Qatar

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

CATEGORY 1: PREVENTING THE EMERGENCE OR RELEASE OF PATHOGENS WITH POTENTIAL FOR INTERNATIONAL CONCERN 4

1.1 Antimicrobial resistance (AMR) 4

1.2 Zoonotic disease 7

1.3 Biosecurity 13

1.4 Biosafety 20

1.5 Dual-use research and culture of responsible science 21

1.6 Immunization 24

CATEGORY 2: EARLY DETECTION AND REPORTING FOR EPIDEMICS OF POTENTIAL INTERNATIONAL CONCERN 25

2.1 Laboratory systems strength and quality 25

2.2 Laboratory supply chains 27

2.3 Real-time surveillance and reporting 28

2.4 Surveillance data accessibility and transparency 31

2.5 Case-based investigation 37

2.6 Epidemiology workforce 40

CATEGORY 3: RAPID RESPONSE TO AND MITIGATION OF THE SPREAD OF AN EPIDEMIC 42

3.1 Emergency preparedness and response planning 42

3.2 Exercising response plans 46

3.3 Emergency response operation 48

3.4 Linking public health and security authorities 50

3.5 Risk communications 51

3.6 Access to communications infrastructure 55

3.7 Trade and travel restrictions 56

CATEGORY 4: SUFFICIENT AND ROBUST HEALTH SECTOR TO TREAT THE SICK AND PROTECT HEALTH WORKERS 58

4.1 Health capacity in clinics, hospitals, and community care centers 58

4.2 Supply chain for health system and healthcare workers 61

4.3 Medical countermeasures and personnel deployment 65

4.4 Healthcare access 67

4.5 Communications with healthcare workers during a public health emergency 69

4.6 Infection control practices and availability of equipment 70

4.7 Capacity to test and approve new medical countermeasures 71

CATEGORY 5: COMMITMENTS TO IMPROVING NATIONAL CAPACITY, FINANCING PLANS TO ADDRESS GAPS, AND ADHERING TO GLOBAL NORMS 73

5.1 International Health Regulations (IHR) reporting compliance and disaster risk reduction 73

5.2 Cross-border agreements on public health and animal health emergency response 74

5.3 International commitments 76

5.4 Joint External Evaluation (JEE) and Performance of Veterinary Services Pathway (PVS) 77

5.5 Financing 78

5.6 Commitment to sharing of genetic and biological data and specimens 82

CATEGORY 6: OVERALL RISK ENVIRONMENT AND VULNERABILITY TO BIOLOGICAL THREATS 84

6.1 Political and security risk 84

6.2 Socio-economic resilience 88

6.3 Infrastructure adequacy 90

6.4 Environmental risks 91

6.5 Public health vulnerabilities 92

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: 0

There is no evidence of a national AMR plan that covers surveillance, detection and reporting of priority AMR pathogens designed and implemented in Qatar. According to the Joint External Evaluation, conducted in May-June 2016, "there are no national plans for detection and reporting of priority AMR pathogens" though the report does note Qatar's capacity for AMR detection and response at some of its facilities. The report also advises Qatar to formalize its plans for AMR. [1] There is no evidence of the plan on the website of the Ministry of Health or or the WHO's library for action plans. [1] [2] There is evidence from 2017 of an AMR plan being developed by the Ministry of Public Health in cooperation with other government agencies, there is however no evidence of completion of the plan. [3] [4] . Qatar appears to be following the advice and the Ministry of Public Health reported that in March of 2017 it was "organizing a workshop on the development of the national action plan to combat antimicrobial resistance in the State of Qatar". [2] As of yet this does not appear to have occurred based on a survey of the ministry's available reports and plans, though its current national health plan indicates a goal to "Decrease of anti-microbial resistance (AMR) and dangerous environmental exposures" [3].

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 September 2020.
[2] Ministry of Public Health of the State of Qatar. "National Plan to Combat Antimicrobial Resistance". [https://www.moph.gov.qa/news/Pages/National-Plan-to-Combat-Antimicrobial-Resistance.aspx]. Accessed 20 September 2020.
[3] Ministry of Public Health of the State of Qatar. "National Health Strategy, 2018-2022". [https://www.moph.gov.qa/HSF/Pages/NHS-18-22.aspx]. Accessed 20 September 2020.
[4] "QU Workshop Discusses Antimicrobial Susceptibility Testing and Surveillance". The Peninsula. [https://www.thepeninsulaqatar.com/article/23/01/2018/QU-workshop-discusses-antimicrobial-susceptibility-testing-and-surveillance]. Accessed 20 September 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 sufficient evidence that Qatar has a national laboratory/laboratory system which tests for priority AMR pathogens. According to the Joint External Evaluation of Qatar, completed in 2016, Salmonella spp., E.Coli and Mycobacterium tuberculosis do have a laboratory system through which they are tested. [1,2] There is evidence that Hamad Medical Center does testing for Salmonella, Shigella, E.Coli, and Gonorrhea. [3] While Qatar has the capacity to test for S. Aureus [4], there is no indication that testing is part of a sentinel system on neither of the Ministry of Public Health's website, Hamad Medical Corporation's website, and Ministry of Municipality and the Environment's website. [5,6,7] The Ministry of Public Health maintains a pneumonia testing policy, but it is not clear if this testing includes AMR K. pneumonia and S. pneumonia. [8]

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 September 2020.
[2] Eltai, Nahla O., et al. 26 June 2018. "Prevalence of Antibiotic Resistant Escherichia coli Isolates from Fecal Samples of Food Handlers in Qatar". Antimicrobial Resistance and Infection Control. [https://aricjournal.biomedcentral.com/articles/10.1186/s13756-018-0369-2].
[3] Hamad Medical Corporation, "Lab Guide—2019 Microbiology Lab Guide". [https://www.hamad.qa/EN/Hospitals-and-services/Hamad-General-Hospital/Hospital-Services/Clinical-Departments/Documents/Microbiology%20Lab%20Guide%202019.pdf]. Accessed 12 October 2020.
[4] Khan et al. "Epidemiology of Bacteraemia in Hamad General Hospital, Qatar: A One Year Hospital-based Study". [https://d1wqtxts1xzle7.cloudfront.net/45188121/Epidemiology_of_bacteraemia_in_Hamad_gen20160428-16116-1htk44f.pdf?1461909932=&response-content-disposition=inline%3B+filename%3DEpidemiology_of_bacteraemia_in_Hamad_gen.pdf&Expires=1602530872&Signature=fXdn8Ue-5UcgyYxw~7mngZ68X6n9PEha0hjiey6wHaF-JOOI5robEEZYB-AgZFqmB8~OXz9wqacP4~5w3MSVKDBrq3lMKIPn1Yi5hiGygrTg4SPxVPWDE917I623jIu0T1vKM95ZlmEMjL8U7jOTCa~D9dW4g6atnum1rJeBX1ygb7NapBuZbnYJl84OojCcsGgZ5SQDOq~urTDTW47KpTQqIQDsv~Cs-rVtSCHjc1gkyKbl3xKc7pAjIeyKfQZiFGrCkaM6iRFryxB2g7qi9HqG5CBq2yYMqyExfa2F6FSwAuvnJUxf4L0JLm6YZ-EQ4S8AS6383bxhCalf11lOfA__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA]. Accessed 12 October 2020.
[5] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 20 September 2020.
[6] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 20 September 2020.
[7] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 20 September 2020.
[8] Ministry of Public Heath of the State of Qatar. "Clinical Guidelines for the State of Qatar: The Diagnosis and Management of Community Acquired Pneumonia". December 2016. [https://www.moph.gov.qa/health-strategies/Documents/Guidelines/MOPH%20Guideline%20-%20Community%20acquired%20pneumonia%20v2-1%20FINAL.pdf]. Accessed 20 September 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 evidence that the government of Qatar conducts environmental detection or surveillance activities for antimicrobial residues or AMR organisms. The Joint External Evaluation, conducted in May-June 2016, does not include detail on environmental surveillance, but indicates that AMR surveillance outside of human health is weaker, stating that "[l]imited passive surveillance of the animal sector for AMR priority pathogens exists." [1] There is however surveillance

and environmental monitoring for air quality, water and soil to monitor persistent organic pollutants is also undertaken by the central laboratory in MoME. [1] There is no evidence on the Ministry of Municipality and Environment website, the Ministry of Public Health website, or elsewhere that the Ministry of Municipality and Environment or another agency actually conducts detection or surveillance activities for antimicrobial residues or AMR organisms in the environment. [2, 3]

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 September 2020.
[2] Ministry of Municipality and Environment of the State of Qatar. "Laws and Regulations."[http://www.mme.gov.qa/cui/view.dox?id=402&contentID=226&siteID=1]. Accessed 20 September 2020.
[3] Ministry of Public Health of the State of Qatar. "Supporting Strategies and Frameworks." [https://www.moph.gov.qa/HSF/Pages/Supporting-Strategies-and-Frameworks.aspx]. Accessed 20 September 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: 2

There is evidence that there national legislation or regulation in place requiring prescriptions for antibiotic use for humans. Legislation is available that prevents antibiotic dispensing without prescription through licensed physicians according to the Joint External Evaluation (JEE) of Qatar. According to the JEE, completed in 2016, "Legislation is available that prevents antibiotic dispensing without prescription through licensed physicians." [1]. It refers to Law No. 3 of 1983 that regulates pharmacology professions, mediators, and agents of drugs factories, which states that a pharmacist could have his license withdrawn if he/she does not respect the code of conduct, which includes strict adherence to the prescription [2]. Evidence reveals that the regulation is effectively implemented, as the latest report on violation of the law dates from 2015 and all 25 pharmacies violating the rules have been forced to close [3].

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 September 2020.
[2] "Law No. 3 of 1983 with regard to Regulating the Pharmacology Professions, Mediators, and Agents of the Drugs Factories". Qatar Legal Portal. [http://www.almeezan.qa/LawArticles.aspx?LawTreeSectionID=9601&lawId=2601&language=en]. Accessed 20 September 2020.
[3] Gulf Times. "25 Pharmacies Closed for Violations". [https://www.gulf-times.com/story/431675/25-pharmacies-closed-for-violations]. Accessed 20 September 2020.

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 publicly available evidence that there is national legislation or regulation in place requiring prescriptions for antibiotic use for animals. According to the Joint External Evaluation (JEE), conducted in May and June 2016, "currently there is no legislation regarding prescription of antibiotics for animal health." [1]. Publicly available resources from the Ministry of Public Health [2], the Ministry of Municipality and the Environment [3], and the World Health Organization (WHO) [4] do not provide any update on the situation. Furthermore, a research published in February 2020 acknowledged the lack of information on the prevalence of antibiotic resistance in the veterinary field in Qatar and highlighted the need for a "a quick response to develop and implement a stewardship program for the monitoring of antibiotic use in the veterinary in Qatar." However, it does not explicitly mention the absence of national legislation requiring prescriptions for antibiotic use for animals [5].

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx].
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2].
[4] World Health Organization (WHO). "Library of National Action Plans". [http://www.who.int/antimicrobial-resistance/national-action-plans/library/en].
[5] Nahla Eltai et al., February 2020 "Antibiotic Resistance Profile of Commensal Escherichia coli Isolated from Healthy Sheep in Qatar". [https://pubmed.ncbi.nlm.nih.gov/32146447/] Accessed 20 September 2020.

1.2 ZOONOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

Is there national legislation, plans, or equivalent strategy documents on zoonotic disease?

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that there is a national law, plan, or equivalent strategy document on zoonotic disease in Qatar. The Joint External Evaluation (JEE) of Qatar, conducted in May and June 2016 notes that "[j]oint surveillance guidelines and protocols exist for MERS-CoV and there are plans to develop written surveillance programmes and action plans for the other priority diseases." However, there is no further information on which diseases are included. Moreover, there is no evidence that the plan is publicly available, via either the Ministry of Public Health or the Ministry of Municipality and Environment [2,3]. The Ministry of Public Health Department of Public Health (which includes Health Protection and Communicable Disease Control) and the Ministry of Municipality and the Environment Department of Animal Health Resources, respectively, regulate the prevention and control of zoonotic diseases. According to the Ministry of Municipality and Environment Livestock Department, it also has the responsibility for "[m]onitoring the field investigation on the various animal diseases," [4] but its documentation is not publicly available. Furthermore, a 2017 study published in the International Journal of Environmental Research and Public Health and conducted by scientists affiliated with the Ministry of Public Health examined the preparedness of Qatar's infrastructure in the event of a MERS-CoV outbreak by examining the response to past outbreaks that resulted from close relationships between humans and camels [5]. The study mentions a National Early Preparedness and Response (EPR) plan that is administered by the Supreme Council of Health and the Animal Health Department, respectively, within the Ministry of Public Health, but the text of this plan was not publicly available. Qatar hosted the Fourth International Congress on Pathogens at the Human-Animal Interface (ICOPHAI) in November 2017 with the aim of exchanging scientific information on infectious diseases and strengthening Qatar's global academic capacity, but it is unclear

what deliverable(s) this conference produced [6].

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 12 October 2020
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 12 October 2020
[4] Ministry of Municipality and Environment, Qatar. Laws and Regulations. [http://www.mme.gov.qa/cui/view.dox?id=589&contentID=621&siteID=2]. Accessed 12 October 2020.
[5] Nour, M., Alhajri, M., Farag, E., Al-Romaihi, H. E., Al-Thani, M., Al-Marri, S., & Savoia, E. (2017). "How Do the First Days Count? A Case Study of Qatar Experience in Emergency Risk Communication during the MERS-CoV Outbreak". International Journal of Environmental Research and Public Health, 14
[12] :1597. Accessed 12 October 2020.
[6] The Fourth International Congress on Pathogens at the Human-Animal Interface (ICOPHAI), 7-9 November 2017. [https://icophai.org/news/welcome]. Accessed 12 October 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 evidence that there is 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. Qatar developed and conducted joint laboratory training programs, developed laboratory guidelines, and created a joint laboratory surveillance and reporting system. It looks to improve surveillance to ensure the early reporting and joint investigation of suspected cases in humans and animals, including contact tracing [1]. This system includes the enhancement of severe acute respiratory infection surveillance and active surveillance of people at risk for MERS-CoV infection and testing of animals at slaughterhouses, camel races, and points of entry. The relevant ministries endorsed a transferable national budget (i.e., exchangeable or one budget) for the collaborating laboratories, and laboratories were granted access to an emergency tender or to a receiving authority to directly purchase supplies in an outbreak situation. Moreover, the cited document cited mentions efforts taken in Qatar with respect to surveillance and control of MERS-CoV and other zoonotic diseases, but it does not flesh out a particular risk factor/factors nor does it outline a full strategy for risk reduction from that factor. There is no evidence of such document on the websites of the Ministry of Public Health [2] or the Ministry of Municipality and Environment [3].

[1] World Organization for Animal Health, Food and Agriculture Organization of the United Nations, World Health Organization, "Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries". [https://www.oie.int/fileadmin/Home/eng/Media_Center/docs/EN_TripartiteZoonosesGuide_webversion.pdf]. Accessed 20 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 22 November 2020.
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2].

Accessed 22 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: 0

There is no evidence that there is national legislation, plans, or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern in Qatar. Evidence indicates that Qatar has concentrated its efforts on zoonotic pathogens, particularly MERS-Cov, but has not included other zoonotic pathogens in its strategy. While Qatar established a single budget to fund MERS-CoV activities across sectors, it has only initiated a joint assessment (with the WHO) of the workforce's capacity to respond to disease emergencies, including for Ebola response capacity, infection prevention and control, and antimircobial resistance (AMR), without creating a plan that covers surveillance and control for diseases other than MERS-CoV. According to the Joint External Evaluation (JEE), conducted in May and June 2016, "[j]oint surveillance guidelines and protocols exist for MERS-CoV and there are plans to develop written surveillance programmes and action plans for the other priority diseases." No further information on which diseases are included. On control, the JEE report notes that "[m]echanisms for responding to zoonoses and potential zoonoses are established and functional"; however, "[t]hese mechanisms are not documented but are being followed by practice." The report further specifies that Qatar has effectively managed events involving MERS-CoV and brucellosis, but in terms of actual plans it says only that Qatar has tested some plans for avian influenza [1]. No records of plans that account for the surveillance and control of multiple zoonotic pathogens appear to exist in the Ministry of Public Health or the Ministry of Municipality and Environment [2, 3].

[1] World Organization for Animal Health, Food and Agriculture Organization of the United Nations, World Health Organization. "Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries". [https://www.oie.int/fileadmin/Home/eng/Media_Center/docs/EN_TripartiteZoonosesGuide_webversion.pdf]. Accessed 20 September 2020.
[2] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 12 October 2020.
[3] Qatar Ministry of Public Health. [https://www.moph.gov.qa]. Accessed 12 October 2020.
[4] Qatar Ministry of Municipality and Environment. [http://www.mme.gov.qa/cui/index.dox?]. Accessed 12 October 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

There is evidence of a department, agency, or similar unit that is dedicated to zoonotic disease that functions across ministries.

Qatar authorities jave initiated the establishment of a sustainable inter-ministerial platform to coordinate policy and action for zoonotic disease control, promoting transparency, education, research, cooperation, and community service values [1,2]. This was done following the discovery of the first MERS-CoV case in 2012. The appearance of the disease was the trigger and provided an opportunity to strengthen multisectoral coordination, including on training of interdisciplinary teams, risk assessments, and surveillance and control measures for MERS-CoV and other zoonotic diseases. Moreover, the activities of

the platform include joint investigations and surveillance, capacity building projects, community engagement, and enhanced networking and collaboration between human and animal laboratories. Furthermore, Qatar established a single budget to fund the MERS-CoV inter-ministerial unit [1,2].

[1] World Organization for Animal Health, Food, and Agriculture Organization of the United Nations, World Health Organization (WHO). 2019. "Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries". [https://www.oie.int/fileadmin/Home/eng/Media_Center/docs/EN_TripartiteZoonosesGuide_webversion.pdf]. Accessed 20 September 2020.
[2] El Moubasher.F et al. 2019. "Qatar Experience on One Health Approach for Middle-east Respiratory Syndrome Coronavirus, 2012–2017: A Viewpoint." [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6462540/]. Accessed 27 April 2021.

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a national mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency. There is no report of such organised practice on the website of the Ministry of Public Health, the Ministry of Municipalities and Environment, or other health/environment-related policy agency [1,2,3]. However, the World Organization for Animal Health (OIE) states that top-down inspections are organized by the central government, where the system includes testing of animals at slaughterhouses, camel races, and points of entry [4].

[1] World Organization for Animal Health, Food, and Agriculture Organisation of the United Nations, World Health Organisation "Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries" Accessed 20 September 2020.
[https://www.oie.int/fileadmin/Home/eng/Media_Center/docs/EN_TripartiteZoonosesGuide_webversion.pdf].
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 20 September 2020.
[3] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 20 September 2020.
[4] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 20 September 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 evidence of legislation and/or regulations that safeguard the confidentiality of information generated through surveillance activities for animals (for owners). Qatar does not have a data confidentiality regime in place for identifiable health information as it relates to health surveillance. A recent law, Law No. 13 of 2016 "Promulgating the Protection of the Privacy of Personal Data Law," [1] governs data privacy but it "does not apply to personal data processed by individuals

privately or within a family context, or to any personal data gathered for official surveys and statistics" [1]. Moreover, there is no reference to laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for owners via the Ministry of Public Health, [2] the Ministry of Municipality and Environment [3], or the national repository of laws and regulations [4].

