn]. Accessed 22 November 2020.
[5] "National Health Workforce Estimates and Key 78 Indicators" report. [http://www.hdc.gov.mn/media/files/ajillakh%20huch.pdf]. Accessed 22 November 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 800

2017

WHO/World Bank; national sources

4.1.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient publicly available evidence that Mongolia has the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit and/or patient isolation facility located within the country [1]. The Joint External Evaluation (J) of IHR core capacities of Mongolia, 2017 recommends: "Isolation facilities may require improvements to enhance biosafety. Implementation of planned infrastructure improvements, including to quarantine, isolation, sterilization and disinfection facilities and to laboratory capacity needs to continue" [2]. There is, however, a government requirement for hospitals to have isolation capacity. Part 4.2.3 of the Ministry of Health's Health Organization Environment Standard MNS 6392: 2013 states that "The number of isolation rooms in the admission ward of a communicable disease hospital shall be planned in accordance with the number of its hospital beds. There shall be 2 isolation rooms per 60 hospital beds, 3 isolation rooms per 61-100 hospital beds, and in hospitals with 101 or more beds, the number of isolation rooms shall be equal to 3% of beds. Isolation rooms shall have individual doors facing outdoors, one-way flow and individual sanitary amenities." [3] However, there is insufficient evidence via the Ministry of Health or the National Center for Communicable Disease (NCCD) on if there are hospitals which have achieved these standards. [4, 5]

[1] Ministry of Health. Health Minister order A/128, 04 April, 2017. "Approval of workplan 2017-2020 for prevention and control of communicable diseases" [https://www.mohs.mn/uploads/files/7f9f0d5246f54e0824131295bfd0037e.pdf]. Accessed 22 November 2020.
[2] World Health Organization. May 2017. "Joint External Evaluation of IHR core capacities of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-

eng.pdf;jsessionid=4120BCD90A7018D0FD6ECDF15A028B8F?sequence=1]. Accessed 22 November 2020.
[3] Ministry of Health. 2013. "Health Organisation's Environment Standard MNS 6392".
[https://www.mohs.mn/uploads/files/MNS%206392;2013.pdf]. Accessed 22 November 2020.
[4] Ministry of Health. [http://www.mohs.mn/] Accessed 22 November 2020.
[5] National Center for Communicable Disease (NCCD). [https://www.nccd.gov.mn]. Accessed 22 November 2020.

4.1.2c

Does the country meet one of the following criteria?
- Is there evidence that the country has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years?
- Is there evidence that the country has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years?
Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Mongolia has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years. Nor is there publicly available evidence that Mongolia has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years.

There is no such evidence in the Ministry of Health's "Regulations of the state health service for disaster protection" published as Order A/43 on 26 January 2017. Additionally, there is no evidence in the Health Minister order A/128, 04 April 2017. “Approval of workplan 2017-2020 for prevention and control of communicable diseases”. Furthermore, the World Health Organization (WHO) Joint External Evaluation of IHR core capacities of Mongolia, done in May 2017 as well as the National emergency management agency's website do not include any evidence that suggests that Mongolia has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak or has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years [1,2,3,4].

[1] Ministry of Health. Health Minister Order A/43 26 January 2017. “ Regulations of the state health service for disaster protection” [https://moh.gov.mn/uploads/files/bb296f2e9fa0ba6105e150c8b3564c21.pdf]. Accessed 23 April 2021.
[2] Ministry of Health. Health Minister order A/128, 04 April 2017. “Approval of workplan 2017-2020 for prevention and control of communicable diseases” [https://moh.gov.mn/uploads/files/7f9f0d5246f54e0824131295bfd0037e.pdf]. Accessed 23 April 2021.
[3] World Health Organization. May 2017. "Joint External Evaluation of IHR core capacities of Mongolia".
[https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf;jsessionid=4120BCD90A7018D0FD6ECDF15A028B8F?sequence=1]. Accessed 23 April 2021.
[4] National Emergency Management Agency (NEMA). [https://nema.gov.mn/?s=эмнэлэг]. Accessed 23 April 2021.

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 evidence that Mongolia has a national procurement protocol in place which can be utilized by the Ministry of Health and the Ministry of Food and Agriculture for the acquisition of laboratory supplies (e.g. equipment, reagents and media) and medical supplies (e.g. equipment, PPE) for routine needs. The two ministries can use the Public Procurement System for Mongolia, a website portal for the acquisition of these supplies. For example, Mongolia's Labor Safety and Health Center has used the platform for bidding on laboratory equipment. [1] The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, mentions that Mongolia should "work towards sustainable capacity with a system for procurement and quality assurance." [2]

[1] Public Procurement System for Mongolia. 2018. "Announcement". [https://www.tender.gov.mn/mn/invitation/detail/1521541089642]. Accessed 28 November 2020.
[2] Public Procurement System for Mongolia. 2019. "Announcement". [https://www.tender.gov.mn/mn/invitation?year=2019&selGovernorId=129&get=1]. Accessed 21 April 2021.
[3] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 28 November 2020.