[1] "Law No. 13 of 2016, Law Promulgating the Protection of the Privacy of Personal Data," Al Meezan Qatar Legal Portal. [http://www.almeezan.qa/LawPage.aspx?id=7121&language=ar]. Accessed 20 September 2020.
[2] Qatar Ministry of Public Health. [https://www.moph.gov.qa]. Accessed 20 September 2020.
[3] Qatar Ministry of Municipality and Environment. [http://www.mme.gov.qa/cui/index.dox]. Accessed 20 September 2020.
[4] Al Meezan Qatar Legal Portal. [http://www.almeezan.qa/]. Accessed 20 September 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 no evidence that the country conducts surveillance of zoonotic disease in wildlife. Qatar does not have a public record of conducting surveillance of zoonotic disease in wildlife (e.g., wild animals, insects, other disease vectors, etc.). The Joint External Evaluation (JEE), conducted in May-June 2016, notes that "Despite good collaboration and day-to-day communication between the public health and veterinary sectors as well as with other sectors (municipalities and wildlife), especially for certain priority diseases, there are no formal structures or mechanisms to upgrade and sustain collaboration for effective surveillance and control of zoonotic diseases." [1]. The Ministry of Municipality and Environment appears to be the appropriate regulatory agency, along with the Ministry of Public Health, but their laws and regulations do not contain any documentation relevant to the surveillance of zoonotic disease in wildlife [2,3].

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 12 October 2020.
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 12 October 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: 1

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: 23.9

2019

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 4.31

2019

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

Does the national plan on zoonotic disease or other legislation, regulations, or plans include mechanisms for working with the private sector in controlling or responding to zoonoses?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of mejmorandums of understanding (MoUs), established partnerships, or plans to include the private sector in disease control or response. According to the Joint External Evaluation (JEE) of Qatar, conducted in May and June 2016, some partnerships with the private sector exist in the area of the cargo and border control of live animals and human remains, but the report does not mention other collaboration for the purposes of zoonotic disease control [1]. The Ministry of Public Health National Health Strategy 2018–2022 aims to include the "intersectional" efforts of "the public, healthcare organizations, businesses, government agencies, civil society and the media," although there appears to be no specific arrangement for collaboration in the area of zoonotic disease control [2]. Further, there is no evidence of these mechanisms on the websites of the Ministry of Public Health or Ministry of Municipaities of Environment [3,4].

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 September 2020.
[2] Ministry of Public Health of Qatar. "National Health Strategy 2018-2022". [https://www.moph.gov.qa/HSF/Documents/short/report/eng/20.03.2018.pdf]. Accessed 20 September 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 12 October 2020.
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2].

Accessed 12 October 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: 0

There is no evidence that the country 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 such facilities. The Joint External Evaluation (JEE) of Qatar, completed in 2016, highlights the need to improve up-to-date records and pathogen inventories within facilities that store or process dangerous pathogens and toxins [3]. Further, the Ministry of the Interior manages the handling of dangerous materials by the public, but there is also no indication that it maintains a database of facilitates where pathogens are processed and stored [3]. Similarly, the VERTIC database, the Ministry of Public Health, and the Ministry of Municipality and the Environment websites also contain no such records [1, 2, 5]. Although Qatar has submitted a Confidence Building Measures report almost every year upto 2020, access to the reports is restricted to the public and it is unknown if they contain information on this matter [4].

[1] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx].
[2] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 21 September 2020.
[3] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 21 September 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 15 December 2018.
[4] Biological Weapons Convention. "Confidence Building Measures." [https://bwc-ecbm.unog.ch/state/qatar]. Accessed 17 April 2019.
[5] Verification Research, Training, and Information Centre (VERTIC) Database. "Qatar." [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/q/]. Accessed 22 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 publicly available evidence that Qatar has in place legislation related to biosecurity that addresses issues such as physical containment, operation practices, failure reporting systems, or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored. The Ministry of Public Health Biosafety Guidelines for Research Laboratories, published in January 2018, include information regarding the levels of containment that should be observed for certain dangerous pathogens and briefly discuss the fact that effective biosafety procedures are the foundation for biosecurity, but the guidelines do not provide specific requirements for biosecurity practices [1]. The National Committee on Biosafety, established by Cabinet Resolution No. 2 of 2012 focuses primarily on the provision of and oversight over biosafety guidelines, including those involving GMO crops [2]. Law No. 4 of 2016 on Biological Weapons prohibits individuals from "the development, production, development, possession, acquisition, acquisition, storage, transfer, transfer, import, export, re-export, transit, transit or use" of certain biological weapons or deadly toxins, including building and maintaining facilities that deal with them without express authorization from the Ministry of Defence [3]. According to Article 4, if an individual obtains a license to handle potentially dangerous pathogens, that individual "shall observe biosecurity and biosafety measures" that are determined by the Defence Minister and make regular reports to the National Committee on Biosecurity [3]. However, there is no reference in the law to medical or scientific research involving these materials, nor is there a reference to government administration of such facilities through the Ministry of Public Health, Ministry of Municipality and the Environment, or the Ministry of the Interior or the verification research, training, and information centre (VERTIC) database [4, 5, 6,7].

[1] Ministry of Public Health of the State of Qatar. January 2018. "Biosafety Guidelines for Research Laboratories". [https://www.moph.gov.qa/about-us/Documents/research/Biosafety%20Guidelines%20for%20Research%20Laboratories.pdf]. Accessed 13 October 2020.
[2] Al Meezan Qatar Legal Portal. "Cabinet Resolution No. 2 of 2012 on the Organization of the National Committee on Biosecurity". 24 January 2012. [http://www.almeezan.qa/LawView.aspx?opt&LawID=4285&language=ar]. Accessed 13 October 2020.
[3] Al Meezan Qatar Legal Portal. "Law No. 4 of 2016 on Biological Weapons". 2 June 2016. [http://www.almeezan.qa/LawArticles.aspx?LawArticleID=71849&LawId=6985&language=ar]. Accessed 13 October 2020.
[4] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 13 October 2020.
[5] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 13 October 2020.
[6] Ministry of the Interior of the State of Qatar. [https://portal.moi.gov.qa/]. Accessed 13 October 2020.
[7] Verification Research, Training, and Information Centre (VERTIC) Database. "Qatar". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/q/]. Accessed 22 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 publicly available evidence of an established committee responsible for the enforcement of biosecurity legislation and regulation in Qatar. The National Committee on Biosecurity, created by Cabinet Resolution No. 2 of 2012, is charged with implementing the Cartagena Protocols and other tasks closely related to the poilcy on genetically modified organisms (GMOs) and does not define biosecurity as protection, control of, and accountability for high-consequence biological agents and toxins [1]. Law No. 4 of 2016 on Biological Weapons, which prohibits individuals from producing or utilizing biological weapons or deadly toxins, including building and maintaining facilities that deal with them without express authorization

from the Ministry of Defence, does not enforce biosecurity legislation [2]. Furthermore, the Permanent Emergency Committee within the Ministry of the Interior is tasked with handling disasters and emergencies caused by "war outbreak, natural, and industrial disasters," including biological events, during times of peace [3, 4, 5]. However, none of these agencies is explicitly responsible for the enforcement of biosecurity legislation nor is there any indication of a dedicated agency through the Ministry of Public Health, Ministry of Municipality and the Environment, or the Ministry of the Interior [6, 7, 8]. Although Qatar has submitted a Confidence Building Measures report almost every year up to 2020, access to the reports is restricted to the public, and it is unknown if they contain information on this matter [9]. No evidence in this regard was found via the verification research, training, and information centre (VERTIC) database [10].

[1] Al Meezan Qatar Legal Portal. "Cabinet Resolution No. 2 of 2012 on the Organization of the National Committee on Biosecurity". 24 January 2012. [http://www.almeezan.qa/LawView.aspx?opt&LawID=4285&language=ar]. Accessed 13 October 2020.
[2] Al Meezan Qatar Legal Portal. "Law No. 4 of 2016 on Biological Weapons". 2 June 2016. [http://www.almeezan.qa/LawArticles.aspx?LawArticleID=71849&LawId=6985&language=ar] Accessed 13 October 2020.
[3] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency/] Accessed 13 October 2020.
[4] Al Meezan Legal Portal. "Cabinet Resolution No. 19 of 2003". 16 June 2003. [http://www.almeezan.qa/LawPage.aspx?id=1488&language=en] Accessed 13 October 2020.
[5] World Health Organisation (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 13 October 2020.
[6] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 13 October 2020.
[7] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. 13 October 2020.
[8] Ministry of the Interior of the State of Qatar. [https://portal.moi.gov.qa/]. Accessed 13 October 2020.
[9] Biological Weapons Convention. "Confidence Building Measures." [https://bwc-ecbm.unog.ch/state/qatar]. Accessed 22 November 2020.
[10] Verification Research, Training, and Information Centre (VERTIC) Database. 'Qatar". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/q/]. Accessed 22 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 publicly available evidence that Qatar has consolidated its inventories of especially dangerous pathogens or toxins into a minimum number of facilities. According to the Joint External Evaluation (JEE), conducted in May and June 2016, although Qatar still currently has "no national biosafety and biosecurity legislation, regulation or guidelines...[and] no formal inventory of the pathogens worked on," it does indicate that "[d]angerous pathogens and toxins are worked on in a determined select number of facilities" [1]. However, the National Committee on Biosafety and the Permanent Emergency Committee within the Ministry of the Interior, respectively, have not provided any publicly available details regarding their operations and associated regulations [2, 3, 4]. Furthermore, there is no additional information regarding the number of facilities handling the stock of pathogens and toxins in Qatar via the Ministry of Public Health, Ministry of Municipality and

the Environment, or the Ministry of the Interior [5, 6, 7]. Although Qatar has submitted a Confidence Building Measures report almost every year up to 2020, access to the reports is restricted to the public and it is unknown if they contain information on this matter [8]. Moreover, no evidence in this regard was found via the verification research, training, and information centre (VERTIC) database [9].

[1] World Health Organisation (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 13 October 2020.
[2] Al-Meezan Qatar Legal Portal. "Cabinet Resolution No. 2 of 2012 on the Organization of the National Committee on Biosecurity." 24 January 2012. [http://www.almeezan.qa/LawView.aspx?opt&LawID=4285&language=ar]. Accessed 13 October 2020.
[3] Al Meezan Qatar Legal Portal. "Law No. 4 of 2016 on Biological Weapons". 2 June 2016. [http://www.almeezan.qa/LawArticles.aspx?LawArticleID=71849&LawId=6985&language=ar]. Accessed 13 October 2020.
[4] Al Meezan Qatar Legal Portal. "Cabinet Resolution No. 17 of 1998 on the Establishment of a Permanent Emergency Committee". 2 December 1998. [http://almeezan.qa/LawArticles.aspx?LawTreeSectionID=10914&lawId=3183&language=ar]. Accessed 13 October 2020.
[5] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 13 October 2020.
[6] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 13 October 2020.
[7] Ministry of the Interior of the State of Qatar. [https://portal.moi.gov.qa/]. Accessed 13 October 2020.
[8] Biological Weapons Convention. "Confidence Building Measures." [https://bwc-ecbm.unog.ch/state/qatar]. Accessed 22 November 2020.
[9] VERTIC Database. "Qatar". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/q/]. Accessed 22 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 no evidence that Qatar has in-country capacity to conduct polymerase chain reaction (PCR)-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen conduct. However, in articles from the World Health Organization (WHO) and the Peninsula, there is evidence that Qatar has capacity to conduct PCR tests to identify the presence of MERS-Cov and COVID-19 [1,2]; however, there is no evidence that Qatar is able to conduct PCR tests to identify Ebola or Anthrax on the websites of the Ministry of Public Health, Ministry of Environment, the Ministry of Defence, or Hamad Medical Corporation's websites [3,4,5,6].

[1] World Health Organization (WHO). "Coronavirus du syndrome respiratoire du Moyen-Orient (MERS CoV) Qatar". [https://www.who.int/csr/don/26-december-2019-mers-qatar/fr/]. Accessed 21 September 2020.
[2] The Peninsula Qatar. "26 Health Facilities in Qatar are MoPH-approved for Covid-19 PCR Test". [https://thepeninsulaqatar.com/article/29/08/2020/26-health-facilities-in-Qatar-are-MoPH-approved-for-Covid-19-PCR-test]. Accessed 21 September 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 21 September 2020.
[4] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2].

Accessed 21 September 2020.
[5] Minister of State for Defence Affairs, Qatar. [https://www.gco.gov.qa/en/ministries/minister-of-state-for-defence-affairs/]. Accessed 22 November 2020.
[6] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 22 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 insufficient evidence to demonstrate that there is a standardized biosecurity training program for staff in facilities with dangerous pathogens. The Joint External Evaluation (JEE), conducted in May and June 2016, noted that one of the ongoing priorities was to "[i]mprove training in biosecurity for all laboratories" [1]. The JEE advised that "a train-the-trainers programme needs to be developed and implemented for biosecurity," and "[s]ustained academic training should be developed on biosafety and biosecurity for those who work with dangerous pathogens and toxins" [1]. Furthermore, Qatar's available legislation similarly does not indicate any call for such training, nor does the Ministry of Public Health, Ministry of Municipality and Environment, National Biosecurity Committee, and Permanent Emergency Committee within the Ministry of the Interior, or on the VERTIC database [2, 3, 4, 5, 6,7]. Although Qatar has submitted a Confidence Building Measures report almost every year up to 2020, access to the reports is restricted to the public and it is unknown if they contain information on this matter [8].

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 13 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 13 October 2020.
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 13 October 2020.
[4] Al Meezan Qatar Legal Portal. Cabinet Resolution No. 2 of 2012 on the Organization of the National Committee on Biosecurity". 24 January 2012. [http://www.almeezan.qa/LawView.aspx?opt&LawID=4285&language=ar]. Accessed 13 October 2020.
[5] Al Meezan Qatar Legal Portal. "Cabinet Resolution No. 17 of 1998 on the Establishment of the Permanent Emergency Committee". 2 December 1998.
[http://www.almeezan.qa/LawArticles.aspx?LawTreeSectionID=17289&LawID=6985&language=ar]. Accessed 13 October 2020.
[6] Al Meezan Qatar Legal Portal. "Law No. 4 on Biological Weapons". 2 June 2018.
[http://www.almeezan.qa/LawArticles.aspx?LawTreeSectionID=17289&LawID=6985&language=ar]. Accessed 13 October 2020.
[7] Verification Research, Training, and Information Centre (VERTIC) Database, Qatar.
[https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/q/]. Accessed 22 November 2020.
[8] Biological Weapons Convention. "Confidence Building Measures." [https://bwc-ecbm.unog.ch/state/qatar]. Accessed 22

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 no publicly available evidence that Qatar has regulations and licensing conditions for personnel with access to especially dangerous pathogens and toxins, which include drug testing, background checks, and psychological or mental fitness checks. Law No. 4 of 2016 on Biological Weapons ratifies the Convention on Biological Weapons by outlawing the production, storage, and use or attempted use of biological elements or toxins in a manner that is harmful to human health and imposes an additional requirement for their appropriate maintenance and use [1]. However, the law does not specify the conditions under which the Minister of Defence would provide a license for the handling of these materials and it provides no details on the regulation of personnel in government facilities. Similarly, the Ministry of Public Health, Ministry of Municipality and Environment, and Permanent Emergency Committee within the Ministry of the Interior do not provide details of licensing conditions [2, 3, 4]. Furthermore, the Joint External Evaluation (JEE), conducted in May and June 2016, indicates that there is a system in place to license both laboratories and individuals, but does not include details on the requirements for licensing of individuals working in laboratories outside of biosafety training [5]. No evidence was found via the Verification Research, Training, and Information Centre (VERTIC) database [6]. Although Qatar has submitted a Confidence Building Measures report almost every year up to 2020, access to the reports is restricted to the public and it is unknown if they contain information on this matter [7].

[1] Al Meezan Qatar Legal Portal. "Law No. 4 of 2016 on Biological Weapons". 2 June 2016. [http://www.almeezan.qa/LawArticles.aspx?LawTreeSectionID=17289&LawID=6985&language=ar]. Accessed 13 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 13 October 2020.
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 13 October 2020.
[4] Al Meezan Qatar Legal Portal. "Cabinet Resolution No. 17 of 1998 on the Establishment of the Permanent Emergency Committee". 2 December 1998. [http://www.almeezan.qa/LawArticles.aspx?LawTreeSectionID=17289&LawID=6985&language=ar]. Accessed 13 October 2020.
[5] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 13 October 2020.
[6] Verification Research, Training, and Information Centre (VERTIC) Database, Qatar. [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/q/] Accessed 22 November 2020.
[7] Biological Weapons Convention. "Confidence Building Measures." [https://bwc-ecbm.unog.ch/state/qatar]. Accessed 22 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: 1

There is publicly available evidence that Qatar has national regulations on the safe and secure transport of infectious substances (Categories A and B). These "Biosafety Guidelines for Research Laboratories" were published in January 2018 by the Ministry of Public Health (MoPH) and require that the transportation of biological agents and toxic materials complies with national and international regulations [1]. Specifically, the guidelines refer to Categories A and B and mandated that, "Category A Infectious Substances must be shipped according to more stringent requirements." The document also states that all laboratories handling such substances must comply with these regulations or face sanctions from the Ministry of Public Health following inspection [1]. In addition, the Joint External Evaluation (JEE), conducted in May and June 2016, also noted that "Staff are trained in public laboratories on the transport of infectious substances according to United Nations regulations" [2]. However, it is unknown how these research laboratory guidelines would apply to hospitals and other medical facilities, if at all.

[1] Ministry of Public Health, Department of Research "Biosafety Guidelines for Research Laboratories". [https://www.moph.gov.qa/Admin/Lists/Services%20Attachments/Attachments/45/Biosafety%20Guidelines%20for%20Research%20Laboratories.pdf]. Accessed 22 September 2020.
[2] World Health Organisation (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 22 September 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 public evidence that there is guidance in place that explicitly oversees cross-border transfer and end-user screening of especially dangerous pathogens and toxins. However, the Ministry of Public Health Biosafety Guidelines for Research Laboratories, published in January 2018, do state that a facility's biosafety officer is required to ensure the "[e]stablishment of appropriate procedures for import/export of pathogenic material to/from the laboratory according to national regulations" [1]. Furthermore, the Ministry of Transport and Communications, Ministry of the Interior, and Ministry of Municipality and Environment do not appear to have publicly available regulations to oversee the cross-border transfer of dangerous pathogens and toxins [2, 3, 4]. No evidence was found in this regard via the Verification Research, Training, and Information Centre (VERTIC) database [5]. Although Qatar has submitted a Confidence Building Measures report almost every year up to 2020, access to the reports is restricted to the public and it is unknown if they contain information on this matter [6].