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

There is sufficient publicly available evidence that Mongolia has a stockpile of medical supplies (e.g. medical countermeasures (MCMs, medicines, vaccines, medical equipment, Personal Protective Equipment (PPE)) for national use during a public health emergency although no further details are provided.

The Joint External Evaluation (JEE) report on Mongolia indicates that Mongolia , conducted in May 2017, "Multiple stocks of medical countermeasures (MCM) exist and are maintained by various health units within the government. A contract is in place with pharmacies to have available adequate quantities of pharmaceuticals that are on a government-generated list. These various MCM stocks have been independently created in the absence of an integrated national public health emergency operations plan based on assessed national risks." The JEE, however, recommends improving the provision of appropriate personal protective equipment (PPE), but does not elaborate on stockpiles [1].

There is no other evidence that the country has a stockpile of medical supplies for national use during a public health emergency via the websites of the Ministry of Health and the National Center for Communicable Diseases [2, 3].

[1] World Health Organization (WHO). "Joint External Evaluation of IHR core capacities of Mongolia, 2027". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1] Accessed 22 November 2020.
[2] Ministry of Health. [https://www.moh.gov.mn/]. Accessed 22 November 2020.
[3] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn]. Accessed 22 November 2020.

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 Mongolia has a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency. The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states that "both National Center for Communicable Diseases (NCCD) and National Center for Zoonotic Diseases (NCZD) have stockpiles in place at the national level, consisting mostly of vaccines' and recommends strengthening of laboratory supplies [1]. There is evidence that laboratories lack supplies and sometimes receive donations [2,3]. No further evidence was found via the Ministry of Health. [4]

[1] World Health Organization (WHO). "Joint External Evaluation of IHR core capacities of Mongolia, 2027". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1] Accessed 22 November 2020.
[2] Ministry of Health. "Donation of equipment and diagnostic devices". [https://www.mohs.mn/news/4448]. Accessed 22 November 2020.
[3] National Center for Communicable Disease (NCCD). "Donation of diagnostic devices to NCCD laboratory". [https://www.nccd.gov.mn/index.php/iltod/iltod-uil-ajillagaa/314-covid-19]. Accessed 22 November 2020.
[4] Ministry of Health. [https://www.moh.gov.mn/] Accessed 28 November 2020.

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 publicly available evidence that Mongolia conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public emergency. There is no relevant evidence on the Ministry of Health's website nor the Parliament Resolution on State Drug Policy of 2014. [1,2].

[1] Ministry of Health. [https://moh.gov.mn/home]. Accessed 24 April 2021.
[2] Legal info website 2014. "Parliament Resolution: State Drug Policy".

[https://www.legalinfo.mn/annex/details/6563?lawid=10736]. Accessed 24 April 2021.

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 publicly available evidence that Mongolia has a plan/agreement to procure or leverage domestic manufacturing capacity to produce medical supplies (e.g. Medical Countermeasures (MCM), medicines, vaccines, equipment, PPE) for national use during a public health emergency.

The government conducts procurement for routine needs through the Public Procurement system [1]. There is publicly available evidence that the Ministry of Health procured medical supplies during Covid-19 [2]. Medicines and medical devices of Govisumber aimag General Hospital were procured during the pandemic [7]. News from the Ministry of Health informs that domestic factories have worked well: manufacturing over 10,000 protective clothes and 160,000 masks per day during Covid-19. [3]. However, the evidence does not point to established plans or agreements, and only indicates arrangements made in response to the outbreak. No evidence was found via the Ministry of Health, National Center for Communicable Diseases, and the National Emergency Management Agency (NEMA). [4,5,6]

[1] Public procurement system of Mongolia.[https://www.tender.gov.mn/mn/index/]. Accessed 28 November 2020.
[2] Public Procurement system of Mongolia. 2019. "Tender and procurement of Ministry of Health".[https://www.tender.gov.mn/mn/invitation?year=2019&selGovernorId=130&get=1]. Accessed 28 November 2020.
[3] Ministry of Health. "News" [https://www.mohs.mn/news/4443] Accessed 28 November 2020.
[4] Ministry of Health. [https://www.mohs.mn/home]. Accessed 28 November 2020.
[5] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn]. Accessed 28 November 2020.
[6] National Emergency Management Agency (NEMA). [https://nema.gov.mn/index]. Accessed 28 November 2020.
[7] Public procurement system of Mongolia. "Tender invitatation". [https://www.tender.gov.mn/mn/invitation/detail/1577206732580]. Accessed 28 November 2020.

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 publicly available evidence that Mongolia has a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies (e.g. reagents, media) for national use during a public health emergency or to procure medical supplies. The government conducts procurement for routine needs through the Public Procurement system [1]. There is publicly available evidence that the Ministry of Health procured laboratory supplies. e.g. laboratory reagents for Khovd aimag soum general hospital, inter-soum hospital and soum health centers in 2020. However, it cannot be confirmed if this was part of the routine needs of the hospital or specifically as part of the Covid-19 outbreak. [2, 7]. There is no public evidence of a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency via the websites of the Ministry of Health, National Center for Communicable Diseases, and National Emergency Management Agency [4,5,6].