[1] Ministry of Public Health, Department of Research. "Biosafety Guidelines for Research Laboratories". https://www.moph.gov.qa/Admin/Lists/Services%20Attachments/Attachments/45/Biosafety%20Guidelines%20for%20Research%20Laboratories.pdf]. Accessed 22 September 2020.
[2] Ministry of Transport and Communications. [http://www.motc.gov.qa/ar]. Accessed 22 September 2020.
[3] Ministry of the Interior of the State of Qatar. [https://portal.moi.gov.qa/wps/portal/MOIInternet/MOIHome]. Accessed 22 September 2020.
[4] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 22 September 2020.
[5] Verification Research, Training, and Information Centre (VERTIC) Database, Qatar. [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/q/]. Accessed 22 November 2020.
[6] Biological Weapons Convention. "Confidence Building Measures." [https://bwc-ecbm.unog.ch/state/qatar]. Accessed 22 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 insufficient evidence that Qatar has in place a national biosafety regulation that puts forth guidelines for laboratory biosafety. A biosafety document is published and enforced through annual inspection by the Ministry of Public Health. It covers biosafety guidelines; laboratory biosecurity; laboratory equipment; standard microbiological practices; security for biotechnology; chemical, fire and electrical safety; and personnel organization and training. The list is none-exhaustive, as the guidelines also provide directions on emergency protocols and outbreaks: A biosafety committee shall be identified and made responsible for ensuring that corrective actions are taken for all deficiencies identified during the audit process. Certification of the laboratory shall not be completed and the laboratory shall not be declared functional until deficiencies have been adequately addressed and approved by the biosafety committee. This is applicable for any laboratory [1].

[1] Ministry of Public Health, Department of Research "Biosafety Guidelines for Research Laboratories". [https://www.moph.gov.qa/Admin/Lists/Services%20Attachments/Attachments/45/Biosafety%20Guidelines%20for%20Research%20Laboratories.pdf]. Accessed 22 September 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 insufficient evidence that Qatar has established an agency responsible for enforcement of biosafety regulations as there is insufficient evidence of any biosafety regulations. Nonetheless, there is an established agency for the enforcement of biosafety legislation and regulations. As mentioned in the Biosafety Guidelines for Research Laboratories published in 2018 by the Ministry of Public Health, the guidelines for biosafety are enforced by the Ministry of Public Health in the form of

annual inspections. A biosafety committee is required to be identified and made responsible for ensuring that corrective actions are taken for all deficiencies identified during the audit process. Moreover, certification of the laboratory shall not be completed and the laboratory shall not be declared functional until deficiencies have been adequately addressed and approved by the biosafety committee. This is applicable for any laboratory.

[1] Ministry of Public Health, Department of Research. "Biosafety Guidelines for Research Laboratories". [https://www.moph.gov.qa/Admin/Lists/Services%20Attachments/Attachments/45/Biosafety%20Guidelines%20for%20Research%20Laboratories.pdf]. Accessed 22 September 2020.

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 evidence that Qatar requires biosafety training using a required, standardized, and institution-specific approach through common standards and train-the-trainer programs. As stated in the guidelines for laboratory biosafety, the laboratory supervisor (reporting to the laboratory director) shall ensure that regular laboratory safety training is provided to the laboratory personnel. The laboratory director shall, after consultation with the biosafety officer and safety committee, ensure that adequate containment equipment is provided and laboratory personnel are trained to use the equipment. Training shall include the code of practice and local guidelines, including the safety or operations manual. Staff training shall include safe methods for working with potentially hazardous procedures commonly encountered by most laboratory personnel, and include the following aspects: 1. Inhalation risks (i.e., aerosol production) when using loops, streaking agar plates, pipetting, making smears, opening cultures, taking blood/serum samples, centrifuging, etc; 2. ingestion risks when handling specimens, smears, and cultures; 3. risks of percutaneous exposures when using syringes and needles; 4. bites and scratches when handling animals; 5. handling blood and other potentially hazardous pathological materials; and 6. decontamination and disposal of infectious material. The training shall include a review of relevant standards of the Ministry of Public Health (MOPH) standards and institution-specific procedures. In addition, one of the duties of the biosafety officer is to verify that all staff have received appropriate biosafety training [1].

[1] Ministry of Public Health, Department of Research. "Biosafety Guidelines for Research Laboratories". [https://www.moph.gov.qa/Admin/Lists/Services%20Attachments/Attachments/45/Biosafety%20Guidelines%20for%20Research%20Laboratories.pdf]. Accessed 22 September 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 Qatar has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential, and/or dual-use research. In addition, there is no evidence that an ongoing assessment of research efforts is occurring within the Ministry of Public Health, Ministry of Municipality and Environment, or the Ministry of Defence [1,2,3]. No evidence was found via the Verification Research, Training, and Information Centre (VERTIC) database [4]. Although Qatar has submitted a Confidence Building Measures report almost every year up to 2020, access to the reports is restricted to the public and it is unknown if they contain information on this matter [5].

[1] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 22 September 2020.
[2] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 22 September 2020.
[3] Minister of State for Defence Affairs, Qatar. [https://www.gco.gov.qa/en/ministries/minister-of-state-for-defence-affairs/]. Accessed 22 September 2020.
[4] Verification Research, Training, and Information Centre (VERTIC) Database, Qatar. [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/q/]. Accessed 22 November 2020.
[5] Biological Weapons Convention. "Confidence Building Measures." [https://bwc-ecbm.unog.ch/state/qatar]. Accessed 22 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: 1

There is sufficient evidence of legislation and/or regulation requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. Law No. 4 of 2016 on Biological Weapons prohibits individuals from producing or utilizing biological weapons or deadly toxins, including dual-use research, without express authorization from the Ministry of Defence. Moreover, Article 2 of the Law prohibits the development of any biological weapon; the transformation of any biological element, pathogen, or toxin into a possible weapon or threat; and to use biological weapons. The second section of Article 4 provides information about oversight of research: "All licensed research centers for dangerous pathogens must provide annual reports (or upon request or inspection) to the National Committee for the Control of Weapons. The report must include all the activities being run, all inputs and outputs of dangerous pathogens defined in the chart of sensitive pathogens and toxins." [1].

[1] Minister of State for Defence Affairs. "Law No.4 of 2016 on Biological Weapons". [https://www.almeezan.qa/LawView.aspx?opt&LawID=6985&language=ar]. Accessed 22 September 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: 1

There is evidence that there is an agency responsible for oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. According to Law no. 4 of 2016, the National Committee for the Prohibition of Weapons is in charge of oversight and reporting on the development of any potential biological weapon. It reports directly to the Ministry of Defence, executively responsible for licensing the development of biological elements and sanctioning in case of violation of the law. Article 4 provides information about oversight of research:"All licensed research centers for dangerous pathogens must provide annual reports (or upon request or inspection) to the National Committee for the Control of Weapons. The report must include all the activities being run, all inputs and outputs of dangerous pathogens defined in the chart of sensitive pathogens and toxins" [1].

[1] Minister of State for Defence Affairs. "Law No. 4 of 2016 on Biological Weapons". [https://www.almeezan.qa/LawView.aspx?opt&LawID=6985&language=ar]. Accessed 22 September 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 publicly available evidence of national guidelines governing the screening of synthesized DNA before it is sold in Qatar. A public-private research partnership, The Qatar Genome Program drafted a national policy alongside the Ministry of Public Health that provides guidelines on conducting genetic research in Qatar called "Guidance for the Design, Ethical Review, and Conduct of Genomic Research in Qatar" [1], but these policies both have to do with individual privacy protections and other ethical considerations and not specimen quality or safety control. The Ministry of Public Health "Guidelines For Gene Transfer Research in Humans" do provide some biosafety conditions, such as review by the National Committee on Biosafety before human clinical tests can occur, although there are no specific requirements on the sale of synthesized genetic material [2]. There is no further public evidence of synthesized DNA policies having been instituted on the websites of the Qatar Legal Portal, Ministry of Public Health, Ministry of Municipality and the Environment, or the Ministry of the Interior [3, 4, 5, 6]. Although Qatar has submitted a Confidence Building Measures report almost every year up until 2020, access to the reports is restricted to the public and it is unknown if they contain information on this matter [7]. Furthermore, no evidence was found via the Verification Research, Training, and Information Centre (VERTIC) database [8].

[1] Ministry of Public Health of the State of Qatar. "Guidance for the Design, Ethical Review, and Conduct of Genomic Research in Qatar". [https://www.moph.gov.qa/about-us/Documents/research/Guidance%20for%20the%20Design%2c%20Ethical%20Review%2c%20and%20Conduct%20of%20Genomic%20Research%20in%20Qatar.pdf]. Accessed 23 September 2020.
[2] Ministry of Public Health of the State of Qatar. "Guidelines for Gene Transfer Research in Humans". [https://www.moph.gov.qa/about-us/Documents/research/Guidelines%20for%20Gene%20Transfer%20Research%20in%20Humans.pdf]. Accessed 23 September 2020.
[3] Al Meezan Qatar Legal Portal. [http://www.almeezan.qa/]. Accessed 23 September 2020.
[4] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 23 September 2020.

[5] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 23 September 2020.
[6] Ministry of the Interior of the State of Qatar. [https://portal.moi.gov.qa/]. Accessed 23 September 2020.
[7] Biological Weapons Convention. "Confidence Building Measures." [https://bwc-ecbm.unog.ch/state/qatar]. Accessed 13 October 2020.
[8] Verification Research, Training, and Information Centre (VERTIC). "Qatar Database Page". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/q/]. Accessed 13 October 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: 1

The national laboratory system of Qatar has the capacity to conduct diagnostic tests for at least 5 of the 10 Wcore tests defined by the World Health Organization (WHO), although the specific tests are not named. The Joint External Evaluation (JEE) for Qatar, conducted in May and June 2016, observed that "The laboratory system in place can detect at least 5 of the 10 core tests identified by the IHR (human immunodeficiency virus (HIV), influenza, plasmodia, salmonella, and tuberculosis)" [1]. The JEE and the Ministry of Public Health website [2] did not specify which four diseases were country-specific. Furthermore, the website of the Hamad Medical Corporation Communicable Disease Centre indicates that it is capable of testing for some of the 10 enumerated diseases, including tuberculosis and influenza [3].

[1] World Health Organization (WHO). "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 23 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 23 September 2020.
[3] Hamad Medical Corporation. "Communicable Disease Center". [https://www.hamad.qa/EN/Hospitals-and-services/Facilities%20Master%20Plan/Recent%20Openings/Pages/Communicable-Disease-Center.aspx]. Accessed 23 September 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: 1

There is evidence that there is a document for conducting testing during a public health emergency, which mentions directions to be taken for testing for scaling capacity but is specific to one disease (COVID-19).

To deal with laboratory surge capacity for testing, the national COVID-19 response plan outlines the need to source PCR Testing for COVID-19 at the virology lab at HMC with the capacity to perform the required tests with the cooperation of the Ministry of Public Health, the Ministry of Finances, the Ministry of Commerce & Industry, the private Health care sector, and

Qatar Petroleum. The plan includes developing and implementing surge plans, incorporating Hamad Medical Corporation, private and government sector capacity, to manage increased demand for testing. It also sets requirements to adopt and disseminate standard operating procedures (as part of disease outbreak investigation protocols) for specimen collection, management, and transportation for COVID 19 diagnostic testing [1]. However, the plan does not provide further detail on strategy, implementation, or objective setting. Further, there is no evidence of plans for dealing with novel pathogens and defining goals for testing on the websites of the Ministry of Public Health and the Ministry of Environment [3,4].

Furthermore, in the action plan for tackling COVID-19, it is mentioned that the Ministry of Public Health produced "Qatar National Preparedness and Response Plan for Communicable Diseases" in 2019 adopting Pandemic Influenza Risk Management WHO Interim Guidance of 2013 standards [1]. However, there is no evidence of public access to the plan therefore the content remains unknown. Finally, there are no mentions of scaling capacity and defining goals for testing in the Qatar Public Health Strategy 2017–2022 emergency response section, and the action plan for COVID-19 is disease-specific [2].

[1] Ministry of Public Health. "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19%20REPORT%20WEB.pdf]. Accessed 23 September 2020.
[2] Ministry of Public Health. "Qatar Public Health Strategy 2017-2022". [https://www.moph.gov.qa/english/strategies/Supporting-Strategies-and-Frameworks/QatarPublicHealthStrategy/Pages/default.aspx]. Accessed 23 September 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 13 October 2020.
[4] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 13 October 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 evidence that the national laboratory that serves as a reference facility that is accredited. The Joint External Evaluation (JEE), conducted in May and June 2016, indicates that "The Hamad Medical Corporation laboratory is an advanced internationally accredited laboratory." Furthermore, the report notes that "[p]ublic sector laboratories under the Supreme Council of Health, accredited according to international standards such as the College of American Pathologists or the National Influenza Centre, are recognized by WHO" [1]. Hamad's Department of Laboratory Medicine and Pathology (DLMP) completed an inspection by the College of American Pathologists (CAP) in April 2014 and accreditation was confirmed in the summer 2014. CAP accreditation concerns proficiency testing, quality control of procedures, staff qualifications, safety programs and overall management [2]. Hamad Medical Corporation (HMC), the main national provider of hospital care, is managed directly by the Minister of Public Health [3].

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 23 September 2020.

[2] Hamad Medical Corporation. "Our Accreditations". [https://www.hamad.qa/EN/About-Us/Our-Accreditations/Pages/default.aspx]. Accessed 23 September 2020.
[3] Hamad Medical Corporation, "HE Dr. Hanan Mohamed Al Kuwari". [https://www.hamad.qa/EN/Education-and-research/Academic-Health/About/Decision-Making-Structure/Pages/HE-Dr-Hanan-Mohamed-Al-Kuwari.aspx]. Accessed 23 September 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: 0

There is no evidence that there is a national laboratory that serves as a reference facility subject to external quality assurance review in Qatar. Although the Hamad Medical Corporation laboratory is a reference laboratory for tuberculosis, there is no evidence that it is subject to an external quality assurance review [1]. In addition, there is no publicly available information regarding ongoing external reviews being conducted within lists of its various international accreditations [2]. The Joint External Evaluation (JEE), conducted in May and June 2016, highlighted the need for Qatar to implement a national system for quality assurance and there is no other evidence to suggest that this need has subsequently been addressed [3]. Further, there is no indication of a reference facility that is subject to external quality assurance review on the websites of the Ministry of Health or Ministry of Municipality and the Environment websites [4, 5].

[1] Hamad Medical Corporations. "National Reference Laboratory." [https://www.hamad.qa/EN/your%20health/Tuberculosis/National/Reference/Laboratory/Pages/default.aspx]. Accessed 23 September 2020.
[2] Hamad Medical Corporation. "Our Accreditations". [https://www.hamad.qa/EN/About-Us/Our-Accreditations/Pages/default.aspx]. Accessed 23 September 2020.
[3] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of the State of Qatar". 29 May-2 June 2016. [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 23 September 2020.
[4] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 23 September 2020.
[5] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 23 September 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: 1

There is public evidence of a nationwide specimen transport system in place in Qatar. According to the Joint External Evaluation (JEE), conducted in May and June 2016, Qatar scored a 4 (out of 5) in question D.1.2. The question concerns specimen referral and transport system. In addition, the JEE mentions that "[a] specimen transportation mechanism exists exists for the public sector" and the Primary Health Care Corporation (PHCC), and "[i]nternational transport regulations are

followed and staff are trained." In addition, "staff are trained in public laboratories on the transport of infectious substances according to United Nations regulations" [1]. Hamad Medical Corporation provided Standard Operating Procedures (SOP) for "Laboratory Specimen Receiving, Handling, and Transportation" that were published in March 2018 and employed the use of trained couriers and electronic tracking with special certification required for the shipping of infectious materials [2].

[1] World Health Organization (WHO). "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf].
[2] Hamad Medical Corporation. "Laboratory Specimen Receiving, Handling, and Transportation". [https://www.hamad.qa/EN/Hospitals-and-services/Hamad-General-Hospital/Hospital-Services/Clinical-Departments/Documents/LABORATORY/SPECIMEN/RECEIVING_HANDLING_AND_TRANSPORTATION_/2018-2020-/lab/guide.pdf]. Accessed 24 September 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 evidence of 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. According to the Covid-19 Qatar National Response Plan published in March 2020 by the Ministry of Public Health, a strategy to extend testing beyond hospital capacity has not yet begun. However, the plan indicates that the development and implementation of surge plans—incorporating HMC, PHCC, private and government sector capacity—to manage increased demand for testing is in progress. It is also only speciifc to COVID-19 [1]. There is no evidence of such plans on the websites of the Ministry of Public Health or the Ministry of Municipality and Environment or on the Health Emergency's Department page [2,3,4].

[1] Ministry of Public Health. "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19%20REPORT%20WEB.pdf] Accessed 24 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx].
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2].
[4] Ministry of Public Health, Health Emergency Department. [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx].

2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a

Is there evidence that the country is conducting ongoing event-based surveillance and analysis for infectious disease?

Yes, there is evidence of ongoing event-based surveillance and evidence that the data is being analyzed on a daily basis = 2, Yes, there is evidence of ongoing event-based surveillance, but no evidence that the data are being analyzed on a daily basis = 1, No = 0

Current Year Score: 0

There is no publicly available information that the emergency operations centre in Qatar conducts ongoing event-based surveillance unit (EBS) and that the data is being analysed on a daily basis. According to the Joint External Evaluation (JEE), conducted in May and June 2016, Qatar has an emergency operations centre in place [1]. However, the JEE does not mention its event-based surveillance capability and more broadly states, "[i]ndicator-based surveillance has been functioning in the country for some time, while event-based surveillance is a new phenomenon in the early stages of implementation, and requires more training and stakeholder involvement" [1]. Qatar's emergency operations centre, the National Command Centre (NCC), operates from within the Ministry of the Interior; it works alongside multiple other governmental entities, including the Hamad Medical Corporation and the Ministry of Public Health, to respond to a wide array of potential emergencies in a dynamic manner [2]. The NCC responds to calls from the public, triggered alarm systems, and other geographic information systems to respond to various incidents that may arise [2]. However, it is unclear whether any of these systems analyze data on a daily basis. There is no additional indication of an emergency operations centre that includes ongoing EBS that analyzes data on a daily basis on the websites of the Ministry of Health, Ministry of Municipality and the Environment, Ministry of the Interior, or Hamad Medical Corporation [3, 4, 5, 6].

[1] World Health Organization (WHO). "Joint External Evaluation of IHR Core Capacities of the State of Qatar". 29 May-2 June 2016. [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 14 October 2020.
[2] Ministry of the Interior of the State of Qatar. "National Operations Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 14 October 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 14 October 2020.
[4] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 14 October 2020.
[5] Ministry of the Interior of the State of Qatar. [https://portal.moi.gov.qa/]. Accessed 14 October 2020.
[6] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 14 October 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: 1

There is publicly available evidence that the country reported a potential public health emergency of international concern (PHEIC) to the World Health Organization (WHO) within the last two years. Qatar reported a case of Middle East respiratory syndrome coronavirus (MERS-CoV) on March 12, 2020. Since 2012, including this case, Qatar has reported 23 human cases of MERS-CoV to the WHO [1]. There is publicly available evidence that Qatar is closely liaising with the WHO on coordination for the COVID-19 crisis. According to the COVID-19 response plan, Qatar is "devising and declaring a national response plan, undertaking national intelligence and planning, including liaising with WHO and other international bodies responsible for providing high-level advice and recommendations to national authorities." [2]. However, there is no evidence that Qatar reported COVID-19 as a potential PHEIC.