[1] Public procurement system of Mongolia. [https://www.tender.gov.mn/mn/index/]. Accessed 28 November 2020.
[2] Public Procurement system of Mongolia. 2019. "Tender and procurement of Ministry of Health". [https://www.tender.gov.mn/mn/invitation?year=2019&selGovernorId=130&get=1]. Accessed 28 November 2020.
[3] Ministry of Health. News [https://www.mohs.mn/news/4443] Accessed 28 November 2020.
[4] Ministry of Health. [https://www.mohs.mn/home]. Accessed 28 November 2020.
[5] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn]. Accessed 28 November 2020.
[6] National Emergency Management Agency (NEMA). [https://nema.gov.mn/index]. Accessed 28 November 2020.
[7] Public procurement system of Mongolia. "Tender invitataion, Khovd provivnce, Health Department". [https://www.tender.gov.mn/mn/invitation/detail/1572837654081]. Accessed 28 November 2020.

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 public evidence that Mongolia has a plan, program, or guidelines in place for dispensing medical countermeasures (MCMs) for national use during a public health emergency (i.e. antibiotics, vaccines, therapeutics, and diagnostics).

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states that the Disaster Preparedness Plan of the National Emergency Management Agency (NEMA), which does not appear to be available online, "provides an adequate generic basis for response logistics operations within the nation". However, the JEE goes on to state that "MCM stocks are not managed in a centralized manner". The JEE does not contain additional information relevant to the dispensing of MCMs. [1] There is no additional information shared via a public website by the Ministry of Health, the Ministry of Defense, or NEMA. [2,3,4]

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 22 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 22 November 2020.
[3] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 22 November 2020.

[4] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 22 November 2020.

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 insufficient publicly available evidence to confirm that Mongolia has a public plan in place to receive health personnel from other countries to respond to a public health emergency.

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017, states that the Ministry of Health and the Ministry of Defense have a memorandum of understanding (MOU) "on collaboration during public health emergencies, which includes provisions for exchange of personnel". However, the JEE goes on to state that there is "no uniform regulatory mechanism for managing incoming foreign surge staffing". This suggests that the agreement between the ministries is inadequate to facilitate the quick reception of health personnel. [1]

There is no additional information shared via the Ministry of Health, Ministry of Defense, or National Emergency Management Agency websites. [2,3,4].

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 22 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 22 November 2020.
[3] Ministry of Defense. [http://www.mod.gov.mn/]. Accessed 22 November 2020.
[4] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 22 November 2020.

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

Current Year Score: 3

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 98.9

2014

WHO/World Bank/United Nations Children's Fund (UNICEF)

4.4.1c

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

Input number

Current Year Score: 166.59

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a

Are workers guaranteed paid sick leave?

Paid sick leave = 2, Unpaid sick leave = 1, No sick leave = 0

Current Year Score: 2

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a

Has the government issued legislation, a policy, or a public statement committing to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that the government has issued a policy committing to provide prioritized health care services to healthcare workers who become sick as a result of responding to a public health emergency.

Ministry of Health order No 43, dated 26 January 2017, acknowledges the contribution of healthcare workers; increases the funds for costs associated with emergency activities, makes workers eligible for rehabilitation care; and allocates compensation as part of disaster protection for injury, disability, or death. However, the order does not prioritize healthcare services to healthcare workers who become sick as a result of responding to a public health emergency. [1]

The 2008 Law on Labor Safety and Hygiene does not contain any directly relevant provisions. [2] There is no additional

information on the websites of the Ministry of Health or the National Emergency Management Agency. [3,4].

[1] Ministry of Health. "Order A/43 - Regulation for Health Workers during Emergency. [https://www.mohs.mn/uploads/files/bb296f2e9fa0ba6105e150c8b3564c21.pdf]. Accessed 22 November 2020.
[2] Government of Mongolia. 2008. "Law on Labor Safety and Hygiene". [http://www.vertic.org/media/National%20Legislation/Mongolia/MN_Labor_Safety_Hygiene_Law_2008.pdf]. Accessed 22 November 2020.
[3] Ministry of Health. [https://www.mohs.mn/home]. Accessed 22 November 2020.
[4] National Emergency Management Agency (NEMA). [https://nema.gov.mn/]. Accessed 22 November 2020.

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

Is there a system in place for public health officials and healthcare workers to communicate during a public health emergency?