[1] World Health Organisation (WHO). "Middle East Respiratory Syndrome Coronavirus (MERS-CoV)—Qatar, Disease Outbreak News, 12 March 2020". [https://www.who.int/csr/don/12-march-2020-mers-qatar/en/] Accessed 14 October 2020.
[2] Ministry of Public Health. "COVID-19 Qatar National Response Plan".

[https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 24 September 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: 1

There is evidence that the government operates an electronic reporting surveillance system at both the national and sub-national level. The Primary Health Care Corporation (PHCC), in collaboration with Qatar's Ministry of Public Health (MoPH), developed an electronic system to notify communicable diseases—the Electronic Communicable Disease Notification System (ECDNS). The ECDNS electronically reports notifiable communicable diseases as mandated by the MoPH. The ECDNS uses automated data extraction and electronic communications to report notifiable conditions to MoPH. The physician fills a form capturing necessary information, which generates an electronic notification at the MoPH. The MoPH system pulls electronic notification records from the PHCC staging area and imports them into its national surveillance system for contact tracing and investigation [1]. There is evidence of implementation of the system on the website of the Hamad Medical Corporation [2].

[1] Cerner. "Electronic Communicable Disease Notification System". [https://www.cerner.com/ae/en/client-achievements/primary-health-care-corporation-electronic-communicable-disease-notification-system]. Accessed 24 September 2020.
[2] Hamad Medical Corporation, "My Health Patient Portal" [https://www.hamad.qa/EN/Patient-Information/Patient-Portal/Pages/default.aspx]. Accessed 26 November 2020.

2.3.2b

Does the electronic reporting surveillance system collect ongoing or real-time laboratory data?
Yes = 1 , No = 0

Current Year Score: 1

The Electronic Communicable Disease Notification System (ECDNS) system is considered a real-time reporting surveillance system of laboratory data. The electronic forms filled by the physician to signal a new communicable disease cases are extracted automatically at 30-minute intervals to a staging database in the Primary Health Care Corporation (PHCC). The Ministry of Public Health system pulls electronic notification records from the PHCC staging area and imports them into its national surveillance system for contact tracing and investigation [1]. There is evidence of implementation of the system on the website of the Hamad Medical Corporation [2].

[1] Cerner. "Electronic Communicable Disease Notification System". [https://www.cerner.com/ae/en/client-achievements/primary-health-care-corporation-electronic-communicable-disease-notification-system]. Accessed 24 September 2020.
[2] Hamad Medical Corporation. "My Health Patient Portal." [https://www.hamad.qa/EN/Patient-Information/Patient-Portal/Pages/default.aspx]. Accessed 26 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: 2

Electronic health records (EHRs) are commonly in use in Qatar. The Cerner surveillance system has been in application and usage since April 2018 [1]. However, the National Health Strategy published by the MoPH indicates that a national target to be realised by 2022 is the full enforcement of real-time systems in effect to ensure compliance with International Health Regulations for surveillance and response, to include supporting readiness for mass gatherings, such as the Qatar 2022 World Cup [2]. Furthermore, the Joint External Evaluation (JEE) highlighted that while the data client-based system Cerner software for patient profiling is in the process of being implemented, its access is still limited and its use for disease surveillance has yet to be evaluated [3]. Qatar has widely adopted EHRs across its Hamad Medical Corporation system which serves the majority of its residents. The implementation of electronic health records began in 2015 and has since become a part of every department at the Hamad Medical Corporation, as well as other systems. According to one EHR provider in Qatar, "when Hamad Medical Corporation and Primary Health Care Corporation decided to go digital, they worked together to create a one-of-a-kind, country-wide EHR. The two health systems are based in Doha, Qatar, and together serve more than 90 percent of the country's population of 2.3 million people. Over the last four years HMC and PHCC have deployed a full suite of clinical, administrative and financial solutions across eight different hospitals, 23 health centres and a variety of clinics and other venues of care." [4]. As recorded in the Qatar Tribune, a Hamad Medical Corporation executive stated that the system has "moved greatly in establishing a comprehensive electronic system and we are dealing with patient records from A to Z, from admission to discharge, both at inpatient and outpatient level." [5]. The Ministry of Public Health currently aims to make electronic records ubiquitous through its e-Health initiative [6]; moreover, it reported in its National Health Strategy 2018–2022 that the Primary Health Care Corporation and Hamad Medical Corporation had already succeeded in doing so [7].

[1] Cerner. "Electronic Communicable Disease Notification System." [https://www.cerner.com/ae/en/client-achievements/primary-health-care-corporation-electronic-communicable-disease-notification-system]. Accessed 24 September 2020.
[2] Ministry of Public Health, "Qatar Public Health Strategy 2017– 2022" [https://www.moph.gov.qa/english/strategies/Supporting-Strategies-and-Frameworks/QatarPublicHealthStrategy/Pages/default.aspx]. Accessed 24 September 2020.
[3] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 24 September 2020.
[4] NTT Data. 23 August 2017. "Two Health Systems in Qatar Partner on a Nation-wide EHR to Enhance Quality of Care". [https://us.nttdata.com/en/blog/2017/august/two-health-systems-in-qatar-partner-on-a-nationwide-ehr-to-enhance-quality-of-care]. Accessed 14 October 2020.
[5] Qatar Tribune. 4 April 2018. "Electronic Health Record System a Success". [http://www.qatar-tribune.com/news-details/id/119365]. Accessed 14 October 2020.
[6] Ministry of Public Health of the State of Qatar. "eHealth and IT". [https://www.moph.gov.qa/about-us/Pages/ehealth-n-it.aspx]. Accessed 14 October 2020.

[7] Ministry of Public Health of that State of Qatar. "National Health Strategy 2018-2022". [https://www.moph.gov.qa/HSF/Documents/short%20report%20eng%2020.03.2018.pdf]. Accessed 14 October 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: 1

The national public health system does have access to electronic health records (EHRs) of individuals in their country. Qatar's implementation of EHRs began in 2015; these records have since become a part of every department at the Hamad Medical Corporation, which serves the majority of its patients as well as other systems. According to one EHRs provider in Qatar, "When Hamad Medical Corporation and Primary Health Care Corporation decided to go digital, they worked together to create a one-of-a-kind, country-wide EHR. The two health systems are based in Doha, Qatar, and together serve more than 90 percent of the country's population of 2.3 million people. Over the last four years Hamad Medical Corporation and Primary Health Care Corporation have deployed a full suite of clinical, administrative and financial solutions across eight different hospitals, 23 health centres and a variety of clinics and other venues of care." [1]. As reported by the Qatar Tribune, a Hamad Medical Corporation executive stated that the system has "moved greatly in establishing a comprehensive electronic system and we are dealing with patient records from A to Z, from admission to discharge, both at inpatient and outpatient level." [2]. The Ministry of Public Health reported in its National Health Strategy 2018–2022 that the Primary Health Care Corporation and Hamad Medical Corporation, the two largest providers of healthcare in Qatar, had fully integrated access to electronic records [3, 4].

[1] NTT Data. 23 August 2017. "Two Health Systems in Qatar Partner on a Nationwide EHR to Enhance Quality of Care". [https://us.nttdata.com/en/blog/2017/august/two-health-systems-in-qatar-partner-on-a-nationwide-ehr-to-enhance-quality-of-care]. Accessed 26 November 2020.
[2] Qatar Tribune. 4 April 2018. "Electronic Health Record System a Success". [http://www.qatar-tribune.com/news-details/id/119365]. Accessed 26 November 2020.
[3] Ministry of Public Health of the State of Qatar. "eHealth and IT". [https://www.moph.gov.qa/about-us/Pages/ehealth-n-it.aspx]. Accessed 26 November 2020.
[4] Ministry of Public Health of that State of Qatar. "National Health Strategy 2018-2022". [https://www.moph.gov.qa/HSF/Documents/short/report/eng/2020.03.2018.pdf]. Accessed 26 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 no publicly available information regarding the data standards employed by Qatar for its health records. There is no information regarding particular standards to which patient health information is collected, held, and protected in the Ministry of Public Health, Hamad Medical Corporation, the Primary Health Care Corporation, or the Qatar legal portal, although Qatar has identified better data standards on its electronic platforms as a goal for its National Health Strategy 2018–2022 [1,2,3,4,5].

[1] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/ar/Pages/default.aspx]. Accessed 26 November 2020.

[2] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 26 November 2020.
[3] Al Meezan Qatar Legal Portal. [http://www.almeezan.qa/Default.aspx]. Accessed 26 November 2020.
[4] Primary Health Care Corporation. [https://www.phcc.qa/portal_new/index/index.php?limit=home]. Accessed 26 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: 0

There is no publicly available information regarding formal mechanisms for data sharing and integration across animal, human, and wildlife health surveillance in place in Qatar. According to the Joint External Evaluation (JEE), conducted in May and June 2016, "The public health and animal health sectors have jointly identified four priority zoonotic diseases (bovine tuberculosis, brucellosis, MERS-CoV, and rabies) for surveillance and are coordinating surveillance activities for MERS-CoV. Further efforts are needed to formalize surveillance systems for all priority zoonotic diseases." However, the JEE also notes "data sharing, collaboration and communication among the public health and veterinary sectors are not systematic or formal" [1]. There is no further evidence regarding a formal mechanism for data sharing via the Ministry of Public Health, Ministry of Municipality and Environment or the Hamad Medical Corporation [2,3,4].

[1] World Health Organisation (WHO). 29 May– 2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 25 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 25 September 2020.
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 25 September 2020.
[4] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 25 September 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 publicly available evidence that Qatar makes de-identified health surveillance data on the number of cases of disease outbreaks available on the website of the Ministry of Public Health website. There is no indication that on the websites of the Ministry of Public Health, [1] Ministry of Municipality and the Environment, [2] or Hamad Medical Corporation [3] that Qatar makes de-identified health surveillance data available publicly.

[1] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 14 October 2020.
[2] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 14 October 2020.
[3] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. 14 October 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

There is evidence that the country 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. The country has a dedicated website created by the Ministry of Public Health, which updates on a daily basis the total number of people tested, total number of current active cases, total number of recovered patients, total number of deaths, total number of people currently under acute hospital care, and the total number of people in Intensive Care Units dedicated exclusively to COVID-19 cases. These numbers are also presented for the last 24 hours as opposed to the total [1].

[1] Ministry of Public Health. "COVID-19 Website". [https://covid19.moph.gov.qa/EN/Pages/default.aspx]. Accessed 25 September 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: 0

Qatar does not have a data confidentiality regime in place for identifiable health information as it relates to health surveillance. A recent law, Law No. 13 of 2016 "Promulgating the Protection of the Privacy of Personal Data Law," [1] governs data privacy but the overarching Article 2 that applies to all the data mentioned in the law states that it "does not apply to personal data processed by individuals privately or within a family context, or to any personal data gathered for official surveys and statistics." Furthermore, Article 16 on the usage of health data states that health data may be used by a third party as long as the third party is granted authority from the relevant authority (Ministry of Public Health in this case) but does not mention consent from the individual [1]. There is no reference to laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for owners via the Ministry of Public Health, [2] the Ministry of Municipality and Environment [3], or the national repository of laws and regulations [4]. The Hamad Medical Corporation has a patients' rights document that includes the right to "[h]ave all records pertaining to a patient's medical care treated as confidential," but these rights are not specific to data gathered during surveillance activities [5].

[1] Al Meezan Qatar Legal Portal. "Law No. 13 of 2016, Law Promulgating the Protection of the Privacy of Personal Data". [http://www.almeezan.qa/LawPage.aspx?id=7121&language=ar]. Accessed 26 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa]. Accessed 26 September 2020.

[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox]. Accessed 26 September 2020.
[4] Al Meezan Qatar Legal Portal. [http://www.almeezan.qa/]. Accessed 26 September 2020.
[5] Hamad Medical Corporation. "Patients and Family Rights and Responsibility". [https://www.hamad.qa/EN/Hospitals-and-services/The-Cuban-Hospital/Patients-and-Visitors/General_information/Pages/Patients-and-Family-Rights-and-Responsibility.aspx]. Accessed 26 September 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: 0

There is no evidence that legislation and/or regulations safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, includes mention of protections from cyber attacks (e.g., ransomware). A recent law, Law No. 13 of 2016 "Promulgating the Protection of the Privacy of Personal Data Law," [1] governs data privacy but it "does not apply to personal data processed by individuals privately or within a family context, or to any personal data gathered for official surveys and statistics." [1]. Although this law does not explicitly provide for protection against cyberattacks, it mandates that holders of such data take "appropriate administrative, technical and material precautions to protect personal data, as determined by the competent department," which could include appropriate protective measures for electronic storage. [1] The Hamad Medical Corporation's "Patient and Family Bill of Rights and Responsibilities" does not contain protections from cyberattacks [2]. In addition, Qatar's Cyber Security Strategy, published in May 2014, mentions protections for critical healthcare systems, but it does not explicitly mention the protection of de-individualized health data [3]. There is no other indication of guidelines that safeguard the confidentiality of identifiable health information in Qatar including protection from cyberattack through the Ministry of Public Health [4].

[1] Al Meezan Qatar Legal Portal. "Law No. 13 of 2016, Law Promulgating the Protection of the Privacy of Personal Data". [http://www.almeezan.qa/LawPage.aspx?id=7121&language=ar]. Accessed 26 September 2020.
[2] Hamad Medical Corporation. "Patient and Family Bill of Rights and Responsibilities". [https://www.hamad.qa/EN/Hospitals-and-services/The-Cuban-Hospital/Patients-and-Visitors/General_information/Pages/Patients-and-Family-Rights-and-Responsibility.aspx]. Accessed 15 October 2020.
[3] Qatar National Cyber Security Strategy. May 2014. [http://www.motc.gov.qa/sites/default/files/national_cyber_security_strategy.pdf]. Accessed 15 October 2020.
[4] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 15 October 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 insufficeint evidence that Qatar has made a commitment via public statements, legislation, and/or a cooperative agreement to share surveillance data during a public health emergency with other countries in the region.

On March 14, 2020, the Ministers of Health of the Gulf Cooperation Council (GCC) met to discuss coordination of efforts regarding the COVID-19 pandemic. They made a commitment to share statistics and data as they highlighted the importance of such measures. They also discussed the possibility of creating a joint operations room to cooperatively monitor the evolution of the pandemic in the region and provide common solutions [1]. During the High-Level Meeting of the General Assembly to Commemorate the 75th Anniversary of the United Nations, Amir H H Sheikh Tamim bin Hamad Al-Thani stated that the "pandemic reminds us cooperation and joint action inevitable to address global challenges" [2]. This has been demonstrated through the Qatar-China cooperation in tackling Covid-19, notably in the fields of information-sharing, providing experience in prevention and control, as well as diagnosis and treatment [3].

Evidence of cooperation with other countries include the plasma that was flown to Italy in June as the result of partnership between Qatar Foundation, Hamad Medical Corporation, and the Embassy of Italy in Doha. According to Dr. Lucio Rispo, CEO of Sardinia Healthcare and Research Properties, the samples are being analyzed at the University Cattolica del Sacro Cuore in Rome and the Mater Olbia Hospital in Sardinia [4]. Regionally, Qatar made a committment on June 17, 2002, during the third meeting for the Gulf ministries of Health to share protocols and data on COVID-19 [5]. There is also evidence that Qatar has made and enacted commitments of sharing data on other diseases such as MERS-Cov: "The commitment of the MoPH and MME in Qatar to the One Health approach that governed the response to MERS-CoV was largely due to the previous experiences with SARS and H1N1 pandemic as these experiences helped to show the feasibility and advantages of joint efforts to policy-makers. The joint strategic technical collaboration between the Qatari authorities and the international technical bodies such as the WHO, FAO, CDC, PHE and EMC have greatly facilitated the preparation and implementation of the road map." [6].

[1] Ministry of Health of Oman." First the First Time, an Online Meeting Between the Ministers of Health of the Gulf". [https://www.moh.gov.om/ar/-/--1259]. Accessed 23 November 2020.
[2] The Peninsula. "Qatar—Covid-19 Pandemic Reminds us Cooperation and Joint Action Inevitable to Address Global Challenges: Amir tells UN High-Level Meeting (full speech)". [https://menafn.com/1100832830/Qatar-Covid-19-pandemic-reminds-us-cooperation-and-joint-action-inevitable-to-address-global-challenges-Amir-tells-UN-High-Level-Meeting-full-speech]. Accessed 26 September 2020.
[3] Gulf Times. "Qatar-China Cooperation in Tackling Covid-19 is an Example for Others: Envoy". [https://www.gulf-times.com/story/665528/Qatar-China-cooperation-in-tackling-Covid-19-is-an-example-for-others-envoy]. Accessed 26 September 2020.
[4] Qatar Foundation. "Hopes High for COVID-19 Research Progress Following Qatar-Italy Cooperation". [https://www.qf.org.qa/stories/hopes-high-for-covid-19-research-progress-following-qatar-italy-cooperation]. Accessed 26 September 2020.
[5] Al Arab. "Qatar Participates in Third Exceptional Meeting of the comittee of Health Ministries of the Gulf". [https://alarab.qa/article/17/06/2020/1516498]. Accessed 15 October 2020.
[6] El Moubasher.F et al., 2019. "Qatar Experience on One Health Approach for Middle-east Respiratory Syndrome Coronavirus, 2012–2017: A Viewpoint". [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6462540/]. Accessed 4 May 2021.

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

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

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

Current Year Score: 0

There is insufficient evidence that there is 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, but only in response to an active public health emergency (COVID-19).

According to the National COVID-19 Response Plan, a system is under development to provide support for the healthcare system in contact tracing, but it is not made public yet and seems to be COVID-19 specific. Qatar has developed quarantine facilities dedicated solely to managing contacts repatriated from high local transmission areas Identify criteria for quarantine for contacts. Guidelines for managing the protected and unprotected exposure of healthcare workers were developed as part of the national interim Infection Prevention and Control guidelines for COVID-19. At the local level, the Minsitry of Public Health (MoPH) has developed guidelines for managing contacts in quarantine facilities and home quarantine. Municipalities have also conducted contact tracing in the community. However, all these measures are specific to the plan developed for COVID-19 and there is no mention of it being applicable to other plans [1]. The MOPH, the department of health emergencies, and the Hamad Medical Corporation's website make no mention of such procedures [2,3,4].

[1] Ministry of Public Health. "COVID-19 Qatar National Response Plan". https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 4 May 2021.
[2] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx].
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx].Accessed 4 May 2021.
[4] Ministry of Public Health, Health Emergency Department. [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx].Accessed 4 May 2021.

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 insufficient evidence that Qatar provides medical and economic 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. However, there is evidence that Qatar has provided wraparound medical services for covid-19.

According to an analysis published in the International Journal of Medical Reviews and Case Reports, "the medical treatment, including the quarantine facilities offered to all patients, including the expat population, was at no cost whatsoever and was completely sponsored by the ministry of health. Patients who had suspected symptoms of COVID-19 presented to the Nodal COVID centres for testing. They had an RT-PCR oropharyngeal/nasopharyngeal swab tests and were directed to be home quarantined until the results were declared. Highly suspicious patients were instructed to be quarantined for 14 days irrespective of the results of their tests. The COVID positive patients were contacted by the MOPH teams via phone calls and were instructed to come back to the COVID Centres for further investigations. A clinical decision by the medical team was then made to either refer the patient to a quarantine centre or admit the patient to one of the COVID hospitals, depending on the severity and the need of the patient at the time. If the patient was deemed to be not highly infective and if the patient had home isolation facilities with personal space and private bathroom, they could be sent for home isolation under the Home Isolation Team comprising of doctors and nurses, who would follow-up them at home for any further medical needs as required" [1,2].

Further, economic support is not provided directly by the government. However, the Ministry of Administrative Development, Labor, & Social Affairs released an official statement directed to the employers and workers stating that "employers must continue to pay basic salaries and other allowances, such as food and housing, as per their contract in sectors, activities and services whose businesses have not stopped due to the precautionary measures to combat the spread of the Coronavirus (COVID-19). Furthermore, the report states that "All workers who are isolated or quarantined who are receiving treatment shall receive their basic salary and allowances regardless of whether they are entitled to sick leave or not." For the sectors that have followed government instructions to cease services due to the precautionary measures to prevent the spread of the Coronavirus (COVID-19), employers and workers can agree that workers take unpaid leave, apply their annual leave, or reduce working hours, in the following manner: In cases where employers provide food and/or housing directly, they must continue to provide food and housing free of charge to workers. Employers and workers cannot agree to cancel or reduce these benefits." On the food security front, the General Authority of Customs in addressing the effects of the coronavirus (COVID-19) pandemic has issued a directive exempting food and medical equipment from customs duties for a period of six months [1]. There is no further evidence of such services for cases outside COVID-19 on the websites of the Ministry of Public Health, the Hamad Medical Corporation or the Primary Health Care Corporation [3,4,5].

[1] International Journal of Medical Reviews and Case Reports. "Analysis of Qatar's Successful Public Health Policy in Dealing with the Covid-19 Pandemic". November 2020. [https://www.researchgate.net/publication/347135483_Analysis_of_Qatar's_successful_public_health_policy_in_dealing_with_the_Covid-19_pandemic].
[2] Ministry of Public Health, "COVID-19 Website". [https://covid19.moph.gov.qa/EN/Pages/default.aspx]. Accessed 26 September 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 2 December 2020.
[4] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 2 December 2020.
[5] Primary Health Care Corporation Website. [https://www.phcc.gov.qa/]. Accessed 2 December 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 de-identified data on contact tracing efforts is made public. The public website made for daily COVID-19 monitoring through dashboards and reports does not provide data on contact tracing [1]. Furthermore, there is no evidence that the application (Ehteraz). which is mandatory for all Qataris and residents and made for COVID-19 surveillance, makes the information collected on the application public in any manner [2].

[1] Ministry of Public Health, "COVID-19 Website". [https://covid19.moph.gov.qa/EN/Pages/default.aspx]. Accessed 28 September 2020.
[2] Gulf Times, "MoPH: Effective Contact Tracing Key to Covid-19 Response". [https://www.gulf-times.com/story/663120/MoPH-Effective-contact-tracing-key-to-Covid-19-response]. Accessed 28 September 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: 1

There is evidence that Qatar has 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 an active public health emergency, but only in response to an ongoing emergency.

The Ministry of Public Health has coordinated the implementation of the Covid-19 response plan at land and sea transportation and the implementation of response actions at the ports of entry along with the Ministry of Transport and Communication, Qatar Airways, Hamad International Airport, and the Civil Aviation Authority. Port measures to control the spread of COVID-19 by restricting entry have been enforced by the Ministry of Transport & Communications, Hamad International Airports, Ministry of Interior, Qatar Civil Aviation Authority. The implementation of additional screening for those coming from high cross-transmission countries has also been coordinated with the Ministry of Transport along with the development of quarantine facilities dedicated solely to managing contacts repatriated from high local-transmission areas [1]. Arrivals in to the State of Qatar are required to take a Coronavirus test upon arrival at the airport and to sign a formal pledge to adhere to quarantine at home for a week. Arrivals from other countries that are not included in the list of low-risk countries and in which there are no accredited COVID-19 testing centres will be required to quarantine in a hotel at their own expense for one week, provided that hotel accommodation is booked through the “Discover Qatar“ website before arriving in the State of Qatar. In addition, all arriving passengers will be asked to show the EHTERAZ application, complete a health assessment form preferably filled prior to arrival into Doha, and submitted upon arrival [2,3]. There is no additional evidence of a plan made public on the website of the General Authority of Customs [4].

According to the World Health Organization's (WHO) Joint External Evaluation (JEE) conducted in June of 2016, "Health facilities located at the points of entry are part of the national surveillance of communicable diseases; they have a direct communication link with the MoPH (Ministry of Public Health) including the IHR-NFP (Internation Health Regulation—National Focal Point). Standard operating procedures (SOPs) (according to national or international guidelines) are available for the management and transport of potentially infectious patients at the local level and points of entry." However, the JEE does not provide evidence that there is a 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 active or future public health emergencies [5].

[1] Ministry of Public Health. "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19%20REPORT%20WEB.pdf]. Accessed 28 September 2020.
[2] Government Communication Office of the State of Qatar. "Government Communications Office Statement on Qatar's Travel Policy During the Gradual Lifting of COVID-19 Restrictions". 21 July 2020. [https://www.gco.gov.qa/en/2020/07/21/government-communications-office-statement-on-qatars-travel-policy-during-the-gradual-lifting-of-covid-19-restrictions/]. Accessed 26 June 2021.
[3] Hamad International Airport. "COVID-19 Impact FAQs". [https://dohahamadairport.com/covid-19-impact-faqs]. Accessed 26 June 2021.
[4] General Authority of Customs, State of Qatar. [https://www.customs.gov.qa/english/pages/default.aspx]. Accessed 15 October 2020.
[5] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 29 September 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 sufficient evidence that Qatar has an applied epidemiology training program, such as a field epidemiology training program (FETP), and Qatar has an applied epidemiology training program in-country, but there is no evidence of resources available to send citizens abroad for training. According to the Joint External Evaluation (JEE), conducted in May and June 2017, "no FETP is available in the country, although the Liverpool School of Public Health and Tropical Medicine offers a six-month short course that could be considered as a basic applied program" [1]. A 2017 article by staff members of the Qatari health system also highlights that The Arab Board in Community Medicine offers a four-year program which covers field epidemiology and is stated as being the only locally available field training program [2,3]. There are no other more recent reports of other applied epidemiology programs in Qatar or funding provided to conduct field training abroad by the Ministry of Public Health, Qatar Foundation, Hamad Medical Corporation, or the Eastern Mediterranean Public Health Network that covers North Africa and the Middle East [4,5,6,7]. Qatar also does not participate in the Center for Disease Control (CDC) field epidemiology training programme (FETP) [7] or the Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) [8].

[1] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 28 September 2020.
[2] Bala, M., et al. 18 October 2017. "Qatar steps up to Global Health security: A Reflection on the Joint External Evaluation, 2016". Global Health Research and Policy. [https://pdfs.semanticscholar.org/568d/d96f69f07844df6ac84d80188eaa94c7b4c5.pdf]. Accessed 28 September 2020.
[3] Arab Board of Medical Specializations. "Community Medicine". [http://arab-board.org/en/content/community-medicine]. Accessed 28 September 2020.
[4] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 28 September 2020.
[5] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 28 September 2020
[6] The Eastern Mediterranean Public Health Network (EMPHNET). [http://emphnet.net/]. Accessed 28 September 2020.
[7] Qatar Foundation. "Student Research and Travel". [https://www.qf.org.qa/education/higher-education/student-research-and-travel]. Accessed 15 October 2020.
[8] Centers for Disease Control and Prevention. 2 May 2016. "Infographics: FETP: Disease Detectives in Action". [https://www.cdc.gov/globalhealth/healthprotection/resources/infographics/fetp-disease-detectives.html]. Accessed 28 September 2020.
[9] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs". [https://www.tephinet.org/training-programs]. Accessed 28 September 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: 0

The available field epidemiology training (FETP) programs available in Qatar are not explicitly inclusive of animal health professionals and there is no specific animal health field program. According to the Joint External Evaluation, conducted in May and June 2016, the limited FETP available in Qatar does not yet include animal health. It recommends that Qatar "[s]trengthen capacity for epidemiology, surveillance and outbreak investigations for zoonotic diseases and integrate veterinary staff in joint training programmes such as FETP" [1]. There was no publicly available information regarding an animal health field program at the Ministry of Public Health, the Ministry of Municipality and the Environment, the Hamad Medical Corporation, the Eastern Mediterranean Public Health Network (EMPHNET), or the Arab Board in Community Medicine, which provides local field training [2,3,4,5,6]. Qatar also does not participate in the Center for Disease Control's (CDC) animal health field epidemiology training programme (FETP) [7] or the Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) [8].

[1] World Health Organisation (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 28 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 28 September 2020.
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 28 September 2020.
[4] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 28 September 2020.
[5] Eastern Mediterranean Public Health Network (EMPHNET). [http://emphnet.net/]. Accessed 28 September 2020.

[6] Arab Board of Medical Specializations. "Community Medicine". [http://arab-board.org/en/content/community-medicine]. Accessed 28 September 2020.
[7] Centers for Disease Control and Prevention. 2 May 2016. "Infographics: FETP: Disease Detectives in Action". [https://www.cdc.gov/globalhealth/healthprotection/resources/infographics/fetp-disease-detectives.html]. Accessed 28 September 2020.
[8] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs". [https://www.tephinet.org/training-programs]. Accessed 28 September 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: 0

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 1

There is evidence that an overarching national public health emergency response plan is in place in Qata,r which addresses planning for multiple communicable diseases with epidemic or pandemic potential, but there is no evidence that it is made public. In the National Health Strategy, it is mentioned that there is a Qatar National Health Emergency Management Plan that has been developed, but is not yet implemented across the sector [1]. According to the Joint External Evaluation (JEE), conducted in May and June 2016, "Qatar has established the National Emergency Preparedness and Response Plan aligned to IHR, covering all hazards with special consideration for chemical, biological, radiological and nuclear (CBRN) threats, which are operationalized and implemented multisectorally, sectorally, and organizationally" [2]. The plan was developed by the Ministry of Public Health alongside its Emergency Preparedness and Response Plan (EPR) Department to oversee a program

for public health emergencies of international concern in accordance with the National Health Strategy 2018–2022, although the most recent document outlining the strategy from 20 March 2018 notes that "[t]he Qatar National Health Emergency Management Plan has been developed, but is not yet implemented across the sector" [3]. It is also not publicly available, as the page of the Ministry of Public Health dedicated to the plan is blank. However, there is a quick summary of what the Health Emergency department [4,5]. The only available health emergency response plan is specific to COVID-19 [5].

[1] Ministry of Public Health, "Qatar Public Health Strategy 2017-2022?" [https://www.moph.gov.qa/english/strategies/Supporting-Strategies-and-Frameworks/QatarPublicHealthStrategy/Pages/default.aspx]. Accessed 28 September 2020.
[2] World Health Organization (WHO). 29 May-2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 15 October 2020.
[3] Ministry of Public Health, Health Emergency Department, [https://www.moph.gov.qa/english/strategies/Supporting-Strategies-and-Frameworks/Pages/Qatar-National-Health-Emergency-Management-Plan.aspx#]. Accessed 28 September 2020.
[4] Ministry of Public Health, Health Emergency Department. [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx]. Accessed 28 September 2020.
[5] Ministry of Public Health "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19%20REPORT%20WEB.pdf]. Accessed 28 September 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: 1

The overall national public health emergency plan that is in place for Qatar has been updated within the past three years. According to the Ministry of Public Health's National Health Strategy 2018–2022, the Qatar National Health Emergency Management Plan has been developed, although it "is not yet implemented across the sector" as of March 20, 2018 [1]. There is no additional evidence to suggest that there is another plan for public health emergencies that has been updated within the past three years on the websites of the Ministry of Public Health, [2] the Ministry of the Interior's Permanent Committee for Emergency, [3] or the National Command Centre [4].

[1] Ministry of Public Health of the State of Qatar. 20 March 2018. "National Health Strategy 2018-2022". [https://www.moph.gov.qa/HSF/Documents/short%20report%20eng%2020.03.2018.pdf]. Accessed 20 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 20 October 2020.
[3] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 20 October 2020.
[4] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 20 October 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 evidence that the overarching plan includes consideration for pediatric or other vulnerable populations. In the National Health Strategy, it is mentioned that the is a Qatar National Health Emergency Management Plan that has been developed, but is not yet implemented across the sector [1]. It is also not made available publicly (therefore not possible if there are special considerations), the page of the Ministry of Public Health dedicated to the plan is blank; however, there is a quick summary of what the Health Emergency department is [2,3]. Furthermore, the only available health emergency response plan is specifc to COVID-19 [4]. There is no information regarding the specific details and priorities of the Qatar National Health Emergency Management Plan, because it is not publicly available through the Ministry of Public Health, [5] Ministry of Municipality and the Environment, [6] or Ministry of the Interior websites [7].

[1] Ministry of Public Health, "Qatar Public Health Strategy 2017 - 2022?" [https://www.moph.gov.qa/english/strategies/Supporting-Strategies-and-Frameworks/QatarPublicHealthStrategy/Pages/default.aspx]. Accessed 28 September 2020.
[2] Ministry of Public Health, "Qatar National Health Emergency Management Plan". [https://www.moph.gov.qa/english/strategies/Supporting-Strategies-and-Frameworks/Pages/Qatar-National-Health-Emergency-Management-Plan.aspx#]. Accessed 28 September 2020.
[3] Ministry of Public Health, Health Emergency Department. [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/healthemergencypreparedness/Pages/default.aspx]. Accessed 28 September 2020.
[4] Ministry of Public Health "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19%20REPORT%20WEB.pdf]. Accessed 28 September 2020.
[5] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx].
[6] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2].
[7] Ministry of Interior. [https://portal.moi.gov.qa/wps/portal/en]

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 evidence that the country has a specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response. The National Health Strategy 2018–2022 includes general reference to the private sector and the acknowledgement that "[s]uccessful implementation of this Strategy will require an effective governance and leadership structure to ensure high quality and safe health services, a more integrated model of care, enhanced private sector involvement...," but there is no specific mechanism for engagement with the private sector [1]. Moreover, there is no information regarding the specific details and priorities of the Qatar National Health Emergency Management Plan, which forms a component part of the National Health Strategy 2018–2022, because it is not publicly available through the websites of the Ministry of Public Health, [2] Ministry of Municipality and the Environment, [3] or Ministry of the Interior [4]. There is no additional evidence of formal engagement with the private sector via the Ministry of Public Health, [2] the Ministry of the Interior's Permanent Committee of Emergency, [5] or the National Command Centre [6]. The National COVID-19 Response Plan emphasizes the importance of working with the private sector to tackle the pandemic and places Key Performance Indicators (KPIs) and objectives to be reached in coordination with the private sector. Targets were put in place to ensure the engagement of the private sector. Private healthcare facilities were engaged in the education and awareness campaigns with regular communications afterwards for any updates Ministry of Public Health and Healthcare Providers, Ministry of Culture and Sport, and the private sector. It also went through the integration of the private sector into contingency planning. Private sector contingency plans accommodated the expected increased demand on their services as a result of preoccupation of the government sector with managing COVID-19. The plan clearly acknowledges that "it is essential that all organisations, both private and public, plan for the potential disruption that a pandemic will cause, including the impact of staff absenteeism" [7].

[1] Ministry of Public Health of the State of Qatar. 20 March 2018. "National Health Strategy 2018-2022". [https://www.moph.gov.qa/HSF/Documents/short%20report%20eng%2020.03.2018.pdf]. Accessed 15 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 15 October 2020.
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 15 October 2020.
[4] Ministry of the Interior of the State of Qatar. [https://portal.moi.gov.qa/]. Accessed 15 October 2020.
[5] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 15 October 2020.
[6] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 15 October 2020.
[7] Ministry of Public Health. "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19%20REPORT%20WEB.pdf]. Accessed 15 October 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 evidence that Qatar has a plan in place to implement NPIs during the current COVID-19 pandemic; however, it is not mentioned that it is applicable to other diseases [1].

The high-level policy paper published by the Ministry of Public Health detailing the criteria and requirements for NPIs is the National COVID-19 Response Plan. The following are a few examples of NPIs highlighted in the policy papers: (a) Regularly and thoroughly clean hands with an alcohol-based hand sanitizer or wash them with soap and water; (b) maintain physical distancing particularly between yourself and anyone who is coughing or sneezing; (c) avoid touching eyes, nose, and mouth; (d) cover mouth and nose with your bent elbow or tissue when you cough or sneeze, then dispose of the used tissue immediately and clean hands. The government has made accessible a series of guidelines for schools, individuals, and businesses on a COVID-19 specific website. However, the policy paper, guidelines, and plan only concern COVID-19 and are not mentioned as being applicable to other diseases [2]. The government has also put in place a series of regulations limiting gathering, promoting social distancing, and reducing capacity in private places [3]. No further evidence was found via the website of the Ministry of Public Health [4].

[1] Ministry of Public Health "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 28 September 2020.
[2] Ministry of Public Health, "COVID-19 Website". [https://covid19.moph.gov.qa/EN/Pages/default.aspx]. Accessed 28 September 2020.
[3] The Peninsula "MoI: Adhering to Social Distancing Key to Controlling Spread of COVID-19". [https://www.thepeninsulaqatar.com/article/28/05/2020/MoI-Adhering-to-social-distancing-key-to-controlling-spread-of-COVID-19]. Accessed 15 October 2020.
[4] Ministry of Public Health. [https://www.moph.gov.qa/english/Pages/default.aspx]. Accessed 28 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 evidence that Qatar has activated their national emergency response plan for an infectious disease outbreak in the past year, but there is no evidence that the country has completed a national-level biological threat-focused exercise (either with the World Health Organization (WHO) or separately) in the past year .

Qatar put the COVID-19 National Response Plan in place after the onset of the pandemic in 2020. In 2019, the Ministry of Public Health produced "Qatar National Preparedness and Response Plan for Communicable Diseases." This is a plan that embodies capacity building and readiness to manage potential outbreaks and pandemics. The purpose of developing the response plan was to manage the threats of communicable diseases in terms of preventing their occurrence, mitigating the risks, controlling and containing the spread of the disease. It also covers the management of different outbreak and

pandemic scenarios. However, the plan is not made publicly available. According to the COVID-19 National Response Plan, the latter plan was built on the Qatar National Preparedness and Response Plan for Communicable Diseases as well as on the Health Protection and Communicable Disease Prevention and Control Program. The program details the multiple steps Qatar has taken, is currently undertaking, and have yet to begin implementing. In addition, it sets key performance indicators (KPIs) for the number of tests, inventory capacity, measures to be taken, and a general policy for the country and all sectors of the society to mobilize and the ways in which it will affect them [1]. Furthermore, there is no evidence that Qatar has conducted a national-level biological threat-focused exercise in the past year on the WHO's extranet or the Ministry of Public Health's website [2,3].