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that there is a system in place for public health officials and healthcare workers to communicate during a public health emergency. The Joint External Evaluation (JEE) of IHR core capacities of Mongolia, conducted in May 2017, states that "During peace time, the Ministry of Health (MoH) prepares a daily report that is distributed to multiple sectors including National Emergency Management Agency (NEMA), General Agency for Specialized Inspection (GASI), and Ministry of Food, Agriculture and Light Industry (MoFALI). Daily communication between the MoH Emergency Operations Center (EOC) and EOC branches also occurs, and there is a weekly teleconference connecting the MoH EOC with EOC branches at the National Center for Communicable Diseases (NCCD), National Center for Zoonotic Diseases (NCZD), and National Public Health Institute (NPHC) to share situation updates on events, conduct joint risk assessments, and to guide actions. During a public health emergency, the daily reports continue but are focused on the emergency. The MOH EOC is mandated to regularly exchange information with NEMA, the Veterinary and Animal Breeding Agency (VABA), GASI and the Poisons Center of the Ministry of Defense. During outbreak responses, there may be daily reporting through this shared teleconferencing. NCCD, NCZD and VABA have email and hotline numbers for the reporting of outbreaks and unknown diseases of human and animal origin as part of their EBS systems." [1] The JEE, however, does not provide an explanation of the communication system in place between public health officials and healthcare workers, not does the Ministry of Health have further evidence. [2]

[1] World Health Organization (WHO). May 2017. "Joint External Evaluation (JEE) of IHR core capacities of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 05 December 2020.
[2] Ministry of Health. [https://www.moh.gov.mn/] Accessed 05 December 2020.

4.5.1b

Does the system for public health officials and healthcare workers to communicate during an emergency encompass healthcare workers in both the public and private sector?

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that there is a system in place for public health officials and healthcare workers to communicate during a public health emergency, let alone one that encompasses workers in both the public and private sectors.

The Joint External Evaluation (JEE) of IHR core capacities of Mongolia, conducted in May 2017, states that During peace time, the Ministry of Health (MoH) prepares a daily report that is distributed to multiple sectors including the National Emergency Management Agency (NEMA), General Agency for Specialized Inspection (GASI), and Ministry of Food, Agriculture and Light Industry (MoFALI). Daily communication between the MoH Emergency Operations Center (EOC) and EOC branches also occurs, and there is a weekly teleconference connecting the MoH EOC with EOC branches at the National Center for Communicable Diseases (NCCD), National Center for Zoonotic Diseases (NCZD), and National Public Health Institute (NPHC) to share situation updates on events, conduct joint risk assessments, and guide actions. During a public health emergency, the daily reports continue but are focused on the emergency. The MOH EOC is mandated to regularly exchange information with NEMA, the Veterinary and Animal Breeding Agency (VABA), GASI and the Poisons Center of the Ministry of Defense. During outbreak responses, there may be daily reporting through this shared teleconferencing. NCCD, NCZD and VABA have email and hotline numbers for the reporting of outbreaks and unknown diseases of human and animal origin as part of their EBS systems." [1] The JEE, however, does not provide an explanation of the communication system in place between public health officials and healthcare workers, not does the Ministry of Health have further evidence. [2]

[1] Ministry of Health. Health Minister order A43, 26 January 2017. "Work procedure of health department during disaster, composition and workplan". [https://www.mohs.mn/uploads/files/bb296f2e9fa0ba6105e150c8b3564c21.pdf]. Accessed 05 December 2020.
[2] National Center for Zoonotic Diseases. Order 5, Chair, Permanent Committee for Prevention of Earthquake Disaster, 02 November 2017. "Regulation on Rapid organization of response during possible Disaster and Public Health Emergency. [https://nczd.gov.mn/Legal/2017_08.pdf]. Accessed 05 December 2020.

4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

4.6.1 Healthcare associated infection (HCAI) prevention and control programs

4.6.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that the national public health system is monitoring and tracking the number of healthcare-associated infections (HCAIs) that take place in healthcare facilities.

The Health Minister order A/536 approves the "Rules of infection prevention and control activities in healthcare organizations" and lists activities to conduct to prevent infections, but it does not mention monitoring and tracking the number of HCAIs [1].

The Joint External Evaluation (JEE) for Mongolia, conducted in May 2017 states, "there is a system to evaluate the effectiveness of implemented [HCAI] control measures including quarterly hospital IPC committee meetings and checklists for hospitals to assess IPC component implementation." However, the JEE provides no evidence that the national public health system specifically tracks the number of HCAIs. [2]. Neither the World Health Organization Library of National Action Plans nor its Global Database for Antimicrobial Resistance Country Self-Assessment contains any relevant information. [3, 4] Neither the Ministry of Health, the laboratories of the National Center for Communicable Disease and the National Center for Zoonotic Disease; the State Central Veterinary Laboratory; nor the Public Health Institute share relevant information via a publicly available website. [5,6,7, 8]

[1] Ministry of Health. "Health Minister order A/536, 29 November 2020. Law and Regulation of prevention and monitoring infections in healthcare facilities". [https://www.mohs.mn/uploads/files/f29e19bd900bdb61dbff9fbf4d9ab399d674d183.pdf]. Accessed 07 December 2020.
[2] World Health Organization (WHO). May 2017. "Joint External Evaluation of IHR Core Capacities of State of Mongolia". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 01 December 2020.
[3] World Health Organization (WHO). "Library of National Action Plans: Mongolia". [https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 01 December 2020.
[4] World Health Organization (WHO). "Global Database for Antimicrobial Resistance Country Self Assessment". [https://amrcountryprogress.org/]. Accessed 01 December 2020.
[5] Ministry of Health. [https://www.moh.gov.mn/]. Accessed 01 December 2020.
[6] National Center for Communicable Diseases (NCCD). [https://www.nccd.gov.mn/index.php/ambulator/laboratoy/bacteriological-laboratory]. Accessed 01 December 2020.
[7] National Center for Zoonotic Disease (NCZD). [https://nczd.gov.mn/]. Accessed 01 December 2020.
[8] State Central Veterinary Laboratory. [http://scvl.gov.mn/]. Accessed 01 December 2020.