[1] Ministry of Public Health. "COVID-19 Qatar National Response Plan". https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 28 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx].
[3] World Health Organization (WHO). "Simulation Exercise" [https://extranet.who.int/sph/simulation-exercise].

3.2.1b

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

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

Current Year Score: 0

There is no evidence that the country in the past year has identified a list of gaps and best practices in response through an infectious disease response and developed a plan to improve response capabilities. Qatar has indeed published its National COVID-19 Response Plan: The plan has identified four main areas to handle the pandemic: Preparedness, Surveillance & Detection, Response & Containment, Recovery & Continuity. For each of these areas, indicators and policy actions are divided into three categories: "completed," "in progress," "not yet started." These categories show that Qatar has identified gaps in its strategy; however, it has not yet developed a plan to improve response capabilities [1]. There is no evidence of such plan on the websites of the World Health Organization (WHO), the Ministry of Public Health, or the Health Emergency Department [2,3,4].

[1] Ministry of Public Health "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19%20REPORT%20WEB.pdf]. Accessed 29 September 2020.
[2] World Health Organization (WHO). After Action Review. [https://extranet.who.int/sph/after-action-review]. 24 November 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 23 November 202.0
[4] Ministry of Public Health, Health Emergency Department. [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx]. 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 the country in the past year has undergone a national-level biological threat-focused exercise that included private sector representatives. Moreover, there is no evidence of such drill on the websites of the Wolrd Health Organization (WHO), the Ministry of Public Health, the Ministry of Defence, the Ministry of Interior or the Ministry of Environment [1,2,3,4,5].

[1] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 29 September 2020.
[2] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 29 September 2020.
[3] Minister of State for Defence Affairs, Qatar. [https://www.gco.gov.qa/en/ministries/minister-of-state-for-defence-affairs/]. Accessed 29 September 2020.
[4] World Health Organization (WHO). "Simulation Exercises". [https://extranet.who.int/sph/simulation-exercise]. Accessed 15 October 2020.
[5] Ministry of Interior of Qatar website [https://portal.moi.gov.qa/wps/portal/MOIInternet/MOIHome]. Accessed 23 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

There is evidence that there is a health issue-related Emergency Operations Center (EOC) in the country. According to the Joint External Evaluation (JEE), conducted in May and June 2016, Qatar has a "national EOC operating procedure and protocol...[and] a functional point of contact available 24/7 at the National Command Centre responsible for receiving all reports of emergencies, and cascading the information to all concerned agencies for the immediate appropriate response" [1]. These EOCs are available in various departments, but the most relevant for health emergencies are the Permanent Committee for Emergency [2] and the National Command Centre [3], both of which are located in the Ministry of the Interior. Furthermore, there is evidence that the Supreme Committee for Crisis Management is also involved in communication and management for the COVID-19 crisis [4]. Finally, the JEE states that there are established EOCs at government agencies, such as the Ministry of Civil Defense, Ministry of Municipality and Environment, Primary Health Care Corporation, and Ministry of Public Health, the System Wide Incident Command Centre at Hamad Medical Corporation, as well as the EOCs of nongovernment organizations such as Qatar Petroleum [1].

[1] World Health Organisation (WHO). 29 May– 2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 15 October 2020.
[2] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 15 October 2020.
[3] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 15 October 2020.
[4] French Business Council in Qatar, "Qatar Chamber forms emergency committee to follow economic developments related to coronavirus crisis" [https://www.ccifq.com/en/news/zoom-on-a-news/news/qatar-chamber-forms-emergency-committee-to-follow-economic-developments-related-to-coronavirus-crisi-1.html]. Accessed 29 September 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: 0

There is no evidence that Qatar's Emergency Operations Center (EOC) is required to conduct a drill for a public health emergency scenario at least once per year or that it conducts a drill at least once per year.

According to the World Health Organization's (WHO) Joint External Evaluation (JEE) of 2016, Qatar has a Permanent Emergency Committee that has the mandate to coordinate the response to a wide spectrum of disasters and emergencies, including public health events in peace time (the Supreme Council for Civil Defense is being established by the Cabinet to take over this Committee). Furthermore, a mapping of hazards is conducted regularly in the country and potential risks, including disease outbreaks and their most likely sources, are identified. A National Plan for Emergency Preparedness and Response (EPR) is in place and is usually updated following the review of the hazards' mapping. While the hazards' mapping and. thus, the National EPR Plan have recently been updated, there is an endorsement of the Plan awaiting the official establishment of the Supreme Council for Civil Defense. The roles and responsibilities of each sector are identified in this Plan. Moreover, SOPs for the Plan are in place and accessible to all sectors. A drill exercise is conducted on an annual basis and the Plan is reviewed accordingly [1].

Qatar also has a public health emergency operation center (EOC). However, there is insufficient evidence that it conducts (or is required to conduct) drills on annual basis. In fact, the JEE scores gives Qatar a score of 3 for question R.2.3 with regard to its emergency operations program. This indicates that "a functional exercise has been completed to test response operations capabilities at the national level, or national health response systems have been activated to respond to a major emergency in the past two years." However, it falls short of a score of 4, which would have indicated that "a combination of exercises is conducted at least annually to test emergency response capabilities at national level with the involvement of subnational levels" [1].

There is no further evidence that the EOC is required to conduct an annual drill on the websites of the Ministry of Public Health or the Health Emergency Department of the Ministry of Public Health [2,3].

[1] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 29 September 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 2 December

2020.
[3] Ministry of Public Health, Health Emergency Department [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx]. Accessed 2 December 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 no public evidence to show that the Emergency Operations Center (EOC) has conducted, within the last year, a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. The Joint External Evaluation (JEE), conducted in May and June 2016, reports that Qatar has "[d]edicated, trained EOC staff [that] can activate a response within two hours: Part of the training of EOC staff is the activation of response actions within two hours upon notification of a public health emergency. [The Ministry of Public Health] has response teams that could provide and support immediate response to a public health emergency, if necessary" [1]. However, the report was from more than four years ago, and is there no public record from since then to indicate that such a response or an exercise evidence on the Ministry of Public Health, the Ministry of Interior, the Ministry of Defence or the Ministry of Environment that an EOC has conducted within the last year a coordinated emergency response exercise within 120 minutes of the identification of the public health emergency [2,3,4].

[1] World Health Organization (WHO). 29 May–2 June 2016. "Joint Extrnal Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 15 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 29 September 2020.
[3] Minister of State for Defence Affairs, Qatar. [https://www.gco.gov.qa/en/ministries/minister-of-state-for-defence-affairs/]. Accessed 29 September 2020.
[4] Ministry of Public Health, Health Emergency Department. [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx]. Accessed 29 September 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: 1

There is evidence that Qatar has standard operating procedures, guidelines, MOUs, and other agreements, but there is limited evidence that public health and national security authorities have carried out an exercise to respond to a deliberate biological event. The Permanent Committee of Emergency, within the Ministry of the Interior, is an inter-agency governmental operation that includes various departments and officials within both the defence and public health systems [1]. According to the Joint External Evaluation (JEE), conducted in May–June 2016, the Permanent Committee of Emergency oversees the national disaster response, conducts exercises and drills, and meets "regularly and on an ad hoc basis to share information and take decisions related to events occurring in the country, including public health events." The report notes that there are standard operating procedures (SOPs) in place that "clearly define the authorities, commitment of resources, roles and responsibilities of health and law enforcement and security agencies." These SOPs "are developed within the framework of the national contingency plan and clearly define the authorities, commitment of resources, roles and responsibilities of health and law enforcement and security agencies, foreign affairs and other sectors, which are specific to the various types of health events and hazards. Specific events include disease outbreaks, events at PoE, quarantine issues, food contamination, chemical and radiation hazards, and intentional use of biological agents. All these require information-sharing, joint investigations, joint risk assessments, coordinated control activities and law enforcement." [2] However, there is no publicly available evidence of these SOPs on the websites of the Ministry of Health [3] or Ministry of the Interior [4]. The National Command Centre, also located within the Ministry of the Interior, serves as a first point-of-contact to coordinate disaster response by investigating reports by members of the public and directing response efforts to the military, if necessary [5]. The exact nature of this coordination and the method of operation between the public health and security elements within the government of Qatar is not publicly available. Although the JEE report notes that there is "regular conduct of simulation exercises[s] and drills," no evidence on these drills is available via the Ministry of Health or Ministry of Interior [3,4].

[1] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 28 November 2020.
[2] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 28 November 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 28 November 2020.
[4] Ministry of the Interior of the State of Qatar. [https://portal.moi.gov.qa/]. Accessed 28 November 2020.
[5] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 28 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

There is no publicly available evidence that there is a risk communication plan in place in Qatar or that a risk communication strategy outlines how messages will reach populations and sectors with different communications needs. According to the Joint External Evaluation (JEE), conducted in May and June 2016, "a plan for public communication and partner liaising and coordination is available" when it comes to emergencies in Qatar, and the Hamad Medical Corporation has a separate communications plan in place [1]. However, "there is no endorsed health sector-wide risk communication plan or strategy. Risk communication plans have been written within the MOPH [Ministry of Public Health] but have not been endorsed and may be outdated with recent health sector reorganization" [1]. Furthermore, the Joint External Evaluation (JEE) indicates that, overall, Qatar has a developed capacity in the area of risk communication, partially due to its confined geographic territory, but there is no evidence of plans to reach the needs of other populations, such as migrant workers on the websites of the Ministry of Public Health, [2] Permanent Committee for Emergency, [3] or National Command Centre [4]. The National COVID-19 Response Plan includes a segment on communication strategy. It details how for every step of the response the government will communicate with different stakeholders and specifies the objectives the communication strategy. Moreover, it takes into consideration the highest rate of exposure, as it will be disseminated through social media, municipalities, schools, and workplaces. Furthermore, all the information will be available in both English and Arabic to ensure that the largest share of the population has access to it. However, it is specific only to COVID-19 and is not applicable to other diseases [5].

[1] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 16 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 16 October 2020.
[3] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 16 October 2020.
[4] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 16 October 2020.
[5] Ministry of Public Health. "COVID-19 Qatar National Response Plan". https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 30 September 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 no publicly available evidence that a risk communication plan is in place. The Joint External Evaluation (JEE), conducted in May and June 2016, observed that "there is no endorsed health sector-wide risk communication plan or strategy. Risk communication plans have been written within the Ministry of Public Health (MoPH) but have not been endorsed and may be outdated with recent health sector reorganization" [1]. Further, the JEE notes that the Hamad Medical Corporation maintains its own separate incident communications plan, but there is no evidence of this plan that has been made publicly available [1, 2]. Similarly, the JEE notes that the Government Communications Office maintains a

communications plan for the public, but there is no evidence of this plan [1,3]. The Ministry of Public Health website, Permanent Committee of Emergency website, National Command Centre website, and Qatar legal portal also provide no evidence of a risk communication plan in the event of a national public health emergency. [4,5,6,7]. Furthermore, as part of the National COVID-19 Response Plan, the government has a section dtailing a risk communication plan but it is specifically intended for use during the COVID-19 crisis. The framework for intervention is actually divided into three segments: 1) research, 2) infection prevention and control, and 3) communication [8].

[1] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 16 October 2020.
[2] Hamad Medical Corporation. [https://www.hamad.qa/]. Accessed 16 October 2020.
[3] Government Communications Office of the State of Qatar. [https://www.gco.gov.qa/en/]. Accessed 16 October 2020.
[4] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 16 October 2020.
[5] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 16 October 2020.
[6] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 16 October 2020.
[7] Al Meezan Qatar Legal Portal. [www.almeezan.qa/default.aspx?language=en]. Accessed 16 October 2020.
[8] Ministry of Public Health. "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 30 September 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: 1

The risk communication plan (or other legislation, regulation, or strategy document used to guide national public health response) designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. According to the Joint External Evaluation, "there is no endorsed health sector-wide risk communication plan or strategy. Risk communication plans have been written within the MOPH but have not been endorsed and may be outdated with recent health sector reorganization" [1]. In addition, there is no evidence of a risk communication plan on the websites of the Ministry of Public Health, the Minister of State for Defence Affairs, the Health Emergency Department, and the Hamad Medical Corporation [3,4,5]. Since the Joint External Evaluation (JEE), the national COVID-19 strategy does include a risk communication plan that designates a few spokespeople in charge of communicating during the public health emergency. In its risk communication plan, it says that the Supreme Committee for Crisis Management and the Ministry of Public Health has successfully "identified, trained, and designated spokespeople" [2].

[1] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 16 October 2020.
[2] Ministry of Public Health. "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf].Accessed 30 September 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 20 October 2020.

[4] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 20 October 2020.
[5] Ministry of Public Health, Health Emergency Department. [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx]. Accessed 20 October 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

In the past year, 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 Ministry of Public Health has created a website entirely dedicated to the COVID-19 pandemic, on which it communicates on a daily basis on the numbers, statistics, updates, and other relevant information regarding the pandemic to combat disinformaiton [1]. It also has social media accounts on which it regularly communicates information on health concerns like urological cancer [2,3]. There is evidence that this communication includes information on health emergencies prior to the COVID-19 pandemic, and on health concerns beyond COVID-19 even during the pandemic [4,5].

[1] Ministry of Public Health. "COVID-19 Website". [https://covid19.moph.gov.qa/EN/Pages/default.aspx]. Accessed 30 September 2020.
[2] Ministry of Public Health "Official Twitter Account". [https://twitter.com/MOPHQatar]. Accessed 30 September 2020.
[3] Ministry of Public Health. "Official Facebook Account". [https://www.facebook.com/MOPHQatar]. Accessed 30 September 2020.
[4] Ministry of Public Health Twitter Account. "MOPH Announces the Second (MERS-CoV) Case in 2016". [https://twitter.com/mophqatar/status/727092668224917504]. Accessed 16 October 2020.
[5] Ministry of Public Health Facebook Page. "Urological Cancer Awareness Month". [https://www.facebook.com/MOPHQatar/posts/3744255752260697]. Accessed 23 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 evidence that senior leaders have shared misinformation or disinformation on infectious diseases in the past two years. Qatar has usually been quick to be transparent about the MERS-COVID and COVID-19 cases detected in the country, and there was no evidence found online of disinformation shared by a senior leader on national (Al Jazeera, the Peninsula, and the Gulf Times) [1,2,3] or international (CNN, BBC, Reuters) platforms [4,5,6].

[1] Al Jazeera Website. [https://www.aljazeera.com/where/qatar/]. Accessed 19 October 2020.
[2] The Peninsula Website. [https://www.thepeninsulaqatar.com/]. Accessed 19 October 2020.
[3] Gulf Times Website. [https://www.gulf-times.com/]. Accessed 19 October 2020.
[4] CNN Website. "Qatar Page". [https://edition.cnn.com/search?q=qatar]. Accessed 23 November 2020.
[5] BBC Website. "Qatar Page". [https://www.bbc.co.uk/search?q=qatar]. Accessed 23 November 2020.
[6] Reuters Website. "Qatar Page". [https://www.reuters.com/search/news?blob=qatar]. Accessed 23 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: 99.65

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: 138.33

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: 6.19

2018-2019

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: 6.0

2018-2019

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 evidence that the country has 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. There is no evidence or on the websites of the Ministry of Public Health, the Ministry of Environment, or in the General Authority of Customs of a restriction without international support on the import/export of medical goods due to an infectious disease [1,2,3]. There was also no evidence found online on national (Al Jazeera, the Peninsula, and the Gulf Times) [4,5,6] or international (CNN, BBC, Reuters) platforms [7,8,9].

[1] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 30 September 2020.
[2] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 30 September 2020.
[3] General Authority of Customs, Qatar. [https://www.customs.gov.qa/english/pages/default.aspx]. Accessed 30 September 2020.
[4] Al Jazeera Website. [https://www.aljazeera.com/where/qatar/]. Accessed 23 November 2020.
[5] The Peninsula Website. [https://www.thepeninsulaqatar.com/]. Accessed 23 November 2020.
[6] Gulf Times Website. [https://www.gulf-times.com/]. Accessed 23 November 2020.
[7] CNN Website. "Qatar Page". [https://edition.cnn.com/search?q=qatar]. Accessed 23 November 2020.
[8] BBC Website. "Qatar Page". [https://www.bbc.co.uk/search?q=qatar]. Accessed 23 November 2020.
[9] Reuters Website. "Qatar Page". [https://www.reuters.com/search/news?blob=qatar]. Accessed 23 November 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

In the past year, there is no evidence that the country has 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. Furthermore, there is no evidence on the websites of the Ministry of Public Health, the Ministry of Municipality and Environment or on the General Authority of Customs website of a restriction without international support on the import/export of non-medical goods due to an infectious disease [1,2,3]. There was also no evidence found online on national (Al Jazeera, the Peninsula, and the Gulf Times) [4,5,6] or international (CNN, BBC, Reuters) platforms [7,8,9] .

[1] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 30 September 2020.
[2] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 30 September 2020.
[3] General Authority of Customs, Qatar. [https://www.customs.gov.qa/english/pages/default.aspx]. Accessed 30 September 2020.
[4] Al Jazeera Website. [https://www.aljazeera.com/where/qatar/]. Accessed 23 November 2020.
[5] The Peninsula Website. [https://www.thepeninsulaqatar.com/]. Accessed 23 November 2020.
[6] Gulf Times Website. [https://www.gulf-times.com/]. Accessed 23 November 2020.
[7] CNN Website. "Qatar Page". [https://edition.cnn.com/search?q=qatar]. Accessed 23 November 2020.
[8] BBC website, "Qatar Page". [https://www.bbc.co.uk/search?q=qatar]. Accessed 23 November 2020.
[9] Reuters Website. "Qatar Page". [https://www.reuters.com/search/news?blob=qatar]. Accessed 23 November 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

In the past year, there is evidence that the country has implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. Under the instructions of the Qatar Government and due to the COVID-19 pandemic, entry into Qatar is currently only allowed for Qatari nationals, the children and spouses of Qatari citizens and permanent resident permit holders, and regular resident permit holders, subject to re-entry approval [1,2]. Until July 31 2021, only Qatari Nationals, their traveling companions, those with a Permanent Resident Card, or other exceptionally approved Visa holders weree permitted to enter Qatar. From August 1, 2021, pre-approved (i.e., those from "low-risk countries") QID resident permit holders will also be able to travel to Qatar. QID resident permit holders returning from August 1 to September 15 will not be able to board a flight to Qatar without first receiving authorization to travel to Qatar and then by providing confirmation of a 14-day quarantine hotel booking. Furthermore, there is no evidence of international or bilateral support for the travel bans on relevant media outlets [3,4,5]. No evidence of support for the ban was found via the Ministry of Public Health or the Ministry of Foreign Affairs [6, 7].

[1] Qatar Airways, "COVID-19 (Coronavirus) Latest Updates" [https://www.qatarairways.com/en/travel-alerts/COVID-19-update.html] Accessed 1 October 2020.
[2] Deloitte, "Qatar—Covid-19 Immigration Update". [https://taj-strategie.fr/qatar-covid-19-immigration-update]. Accessed 1 October 2020.

[3] Al Jazeera Website. [https://www.aljazeera.com/where/qatar/]. Accessed 19 October 2020.
[4] The Peninsula Website [https://www.thepeninsulaqatar.com/]. Accessed 19 October 2020.
[5] Gulf Times Website. [https://www.gulf-times.com/]. Accessed 19 October 2020.
[6] Ministry of Public Health. [https://www.moph.gov.qa/english/Pages/default.aspx]. Accessed 28 November 2020. Ministry of Foreign Affairs. [https://www.mofa.gov.qa/en]. Accessed 28 November 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: 248.52

2018

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 726.28

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: 1

Qatar does have a public workforce strategy in place that has been updated within the past five years that relates to public health. The National Health Strategy 2018–2022 in Qatar includes the acknowledgment that "new resources and greater capacity, reprioritization of existing resources within the system, including funding and workforce, may be necessary to support the initiatives and desired outcomes" to account for current rates of growth [1]. One of the goals of the strategy is "Qatar Health Workforce Plan 2014–2022," which is a component of the National Development Strategy 2018–2022 maintained by the Ministry of Development Planning and Statistics. This strategy aims, in part, to assemble a skilled workforce by increasing "workforce capacity and capability initiatives addressed planning, optimizing skill-mix, recruitment, and retention" [1,2]. However, the content of the Qatar Health Workplace Plan 2014–2022 itself is not publicly available on the websites of the Ministry of Public Health, [3] Ministry of Municipality and Environment, [4] Ministry of Education and Higher Education, [5] Ministry of the Interior, [6] the Ministry of Development Planning and Statistics, [7] the Hamad Medical Corporation, [8] and Primary Healthcare Corporation [9]. There is evidence in the National COVID-19 Response Plan that Qatar has identified shortages in its healthcare workforce due to the surge in number of cases and has implemented strategies to mitigate these shortages. The main policies through which workforce shortcomings were handled or are being handled is an increase of cooperation with the private sector, an increase in the training of healthcare professionals to handle COVID-19, encouraging volunteering, and creating a better system for absenteeism management due to workers getting contaminated [10].

[1] Ministry of Public Health of the State of Qatar. "National Health Strategy 2018–2022". [https://www.moph.gov.qa/HSF/Documents/short%20report%20eng%2020.03.2018.pdf]. Accessed 19 October 2020.
[2] Ministry of Development Planning and Statistics of the State of Qatar. "National Development Strategy 2018–2022". [https://www.mdps.gov.qa/ar/knowledge/Documents/NDS2Final.pdf]. Accessed 19 October 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 19 October 2020.
[4] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 19 October 2020.
[5] Ministry of Education and Higher Education. [http://www.edu.gov.qa/En/Pages/Home_en.aspx]. Accessed 19 October 2020.
[6] Ministry of the Interior of the State of Qatar. [https://www.moi.gov.qa/site/english/]. Accessed 19 October 2020.
[7] Ministry of Development Planning and Statistics of the State of Qatar. [https://www.mdps.gov.qa/en/nds1/pages/default.aspx]. Accessed 19 October 2020.
[8] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 19 October 2020.
[9] Primary Healthcare Corporation. [https://www.phcc.qa/portal_new/index/index.php?limit=home]. Accessed 19 October 2020.
[10] Ministry of Public Health. "COVID-19 Qatar National Response Plan" [https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19%20REPORT%20WEB.pdf]. Accessed 19 October 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 125

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: 1

There is evidence that Qatar has 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.

According to the COVID-19 Qatar National Response Plan, isolation rooms were allocated in all buildings related to public and private health care providers [1]. Moreover, if necessary, three health centres with large multipurpose rooms can be activated for quarantine purposes. Furthermore, there is evidence that medical centers do have the capacity to isolate patients [2]. The Communicable Disease Centre (CDC), which is part of the government-operated Hamad Medical Corporation hospital network, has the capacity to isolate patients with highly communicable diseases. According to the Hamad Medical Corporation website, "The Communicable Disease Center (CDC) is a 65-bed, single inpatient room specialist tertiary center with outpatient services that aims to support and treat patients with a spectrum of communicable diseases." Furthermore, " the CDC has negative pressure patient rooms and public spaces with HEPA filtration systems within the structure of standard and isolation rooms. Sustaining negative room pressure and HEPA filtration as standard technique is used to prevent cross-contamination from room to room. A ventilation system generates negative pressure to allow air to flow into the isolation room from the hallway but not escape from the room, as air will naturally flow from areas with higher pressure to areas with lower pressure, thereby preventing contaminated air from escaping the room. These techniques are normally used to isolate patients with airborne contagious diseases such as TB, Zika, measles or chicken pox" [3].

[1] Ministry of Public Health "COVID-19 Qatar National Response Plan" [https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 1 October 2020.
[2] Hamad Medical Corporation. "Isolation Room". [https://www.hamad.qa/EN/Hospitals-and-services/PECS/Facilities/Pages/Isolation-Room.aspx]. Accessed 19 October 2020.
[3] Hamad Medical Corporation "Communicable Disease Center". [https://www.hamad.qa/EN/Hospitals-and-services/Communicable-Disease-Center/Our-services/Pages/default.aspx]. Accessed 23 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: 1

There is some evidence that the Qatar has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the last two years but no 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.

In response to COVID-19 pandemic outbreak, Qatar has created an additional 37,000 isolation beds capacity and 12,500 quarantine beds for suspected and confirmed cases of COVID-19. However, there is insufficient evidence regarding how many of those were isolation rooms equipped with negative air pressure, separate air ventilation systems, separate nurse stations, indvidual bathrooms, etc. [1]. This was made by applying the strategic goals of the COVID-19 response plan of planning quarantine facilities and allocating isolation rooms in all buildings of the Ministry of Public Health, Healthcare Providers & Ministry Of Interior, Ministry of Administrative Development, Labour & Social Affairs [2].

[1] Al Khal, Al Kaabi and Checketts, "Qatar's Response to COVID-19 Pandemic".
[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7899009/]. Accessed 9 May 2021.
[2] Ministry of Public Health. "COVID-19 Qatar National Response Plan".
[https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19%20REPORT%20WEB.pdf]. Accessed 9 May 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: 0

There is no evidence of a national procurement protocol in place, which can be utilized by the Ministries of Health and Agriculture for the acquisition of laboratory and medical supplies (e.g., equipment, reagents, and media) and medical supplies (e.g., equipment, PPE) for routine needs [1,2]. In fact, the national response plan for COVID-19 has identified the lack of a national procurement protocol as a gap and intends to resolve it through regional and global procurement chains. It states in the plan that therapeutic, diagnostic, and protective equipment is currently being requested through regional and global procurement mechanisms but does not detail this point further [1]. Furthermore, there is no evidence of such protocol on the websites of the Ministry of Public Health, the Ministry of Environment, the Hamad Medical Corporation, or on the Al Meezan legal portal [2,3,4].

[1] Ministry of Public Health. "COVID-19 Qatar National Response Plan".
[https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 1 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 1 October 2020.
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 1 October 2020.
[4] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 19 October 2020.
[5] Al Meezan Legal Portal [https://www.almeezan.qa/default.aspx?language=en]. Accessed 23 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 evidence that the country does have a stockpile of medical supplies (e.g., MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency, but there is limited evidence on what the stockpile contains.

According to the Joint External Evaluation (JEE), conducted in May and June 2016, "The stockpile of medical logistics is centrally stored and distributed nationwide by the HMC [Hamad Medical Corporation] through its Material Management Department based on the needs reflected in the emergency preparedness plan of health facilities. National stockpile to include countermeasures is still in the process of development, although a limited stockpile of countermeasures for IHR(International Health Regulations)-related hazards such as CBRN (chemical, biological, radiological and nuclear) threats exists." Other supplies can be obtained as part of Qatar's agreement with and participation in the GCC (Gulf Cooperation Council) Logistics Centre [1].

As stated in the National COVID-19 Response Plan, the Minstry of Public Health, HMC, Ministry of Commerce and Industry, Ministry of Municipality and Environment have managed and controlled the emergency stockpile for the management of COVID-19, including contingency plans for any shortages. This includes estimating volumes for pandemic stock and assessing the capacity of market to meet the increased demand for medical and nonmedical PPE supplies. A central stock reserve for COVID 19 response undertaken by Hamad Medical Corporation. There is no additional publicly available information via the Ministry of Public Health, HMC, Primary Healthcare Corporation, Permanent Committee of Emergency, and National Command Centre [3,4,5,6,7].

[1] World Health Organization (WHO). 29 May –2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 19 October 2020.
[2] Ministry of Public Health. "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf] Accessed 1 October 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 1 October 2020.
[4] Hamad Medical Corporation. [https://www.hamad.qa/]. Accessed 1 October 2020.
[5] Primary Healthcare Corporation. [https://www.phcc.qa/portal_new/index/index.php?limit=home]. Accessed 1 October 2020.
[6] Ministry of the Interior of the State of Qatar. "Permanent Committee of Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 1 October 2020.
[7] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 1 October 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 evidence that the country has a stockpile of laboratory supplies for national use during a public emergency. There is no evidence that the country has such supplies on the websites of the Ministry of Public Health, the Hamad Medical Corporation, the Ministry of Defence, the Health Emergency Department, or in the Joint External Evaluation of 2016 [1,2,3,4,5].

[1] World Health Organisation (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 1 October 2020.
[2] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 1 October 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 1 October 2020.
[4] Minister of State for Defence Affairs, Qatar. [https://www.gco.gov.qa/en/ministries/minister-of-state-for-defence-affairs/]. Accessed 23 November 2020.
[5] Ministry of Public Health, Health Emergency Department. [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx]. Accessed 23 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 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. The Joint External Evaluation (JEE) of 2016 has already highlighted the need to establish and regularly monitor stockpiles based on updates from risk assessments, experience from actual emergency response operations, and the needs of end-users [1]. Following the blockade implemented by Saudi-led coalition against Qatar in 2017, a document was published by Qatar University highlighting the need to annually evaluate and report on the situation of the national stockpile starting 2018, but there is no evidence of implementation [2]. There is no further evidence of such procedures on the websites of the Ministry of Public Health, Ministry of Defense, or the Hamad Medical Corporation [3,4,5].

[1] World Health Organization (WHO). 29 May–2 June 2016. “Joint External Evaluation of IHR Core Capacities of the State of Qatar”. [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 5 May 2021.
[2] Qatar University, "National Strategic Stockpile for the Health Sector". [http://www.qu.edu.qa/static_file/qu/conference/CPH/Embargo/Symposium/documents/Nationa/Strategic/Stockpile/for/the/Health/sector.pdf]. Accessed 5 May 2021.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 5 May 2021.
[4] Minister of State for Defence Affairs, Qatar. [https://www.gco.gov.qa/en/ministries/minister-of-state-for-defence-affairs/] Accessed 5 May 2021.
[5] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 5 May 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: 1

There is evidence that country has a plan/mechanism to procure medical supplies (e.g., medical countermeasures (MCMs), medicines, vaccines, equipment, personal protective equipment (PPE)) for national use during a public health emergency, but there is no evidence that the country has 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.

Article 41 of law 26 (2006) for example states that it is possible to purchase by direct order supplies through Hamad Medical Corporation in a situation of emergency or where supply shortage will lead to danger, even if the supply is overpriced [1]. Qatar also has an agreement in place with the Gulf Cooperation Council (GCC) Logistics Centre in Kuwait to receive medical supplies externally if necessary [2]. Furthermore, the National COVID-19 Response Plan highlights that therapeutic supply, diagnostic equipment, and PPE are all made available through the "Request of such supplies through regional and global procurement mechanisms." The organizations in charge of the process are the Ministry of Public Health, Hamad Medical Corporation, Ministry of Commerce and Industry, Qatar Petroleum, Ministry of Defense and Ministry of Interior [3]. There is also evidence that Qatar has the domestic capacity to produce PPE and pharmaceutic supplies [4,5], but there is no evidence of a plan or agreement to leverage manufacturing of such products during a public health emergency crisis. Qatar Pharma did increase its ceiling to produce PPEs, but it is unclear wether this is part of a plan/agreement to leverage domestic capacity [4].

[1] Decree of the Chairman of Hamad Medical Corporation. "Article 41, Law 26 of 2007". [https://www.almeezan.qa/ClarificationsNoteDetails.aspx?id=7702&language=ar]. Accessed 24 November 2020.
[2] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 24 November 2020.
[3] Ministry of Public Health. "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 1 October 2020.
[4] Lusail, "Raising the Threshhold of Production of Masks to 30 Million Per Month". [https://lusailnews.net/article/business/e-qatar/28/04/2020/]. Accessed 19 October 2020.
[5] Ministry of Public Health. "National Health Strategy, 2018–2022". [https://www.moph.gov.qa/Admin/Lists/PublicationsAttachments/Attachments/54/NHS.pdf]. Accessed 19 October 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 evidence of a plan/agreement to leverage the domestic manufacturing capacity to produce laboratory supplies (e.g., reagents, media) for national use during a public health emergency or evidence of a plan/mechanism to procure laboratory supplies (e.g., reagents, media) for national use during a public health emergency. Moreover, there is no mention of such plans on the websites of the Ministry of Public Health, the Ministry of Defence, or the multiple emergency planning agencies [1,2,3,4]. However, there is evidence that Qatar has donated laboratory supplies to multiple countries, which is a sign that Qatar does not have supply issues or shortages when it comes to laboratory equipment [5]. While Article 41 of Law 26 of 2007 provides provisions for emergency procurement of medical supplies, there is no explicit mention of laboratory supplies [6].

[1] Ministry of Public Health "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style%20Library/MOPH/Videos/COVID-19%20REPORT%20WEB.pdf]. Accessed 1 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 1 October 2020.
[3] Minister of State for Defence Affairs, Qatar. [https://www.gco.gov.qa/en/ministries/minister-of-state-for-defence-affairs/]. Accessed 1 October 2020.
[4] Ministry of Public Health, "Qatar Public Health Strategy 2017–2022". [https://www.moph.gov.qa/english/strategies/Supporting-Strategies-and-Frameworks/QatarPublicHealthStrategy/Pages/default.aspx]. Accessed 1 October 2020.
[5] Relief Web, United Nations Office for the Coordination of Humanitarian Affairs. "Qatar Charity Provides Medical Aid to Health Centers in Palestine". [https://reliefweb.int/report/occupied-palestinian-territory/qatar-charity-provides-medical-aid-health-centers-palestine]. Accessed 1 October 2020.
[6] Decree of the Chairman of Hamad Medical Corporation. "Article 41, Law 26 of 2007". [https://www.almeezan.qa/ClarificationsNoteDetails.aspx?id=7702&language=ar]. Accessed 24 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 evidence that Qatar has 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). The Joint External Evaluation (JEE) mentions that Qatar does have logistics put in place for distribution of MCMs during crisis, but not for dispensing them [1]. Furthermore, there is evidence that Qatar has facilitated the dispensing of MCMs through postal services for people in quarantine; however, there is no evidence that these measures have been made as part of a plan or protocol [2]. There is no further evidence of a plan or protocol for the dispensing of MCMs on the websites of the Ministry of Public Health, the Ministry of Defence, the Health Emergency Department, the website for COVID-19, or the COVID-19 response plan [3,4,5,6,7].

[1] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 2 October 2020.
[2] Ministry of Public Health. "Delivering Medicines, Medical Supplies and Official Medical Documents to Patients at their Homes via Qatar Post". [https://www.moph.gov.qa/arabic/mediacenter/News/Pages/NewsDetails.aspx?ItemId=281]. Accessed 19 October 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 2 October 2020.
[4] Minister of State for Defence Affairs, Qatar. [https://www.gco.gov.qa/en/ministries/minister-of-state-for-defence-affairs/]. Accessed 2 October 2020.
[5] Ministry of Public Health, Health Emergency Department [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx]. Accessed 2 October 2020.
[6] Ministry of Public Health, "COVID-19 Website". [https://covid19.moph.gov.qa/EN/Pages/default.aspx]. Accessed 2 October 2020.
[7] Ministry of Public Health. "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf] Accessed 2 October 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 evidence of a public plan in place to receive health personnel from other countries to respond to a public health emergency. According to the Joint External Evaluation (JEE), conducted in May and June 2016, "[w]ith regards to the sending and receiving health personnel during public health emergencies, Qatar has not yet drafted its National Personnel Deployment Plan." However, the JEE report does note that the 2015 draft National Health Emergency Management Plan " includes a guide in receiving health personnel (local/international) during public health emergencies (e.g., issuing credentials for personnel)" [1]. A 2018 strategy document notes that "[t]he Qatar National Health Emergency Management Plan has been developed, but is not yet implemented across the sector" [2]. The plan is also not publicly available. There is evidence that the country has facilitated the arrival of medical professionals in the past, but not specifically for a health emergency. There is an agreement between the governments of Cuba and Qatar concerning the provision of medical professionals from Cuba to Qatar to enhance Qatari medical capacity and training. Article 4 of the agreement details how personnel are identified, how they get visas, how they cross the border, licensure, sleeping accommodations, and other legal and logistical details [3]. However, there is no additional evidence of a publicly available plan for dispensing medical countermeasures via the Ministry of Public Health, Hamad Medical Corporation, Primary Healthcare Corporation, Permanent Committee for Emergency, or the National Command Centre [4, 5, 6, 7, 8].

[1] World Health Organization (WHO). 29 May–2 June 2016. “Joint External Evaluation of IHR Core Capacities of the State of Qatar”. [https://apps.who.int/iris/bitstream/handle/10665/254509/WHO-WHE-CPI-2017.6-eng.pdf?sequence=1&isAllowed=y]. Accessed 24 June 2021.
[2] Ministry of Public Health, Health Emergency Department, [https://www.moph.gov.qa/english/strategies/Supporting-Strategies-and-Frameworks/Pages/Qatar-National-Health-Emergency-Management-Plan.aspx#]. Accessed 28 September 2020.
[3] Government of Qatar. 2009. "Agreement Between the Government of the State of Qatar and the Government of the

Republic of Cuba for Provision of Medical Services".
[https://www.almeezan.qa/AgreementsPage.aspx?id=1455&language=ar]. Accessed 19 October 2020.
[4] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 24 June 2021.
[5] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 24 June 2021.
[6] Primary Healthcare Corporation. [https://www.phcc.qa/portal_new/index/index.php?limit=home]. Accessed 24 June 2021.
[7] Ministry of the Interior for the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 24 June 2021.
[8] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 24 June 2021.

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: 100

2015

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: 298.63

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

Qatar has not issued legislation, a policy, or public statement committing to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency. There is no evidence of a policy of prioritized treatment of healthcare workers via the Ministry of Public Health, the National Health Strategy 2018–2022, Hamad Medical Corporation, Primary Healthcare Corporation, Permanent Committee for Emergency, the National Command Centre, or the Qatar legal portal [1,2,3,4,5,6,7]. However, the government issued a plan committing to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergencyIn the national response plan for COVID-19, healthcare workers are identified as part of the most at-risk populations and must receive priority treatment, along with the elderly, people with co-morbidities, and airport and sea-port workers. The plan states that "The overall objective of this program is to break the chain of infection and halt the spread of COVID-19 in Qatar particularly focusing on the healthcare settings, protecting the vulnerable population as well as protecting healthcare staff." While the language used may be applicable to other virus outbreaks, it might not be applicable to all health emergencies [8].