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 publicly available evidence that Mongolia has a national requirement for ethical review (e.g. from an ethics committee or via Institutional Review Board approval) before beginning a clinical trial.

According to the Ministry of Health, there is an ethical review committee whose role is to perform checks before beginning a clinical trial. [1] While there is some uncertainty on government websites as to whether this ethics review is compulsory for clinical trials, other organizations indicate that it is required. The Canadian Coalition for Global Health Research, for instance, describes the review as "required"; the T.H. Chan School of Public Health at Harvard states on its website that, in Mongolia, "all research must be reviewed by both the institutional ethics review committee and National Research Ethics Committee". [2,3].

[1] Ministry of Health. "Hospital's officials' ethical review committee". [https://www.mohs.mn/p/88]. Accessed 22 November 2020.
[2] Canadian Coalition for Global Health Research. "Mongolia Research Ethics". [https://www.ccghr.ca/resources/harmonization/mongolia/mongolia-research-ethics/]. Accessed 22 November 2020.
[3] Harvard University - T.H. Chan School of Public Health. "Mongolia". [https://www.hsph.harvard.edu/region-map/research_project/mongolia/]. Accessed 22 November 2020.

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.

The Ministry of Health's ethical review committee webpage does not contain any relevant information. [1] Neither the Ministry of Health nor the Ministry of Education, Culture, Science, and Sports shares any other relevant information via a publicly available website. [2,3]

The Canadian Coalition for Global Health Research and the T.H. Chan School of Public Health at Harvard describe the basic requirements for approval of clinical trials in Mongolia, but do not have any information on the existence of an expedited process. [4,5]

[1] Ministry of Health. 2018. "Hospital's officials' ethical review committee page". [https://www.mohs.mn/p/88]. Accessed 22 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 22 November 2020.
[3] Ministry of Education, Culture, Science, and Sports. [https://mecss.gov.mn/]. Accessed 22 November 2020.
[4] Canadian Coalition for Global Health Research. "Mongolia Research Ethics". [https://www.ccghr.ca/resources/harmonization/mongolia/mongolia-research-ethics/]. Accessed 22 November 2020.
[5] Harvard University - T.H. Chan School of Public Health. "Mongolia". [https://www.hsph.harvard.edu/region-map/research_project/mongolia/]. Accessed 22 November 2020.

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 Mongolian government agency responsible for approving new medical countermeasures for humans, the Ministry of Health. The 2010 Law on Medical Drug and Countermeasures designates the Ministry of Health as being responsible for registering, controlling, and monitoring drug and bioactive products and countermeasures as well as their safety and research. [1]

[1] Government of Mongolia. 2010. "Law on Medical Drug and Countermeasures". [http://www.legalinfo.mn/law/details/85]. Accessed 22 November 2020.

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 insufficient publicly available evidence to conclude that there is an expedited process for approving medical countermeasures for human use during public health emergencies in Mongolia.

The 2010 Law on Medical Drug and Countermeasures provides guidance on the process for urgent purchases of drugs and medical countermeasures during emergencies. However, it is not clear that this expedited purchasing process would extend to the approval of previously unapproved items. [1]

Neither the Ministry of Health nor the Ministry of Education, Culture, Science, and Sports shares any other relevant information via a publicly available website. [2,3] There is no evidence of relevant studies or media reports on the matter. Minister's decree on 17 October 2014 on "Drug Treatment Coordinating Committee " describes working guidelines, but does not mention an expedited process [4].

[1] Government of Mongolia. 2010. "Law on Medical Drug and Countermeasures". [http://www.legalinfo.mn/law/details/85]. Accessed 22 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 22 November 2020.
[3] Ministry of Education, Culture, Science, and Sports. [https://mecss.gov.mn/]. Accessed 22 November 2020.
[4] Ministry of Health, Drug Treatment Coordinating Committee.
[https://www.mohs.mn/uploads/files/a5dc50f8445d156565753ddc5865d663.pdf] Accessed 22 November 2020.

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: 0

There is insufficient publicly available evidence to conclude that pandemics are integrated into the national risk reduction strategy. Pandemics are integrated into the National Risk Reduction Strategy with regard to the “Participation of Community", but it appears they are only mentioned as they relate to climate change. [1] Neither the Ministry of Health nor the National Emergency Management Agency shares additional relevant information via a publicly available website. [2,3] There is no evidence of relevant studies or media reports.

[1] Government of Mongolia. 2015. "National Risk Reduction Strategy with the Participation of Community. [http://nema.gov.mn/wp-content/uploads/2016/05/2.%D0%93%D0%AD%D0%9E%D0%9D%D0%9E%D0%91%D2%AE%D0%A5-%D0%B8%D0%B9%D0%B3-%D1%85%D1%8D%D1%80%D1%8D%D0%B3%D0%B6%D2%AF%D2%AF%D0%BB%D1%8D%D1%85-%D1%82%D3%A9%D0%BB%D3%A9%D0%B2%D0%BB%D3%A9%D0%B3%D3%A9%D3%A9.pdf]. Accessed 07 December 2020.
[2] Ministry of Health. [https://www.moh.gov.mn/]. Accessed 07 December 2020.
[3] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 07 December 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: 0

There is no publicly available evidence of cross-border agreements with regard to public health emergencies that involve Mongolia. No evidence was found via the Ministry of Health, National Emergency Management Agency, Ministry of Foreign Affairs or Ministry of Food, Agriculture and Light Industry websites [1, 2,3,4].

[1] Ministry of Health. [https://www.mohs.mn/home]. Accessed 22 November 2020.
[2] National Emergency Management Agency (NEMA). [https://nema.gov.mn/index]. Accessed 22 November 2020.
[3] Ministry of Foreign Affairs.[http://www.mfa.gov.mn] Accessed 22 November 2020.
[4] Ministry of Food, Agriculture and Light Industry (MOFA). [https://mofa.gov.mn/exp/blog/7/240]. Accessed 22 November 2020.

5.2.1b

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

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

Current Year Score: 0

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

Although the Food and Agriculture Organization of the United Nations praises Mongolia for its management of transboundary animal diseases, it does not indicate that Mongolia is a party to an international agreement that involves them. [1] Neither the Ministry of Health nor the National Emergency Management Agency shares additional relevant information via a publicly available website. [2,3]

The Mongolia-China Border Sanitation and Quarantine Cooperation Agreement, signed on 29 August 2016 with implementation meetings taking place in August 2017, seeks to provide legal mechanisms to strengthen the capacity of cross-border transboundary diseases and other preventive mechanisms, as well as exchange of experiences between ports, train staff, joint surveillance, information exchange, technical assistance, and equipment." However, there is no indication that the agreement applies to animal health emergencies, and the original text is not available online. [4]

[1] Food and Agriculture Organization of the United Nations (FAO). February 2018. "Mongolia Enhances Control of Cross-Border Animal Diseases". [http://www.fao.org/3/i8717en/I8717EN.PDF]. Accessed 22 November 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 22 November 2020.
[3] National Emergency Management Agency (NEMA). [http://nema.gov.mn/]. Accessed 22 November 2020.
[4] Inspection. "Memorandum of understanding on border health and quarantine". [http://home.inspection.gov.mn/news/247/single/882]. Accessed 22 November 2020.

5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

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

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

Current Year Score: 2

2021

Biological Weapons Convention

5.3.1b

Has the country submitted confidence building measures for the Biological Weapons Convention in the past three years?

Yes = 1 , No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1c

Has the state provided the required United Nations Security Council Resolution (UNSCR) 1540 report to the Security Council Committee established pursuant to resolution 1540 (1540 Committee)?

Yes = 1 , No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

Extent of United Nations Security Council Resolution (UNSCR) 1540 implementation related to legal frameworks and enforcement for countering biological weapons:

Very good (60+ points) = 4, Good (45–59 points) = 3, Moderate (30–44 points) = 2, Weak (15–29 points) = 1, Very weak (0–14 points) or no matrix exists/country is not party to the BWC = 0

Current Year Score: 2

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: 1

2021

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

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

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

5.4.1a

Has the country completed a Joint External Evaluation (JEE) or precursor external evaluation (e.g., GHSA pilot external assessment) and published a full public report in the last five years?

Yes = 1 , No = 0

Current Year Score: 1

2021

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

5.4.1b

Has the country completed and published, within the last five years, either a National Action Plan for Health Security (NAPHS) to address gaps identified through the Joint External Evaluation (JEE) assessment or a national GHSA roadmap that sets milestones for achieving each of the GHSA targets?

Yes = 1 , No = 0

Current Year Score: 0

2021

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

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

5.4.2a

Has the country completed and published a Performance of Veterinary Services (PVS) assessment in the last five years?

Yes = 1 , No = 0

Current Year Score: 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 no publicly available evidence that Mongolia has committed funds from the national budget to improve capacity against future threats. Neither the Ministry of Health nor the Ministry of Agriculture share relevant information. [1,2]. The Joint External Evaluation (JEE) of IHR core capacities of Mongolia, conducted in May 2017, states that "Funding for health security activities is inadequate across a range of IHR core capacities, including, but not limited to risk communications, extending the scope of the Mongolian Field Epidemiology Training Program (MFETP), enhancing national surge capacity to address large-scale outbreaks and other public health emergencies." [3]. There is no relevant information on the Office of the President's website or in other media. [4,5].

[1] Ministry of Health. "Budget Execution".[https://www.mohs.mn/p/61]. Accessed 05 December 2020.
[2] Ministry of Agriculture. "Budget and Finance". [https://mofa.gov.mn/exp/blog/12/29]. Accessed 05 December 2020.
[3] World Health Organization (WHO). "JEE of IHR core capacities of Mongolia, May 2017". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf;jsessionid=9A46D9A45B2BD813E5FD9A7A8B64EA80?sequence=1]. Accessed 05 December 2020.
[4] President Office. "News". [https://president.mn/medee/]. Accessed 05 December 2020.
[5] National News Agency MONTSAME. "Funding". [https://www.montsame.mn/en/search?keyword=funding+]. Accessed 05 December 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: 1

There is a publicly identified special emergency public financing mechanism and funds that Mongolia can access in the face of a public health emergency.

Mongolia is among the countries eligible to borrow from the World Bank's International Development Association (IDA). [1] As a qualified IDA borrower, Mongolia is also eligible to access funds from the World Bank's Pandemic Emergency Financing Facility (PEF). [2]

Mongolia has received a total of US$562.4 million, of which US$325.9 million was loans; and $236.5 million was grants. Rapid Financing Instrument on Mongolia, International Monetary Fund (IMF)-approved US$99 million; Asian Development Bank (ADB): US$160.9 million; China: US$ 114 million; World Bank mobilized US$2.2 million to strengthen medical diagnostic services in response to Covid-19. EU: US$104 million; World Bank response to COVID 19 in Mongolia: US$20 million credit to support employment [3,4,5,6].

[1] International Development Association. "Borrowing Countries". [http://ida.worldbank.org/about/borrowing-countries]. Accessed 21 November 2020.
[2] Pandemic Emergency Financing Facility. December 2017. "Operational Brief for Eligible Countries". [http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf]. Accessed 21 November

2020.
[3] International Monetory Fund (IMF). [https://www.imf.org/en/News/Articles/2020/06/03/pr20232-mongolia-imf-executive-board-approves-us-99m-disbursement-under-the-rfi-address-covid19] Accessed 21 November 2020.
[4] National News Agency MONTSAME. [https://montsame.mn/en/read/236469 mongolia-20-million-credit-to-support-employment-opportunities-workers-and-employers-in-the-wake-of-covid-19-coronavirus] Accessed 21 November 2020.
[5] World Bank. [https://www.worldbank.org/en/news/press-release/2020/03/25/mongolia-world-bank-mobilizes-22-million-to-strengthen-medical-diagnostic-services-in-response-to-covid-19]. Accessed 21 November 2020.
[6] Breathe Mongolia. [https://breathemongolia.org/news-article/a-summary-of-covid-19-relief-and-support-received-by-mongolia/]. Accessed 21 November 2020.

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 public evidence that senior Mongolian leaders have, in the past three years, made a public commitment either to support other countries to improve capacity to address epidemic threats by providing financing or support nor that it has improved its own domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity. Neither the Ministry of Health; Ministry of Foreign Affairs; nor the Office of the President shares relevant information via a publicly available website. [1,2,3] There is no other evidence of media reports or reports from the World Health Organization or the United Nations that indicate such a commitment. [4]

[1] The President's Office. [https://president.mn/en/]. Accessed 05 December 2020.
[2] Ministry of Health. [http://mohs.mn/]. Accessed 05 December 2020.
[3] Ministry of Foreign Affairs. [http://www.mfa.gov.mn/?lang=en]. Accessed 05 December 2020.
[4] World Health Organization (WHO). "Mongolia. [https://www.who.int/countries/mng/]. Accessed 05 December 2020.

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 Mongolia has requested financing or technical support from donors to improve its capacity to address epidemic threats in the last three years.

According to the Georgetown Infectious Disease Atlas Global Health Security Tracker, US$128.2m has been disbursed to Mongolia for improving core capacities such as immunization, workforce development, and real-time surveillance [1]. There are news articles on the websites of the Ministry of Health and Ministry of Foreign Affairs that the World Health Organization (WHO) provides vaccines against the influenza virus and other necessary equipment worth US$150,000 to the government to support the implementation of the influenza immunization campaign in a safe and timely manner. [2] There is no publicly available evidence found on government websites including the Ministry of Foreign Affairs and Ministry of Health that Mongolia has provided technical support in the last three years, or supported other countries to improve their capacity to address epidemic threats [3, 4].

[1] Global Health Security Tracking. [https://tracking.ghscosting.org/details/154/recipient]. Accessed 21 November 2020.
[2] Ministry of Health. 2 October 2020. "Sergei Diorditsa: WHO provides vaccine against influenza virus in Mongolia". [http://mohs.mn/news/4656]. Accessed 21 November 2020.
[3] Ministry of Foreign Affairs. [http://www.mfa.gov.mn]. Accessed 21 November 2020.
[4] Ministry of Health. [https://www.mohs.mn/home]. Accessed 21 November 2020.

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 publicly available plan or policy for sharing genetic data, epidemiological data, clinical specimens, and/or isolated specimens (biological materials) with international organizations and/or other countries that goes beyond influenza.

Neither the Ministry of Health; Ministry of Food and Agriculture; Ministry of Education, Culture, Science, and Sports; nor the National Influenza Center shares any relevant information via a publicly available website. [1,2,3,4].

Mongolia is currently not a signatory to any international stockpile sharing agreements [5].

[1] Ministry of Health. [http://mohs.mn/]. Accessed 21 November 2020.
[2] Ministry of Food, Agriculture And Light Industry (MOFA). [http://mofa.gov.mn/exp/#]. Accessed 21 November 2020.
[3] Ministry of Education, Culture, Science, and Sports. [https://mecss.gov.mn/]. Accessed 21 November 2020.
[4] National Influenza Centre. [http://flu.mn/search]. Accessed 21 November 2020.
[5] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR core capacities of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 21 November 2020.

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 that Mongolia has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) Framework in the past two years.

As a PIP Framework priority country, Mongolia has been actively supported by the PIP Framework project since 2014. According to a March 2016 report from the WHO, "helping the country to improve its risk communications is an integral part of this support." [1]. Mongolia is currently not a signatory to any international stockpile sharing agreements [2]. News on the website informs the public that Mongolia is receiving vaccines from WHO [3].

[1] World Health Organization (WHO). 2016. "WHO Supports Efforts to Improve Risk Communications in Mongolia". [http://www.who.int/mongolia/news/feature-stories/detail/who-supports-efforts-to-improve-risk-communications-in-mongolia]. Accessed 21 November 2020.
[2] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR core capacities of Mongolia". [https://apps.who.int/iris/bitstream/handle/10665/259265/WHO-WHE-CPI-REP-2017.51-eng.pdf?sequence=1]. Accessed 21 November 2020.
[3] Media news website. "Mongolia receiving vaccines from WHO". [https://news.mn/r/2350804/]. Accessed 21 November 2020.

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 Mongolia has not shared pandemic pathogen samples during an outbreak in the past two years, including 2020 (COVID 19). There are no reports of Mongolia not sharing samples in either national and international media, the Ministry of Health or in World Health Organization sources. [1,2,3]

[1] World Health Organization (WHO). "Disease outbreak news: Mongolia" [https://www.who.int/csr/don/archive/country/mng/en/]. Accessed 05 December 2020.

[2] Ministry of Health. "News." [https://www.mohs.mn/index.php/news/t/1]. Accessed 05 December 2020.
[3] Ministry of Health. "Covid-19". [https://covid19.mohs.mn/]. Accessed 05 December 2020.
[4] World Health Organization (WHO). "Mongolia." [https://www.who.int/countries/mng/]. Accessed 05 December 2020.

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: 2

2020

Economist Intelligence

6.1.1b

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

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1c

Excessive bureaucracy/red tape (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1d

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

Input number

Current Year Score: 0

2020

Economist Intelligence

6.1.1e

Country score on Corruption Perception Index (0-100, where 100=best)

Input number

Current Year Score: 35

2020

Transparency International

6.1.1f

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

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1g

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

Input number

Current Year Score: 3

2020

Economist Intelligence

6.1.2 Orderly transfers of power

6.1.2a

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

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

Current Year Score: 4

2021

Economist Intelligence

6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

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

Current Year Score: 2

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

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

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

Current Year Score: 4

2021

Economist Intelligence

6.1.4b

What is the level of illicit arms flows within the country?

4 = Very high, 3 = High, 2 = Moderate, 1 = Low, 0 = Very low

Current Year Score: 4

2020

UN Office of Drugs and Crime (UNODC)

6.1.4c

How high is the risk of organized criminal activity to the government or businesses in the country?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 3

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: 4

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: 3

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: 98.42

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: 0.68

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: 0.1

2018

World Bank; Economist Impact

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 National Labor Force Report 2018 indicates that the number of people working in the informal sector is 220,000. The number of total employed people is 1,358,637. The number of people working in the informal sector (220,000) represents 16.19% of total employed people.

The International Labor Organization (ILO) website provides the number of people employed in the informal sector as 220,683 in 2019 [2]. The national media includes information on the contribution of the informal sector to the economy but does not mention the number of people working in the informal sector [3].

[1] National Statistical Database. 2018. "National Labor Force Report". [http://1212.mn/BookLibraryDownload.ashx?url=2018_LFS_report.pdf&ln=Mn] Accessed 21 November 2020.
[2] International Labor Organization. "Mongolia key facts and figures". [https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-beijing/documents/publication/wcms_706539.pdf]. Accessed 21 November 2020.
[3] National News Agency MONTSAME. [https://montsame.mn/en/read/212653#:~:text=The%20National%20Statistical%20Office%20of,Mongolia%20between%202015%20and%202018.&text=As%20of%202018%2C%20the%20size,to%209.8%20percent%20of%20GDP]. Accessed 21 November 2020.

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: 1

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.33

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: 3

2021

Economist Intelligence

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: 68.54

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: -0.04

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: 4

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years)

Input number

Current Year Score: 69.69

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: 939.2

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 4.19

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 27.6

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 20.6

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: 83.31

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 58.48

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: 304.71

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: 1

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