[1] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 19 October 2020.
[2] Ministry of Public Health of the State of Qatar. "National Health Strategy 2018-2022". [https://www.moph.gov.qa/HSF/Documents/short/report/eng/2020.03.2018.pdf]. Accessed 19 October 2020.
[3] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 19 October 2020.
[4] Primary Healthcare Corporation.[https://www.phcc.qa/portal_new/]. Accessed 19 October 2020.
[5] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 19 October 2020.
[6] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 19 October 2020.
[7] Al Meezan Qatar Legal Portal. [www.almeezan.qa/default.aspx?language=en]. Accessed 19 October 2020.
[8] Ministry of Public Health "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 2 October 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 no evidence of a system in place for public health officials and healthcare workers to communicate during a public health emergency. A work stream of the Communication Reference Group (CRG) that is focused on staff communications has been established, providing regular briefings, videos, and education collateral to keep them up-do-date with developments as they happen, but it does not provide opportunity for bottom-up communication [1]. There is no evidence of system where healthcare workers are able to communicate in a bottom up manner on the website of the Ministry of Public Health, the Health Emergency Department or the Ministry of Defence [2,3,4].

[1] Ministry of Public Health. "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 2 October 2020.
[2] Minister of State for Defence Affairs, Qatar. [https://www.gco.gov.qa/en/ministries/minister-of-state-for-defence-affairs/]. Accessed 2 October 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 2 October 2020.
[4] Ministry of Public Health, Health Emergency Department. [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx]. Accessed 2 October 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 no publicly available information regarding a system in place for communication between public health officials and healthcare workers during an emergency in Qatar within both the public and the private sector.

According to the Joint External Evaluation (JEE), the National Health Emergency Management and Response Plan contains a detailed plan of communication flow between all relevant agencies during a public health emergency, but the plan has not yet been endorsed or fully implemented across the health sector [1,2]. There is no other evidence of an existing system in place for public health officials and public and private healthcare workers to communicate during a public health emergency via the Ministry of Public Health, Hamad Medical Corporation, Permanent Committee for Emergency, or National Command Centre [3,4,5,6].

[1] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 October 2020.

[2] Ministry of Public Health of the State of Qatar. "National Health Strategy 2018–2022". [https://www.moph.gov.qa/HSF/Pages/NHS-18-22.aspx]. Accessed 20 October 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 20 October 2020.
[4] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 20 October 2020.
[5] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 20 October 2020.
[6] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 20 October 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: 1

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

According to the Joint External Evaluation (JEE), conducted in May and June 2018, "Eight hospitals at [the Hamad Medical Corporation] have been conducting active health care-associated infection surveillance and community-acquired surveillance since 2000...The [Hamad Medical Corporation] laboratory is an advanced internationally accredited laboratory conducting AMR surveillance for community-acquired and nosocomial pathogens in 8 out of 11 hospitals in the country" [1]. However, although both the Hamad Medical Corporation and Primary Healthcare Corporation have longstanding infection prevention and control (IPC) programs in place, the report notes that "a national plan for surveillance of infections caused by AMR pathogens needs to be developed and coordinated through a national structure (IPC/AMR) within the MoPH [Ministry of Public Health]" [1]. The Healthcare Quality and Patient Safety Department at the Ministry of Public Health has established its own active national IPC program to reduce the instances of healthcare-associated infections [2]. In addition, medical students at the Weill Cornell Medical College, Qatar, and medical staff at the Hamad Medical Corporation and Primary Healthcare Corporation are receiving training directed towards the problem of healthcare-associated infections [3,4,5].

[1] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 October 2020.
[2] Ministry of Public Health of the State of Qatar. "Healthcare Quality and Patient Safety". [https://www.moph.gov.qa/about-us/Pages/healthcare-quality.aspx]. Accessed 20 October 2020.
[3] Ibrahim, A. A., & Elshafie, S. S. 2016. "Knowledge, Awareness, and Attitude Regarding Infection Prevention and Control among Medical Students: A Call for Educational Intervention". Advances in Medical Education and Practice. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5001551/].
[4] Hamad Medical Corporation. 1 November 2015. "Qatari Physician's Experience and Training Drives Improvements in Patient Safety". [https://www.hamad.qa/EN/news/2015/November/Pages/Qatari-Physician-experience-and-training-drives-

improvements-in-Patient-Safety.aspx]. Accessed 20 October 2020.
[5] Primary Healthcare Corporation. 18 October 2016. "Under the Slogan 'Break the Chain of Infection PHCC Shares the International Community the Infection Control Week". [https://phcc.qa/portal_new/index/index.php?limit=news261]. Accessed 20 October 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

Qatar has a national requirement for ethical review before beginning clinical trials. Clinical trials involving human subjects must first be cleared by the Institutional Review Board and Independent Ethics Committee after submitting an "Assurance Application for the Protection of Human Subjects Involved in Research." The application requires institutional review board (IRB) or independent ethic committee (IEC) approval for research involving human subjects [1]. Research involving human subjects must also comply with the Ministry of Public Health's "Policies, Regulations and Guidelines for Research Involving Human" [2]. The Ministry of Public Health Research Department is the governmental authority responsible for "[d]eveloping and implementing research policies, rules, and regulations for the ethical involvement of humans in research and for establishing basic and translational research policies for the state of Qatar" [3].

[1] Ministry of Public Health of the State of Qatar. "Local/Foreign Institutional Review Board (IRB)/Independent Ethics Committee (IEC) Assurance Application for the Protection of Human Subjects Involved in Research". [https://www.moph.gov.qa/about-us/Documents/research/Local/Foreign/IRB/IEC/Assurance/Application/for/the/Protection/of/Human/Subjects/Involved/in/Research.pdf]. Accessed 2 October 2020.
[2] Ministry of Public Health of the State of Qatar. "Policies, Regulations and Guidelines for Research Involving Human". [https://www.moph.gov.qa/about-us/Documents/research/Policies/Regulations/and/Guidelines/for/Research/Involving/Human.pdf]. Accessed 2 October 2020.
[3] Ministry of Public Health of the State of Qatar. "Research Department". [https://www.moph.gov.qa/about-us/Pages/research.aspx]. Accessed 2 October 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 publicly available evidence of an expedited process for approving clinical trials in the case of pandemics in Qatar. According to the Ministry of Public Health "Policies, Regulations, and Guidelines for Research involving Humans," expedited

review by the Institutional Review Board (IRB) is possible for research activities that "present no more than minimal risk to human subjects" and fall within a certain limited range of research subjects, such as trials for products that have already been cleared for medical use [1]. There is no specific expedited process for use during pandemics or other public health emergencies available elsewhere through the Ministry of Public Health [2].

[1] Ministry of Public Health of the State of Qatar. "Policies, Regulations, and Guidelines for Research Involving Humans". [https://www.moph.gov.qa/about-us/Documents/research/Policies/Regulations/and/Guidelines/for/Research/Involving]. Accessed 2 October 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 evidence of a government agency responsible for approving new medical countermeasures (MCM) for humans. The Ministry of Public Health's Department of Pharmacy and Drug Control is responsible for approving new pharmaceuticals, drug agents, herbal products, dietary supplements and medicated cosmetics. [1] Any of these pharmaceuticals that require human trials must also be approved by the Institutional Review Board. [2] However, there is no specific mention of oversight over medical countermeasures on the Department and Drug Control site or in the Joint External Evaluation, conducted in May and June 2016 [1,3].

[1] Ministry of Public Health of the State of Qatar. "Pharmacy & Drug Control". [https://www.moph.gov.qa/english/derpartments/policyaffairs/pdc/Pages/default.aspx]. Accessed 2 October 2020.
[2] Ministry of Public Health of the State of Qatar. "Policies, Regulations, and Guidelines for Research Involving Humans". [https://www.moph.gov.qa/about-us/Documents/research/Policies/Regulations/Guidelines/for/Research/Involving/Human.pdf]. Accessed 2 October 2020.
[3] World Health Organisation (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 2 October 2020.
[4] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 2 October 2020.
[5] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 2 October 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 no evidence of an expedited process for approving medical countermeasures for human use during pandemic emergencies in Qatar. The Ministry of Public Health's Department of Pharmacy and Drug Control is responsible for approving new pharmaceuticals, drug agents, herbal products, dietary supplements and medicated cosmetics, but there is no indication that it has a specific process of expedited review during public health emergencies [1]. According to the Ministry of Public Health, "Policies, Regulations, and Guidelines for Research involving Humans," expedited review by the Institutional Review Board (IRB) is possible for research activities that "present no more than minimal risk to human subjects," but these

guidelines appear to only address clinical trials and there is no evidence of a specific process for approving use during pandemic events [2]. There is also no specific expedited process for the use of medical countermeasures during pandemics or other public health emergencies on the websites of the Ministry of Public Health [3], Hamad Medical Corporation [4], the Joint External Evaluation, conducted in May and June 2016, [5] the Ministry of the Interior's Permanent Committee for Emergency, [6] or the National Command Centre [7]. Furthermore, the National Response Plan for COVID-19 mentions no processes for quick approval of medical countermeasures (MCMs) during pandemics [8].

[1] Ministry of Public Health of the State of Qatar. "Pharmacy and Drug Control". [https://www.moph.gov.qa/about-us/Pages/pharmacy-n-drug-control.aspx]. Accessed 3 October 2020.
[2] Ministry of Public Health of the State of Qatar. "Policies, Regulations, and Guidelines for Research Involving Humans". [https://www.moph.gov.qa/about-us/Documents/research/Policies/Regulations/and/Guidelines/for/Research/Involving/Human.pdf]. Accessed 3 October 2020.
[3] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 3 October 2020.
[4] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 3 October 2020.
[5] World Health Organization (WHO). 29 May–2 June 2016. Joint External Evaluation of IHR Core Capacities of the State of Qatar. [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 3 October 2020.
[6] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 3 October 2020.
[7] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 3 October 2020.
[8] Ministry of Public Health, "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 3 October 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 evidence that there is a national disaster risk reducation strategy for epidemics and pandemics; however, there is no evidence of it being available publicly. According to the COVID-19 National Response Plan, there is a "Qatar National Preparedness and Response Plan for Communicable Diseases" on which it is based. It is described as a plan that includes capacity building and readiness to manage potential outbreaks and pandemics. It is said that the purpose of developing the response plan was to manage the threats of communicable diseases in terms of preventing their occurrence, mitigating the risks, controlling and containing the disease that occurres. It also covers the management of different outbreak and pandemic scenarios, as "pandemics follow relatively predictable phases." The plan was developed adapting the World Health Organization's (WHO) recommended Pandemic Influenza Risk Management Guide 2013 to support the harmonization of national and international pandemic preparedness and response, which, therefore, makes it fit into the category of risk reduction, as the guidelines from the WHO's plan it as "the emergency risk management for health continuum describes the range of measures to manage risks through prevention and mitigation, and preparing for, responding to and recovering from emergencies" [1]. However, there is no evidence that the plan is publicly available on the websites of the Ministry of Public Health, the Hamad Medical Corporation, or the Health Emergency Department [2,3,4].

[1] Ministry of Public Health, "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 3 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 3 October 2020.
[3] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 3 October 2020.
[4] Ministry of Public Health, Health Emergency Department. [https://www.moph.gov.qa/english/derpartments/healthaffairs/healthemergencydepartment/Pages/default.aspx]. Accessed 3 October 2020.

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

5.2.1 Cross-border agreements

5.2.1a

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

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

Current Year Score: 2

There is evidence that the country has cross-border agreements, protocols, or memorandum of understanding (MOUs) with neighboring countries, or as part of a regional group, with regard to public health emergencies. An agreement for strengthening the capabilities to combat the COVID-19 was signed between the Sudan Red Crescent and its Turkish and Qatari counterparts [1]. The agreement was signed by the General Secretaries of the Sudanese, Qatari, and Turkish Red Crescent Societies. In implementation, the Ministry of Public Health (MOPH) announced that it approved four centers for

Qatari citizens to take COVID-19 tests in the Republic of Turkey. Furthermore, The Turkish and Qatari branches of the Red Crescent Society have sent medical supplies to Sudan to support the country's fight against the novel coronavirus. Over 1.65 million COVID-19 test kits and protective medical equipment on the planes were delivered to the Sudanese Health Ministry [2]. Qatar has cooperated with other Gulf Cooperation Council (GCC) countries with regards to public health emergencies, but its continued involvement in this arrangement cannot be confirmed due to the recent deterioration of its diplomatic and political relations with its neighbouring countries. According to the Joint External Evaluation (JEE), conducted in May and June 2016, "Hazards mapping and classification at regional (GCC) and country level is done by the disaster/crises risk management committee managed by the GCC secretariat." In addition, in the past, Qatar has participated in the GCC Logistics Centre, based out of Kuwait, which can provide countermeasures and other supplies in the event of a public health emergency, but it is not clear whether this relationship has survived recent diplomatic tensions [3].

[1] Relief Web, OCHA "QRCS Signs Pact with Turkish, Sudanese Counterparts to Enhance Coronavirus Control Efforts in Sudan". [https://reliefweb.int/report/sudan/qrcs-signs-pact-turkish-sudanese-counterparts-enhance-coronavirus-control-efforts-sudan]. Accessed 3 October 2020.
[2] AA, "Turkey, Qatar Aid Sudan's Fight Against COVID-19". [https://www.aa.com.tr/en/africa/turkey-qatar-aid-sudans-fight-against-covid-19/1966055]. Accessed 3 October 2020.
[3] World Health Organisation (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf].

5.2.1b

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

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

Current Year Score: 0

There is no publicly available evidence that Qatar has cross-border agreements, protocols, or memorandums of understanding (MOUs) with neighboring countries with regard to animal health emergencies. Historically, Qatar has participated in the Gulf Cooperation Council (GCC) Logistics Centre, based out of Kuwait, for the provision of public health emergency supplies [1], but it is unclear to what extent this organization cooperates on matters having to do with animal health. In addition, it is unknown the effect that Qatar's recent diplomatic and political isolation from other regional powers has had on its participation in this group. Furthermore, there is no additional evidence of a cross-border agreement for animal health emergencies available on the websites of the Ministry of Public Health [2], Ministry of Municipality and Environment, [3] Hamad Medical Corporation, [4] Permanent Committee for Emergency, [5] or National Command Centre [6].

[1] World Health Organisation (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 3 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 3 October 2020.
[3] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 3 October 2020.
[4] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 3 October 2020.
[5] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 3 October 2020.
[6] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 3

October 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: 3

2021

Biological Weapons Convention

5.3.2 Voluntary memberships

5.3.2a

Does the country meet at least 2 of the following criteria?
- Membership in Global Health Security Agenda (GHSA)
- Membership in the Alliance for Country Assessments for Global Health Security and IHR Implementation (JEE Alliance)
- Membership in the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction (GP)
- Membership in the Australia Group (AG)
- Membership in the Proliferation Security Initiative (PSI)

Needs to meet at least two of the criteria to be scored a 1 on this measure. , Yes for five = 1 , Yes for four = 1 , Yes for three = 1 , Yes for two = 1 , Yes for one = 0 , No for all = 0

Current Year Score: 0

2021

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

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

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

5.4.1a

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

Yes = 1 , No = 0

Current Year Score: 1

2021

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

5.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

2021

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

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

5.4.2a

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

Yes = 1 , No = 0

Current Year Score: 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: 1

There is evidence that the country has allocated national funds to improve capacity to address epidemic threats within the past three years. The Qatar Foundation (QF) developed the Rapid Response Call (RRC). It aims to encourage researchers to participate in providing impactful and innovative solutions on a fast-track basis through research projects that support Qatar's efforts to mitigate the COVID-19 pandemic and its effects. Under the inaugural cycle of RRC, Qatar National Research Fund (QNRF) received 230 proposals from researchers across Qatar, and, after a thorough competitive scientific and technical review process, 21 research proposals were selected to receive funding. Researchers will be awarded grants worth up to QR100,000 each and given three months to complete their projects. While launched specially in response to the COVID-19 pandemic, the RRC will be a permanent fixture in QNRF's diverse portfolio of programs aimed at building the effectiveness of Qatar's response to any emerging situations [1,2].

[1] Qatar National Research Fund. "QF Launches Funding Initiative to Tackle Emergencies like COVID-19". [https://www.qnrf.org/en-us/Newsroom/Press-Releases/qf-launches-funding-initiative-to-tackle-emergencies-like-covid-19].

Accessed 3 October 2020.
[2] TrialSiteNews, "Qatar's National Research Fund Supports COVID-19 Crisis by Funding Rapid Response Call Projects & Studies". [https://www.trialsitenews.com/qatars-national-research-fund-supports-covid-19-crisis-by-funding-rapid-response-call-projects-studies/]. Accessed 3 October 2020.

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

5.5.2a

Does the Joint External Evaluation (JEE) report, National Action Plan for Health Security (NAPHS), and/or national GHSA roadmap allocate or describe specific funding from the national budget (covering a time-period either in the future or within the past five years) to address the identified gaps?

Yes = 1 , No/country has not conducted a JEE = 0

Current Year Score: 0

2021

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

5.5.2b

Does the Performance of Veterinary Services (PVS) gap analysis and/or PVS assessment allocate or describe specific funding from the national budget (covering a time-period either in the future or within the past five years) to address the identified gaps?

Yes = 1 , No/country has not conducted a PVS = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5.3 Financing for emergency response

5.5.3a

Is there a publicly identified special emergency public financing mechanism and funds which the country can access in the face of a public health emergency (such as through a dedicated national reserve fund, an established agreement with the World Bank pandemic financing facility/other multilateral emergency funding mechanism, or other pathway identified through a public health or state of emergency act)?

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence to demonstrate that Qatar has access to emergency funding in case of a public health emergency. According to the Joint External Evaluation (JEE), conducted in May and June 2016, the chemicals emergency section notes that "there is provision for mobilization of an emergency budget" in Qatar [1], but there is no corroborating evidence of what this budget is or if it can be used for biological emergencies via the Ministry of Public Health, the National Health Strategy 2018–2022, Ministry of Municipality and Environment, Hamad Medical Corporation, Permanent Committee

for Emergency, or National Command Centre [2,3,4,5,6,7]. Qatar has not been identified as an eligible borrowing country by the World Bank Group International Development Association and cannot access the Pandemic Emergency Financing Facility (PEF) [8,9]. Furthermore, there is evidence in the National Response Plan for COVID-19 that the Ministry of Public Health, the Ministry of Finance, the Qatar Central Bank and the Qatar Development Bank have coordinated to create an emergency fund for the implementation of the COVID-19 action plan [10]. However, it appears that this fund is disease-specific.

[1] World Health Organization (WHO). 29 May–2 June 2016. "Joint External Evaluation of IHR Core Capacities of the State of Qatar". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.6-eng.pdf]. Accessed 20 October 2020.
[2] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 20 October 2020.
[3] Ministry of Public Health of the State of Qatar. "National Health Strategy 2018-2022". [https://www.moph.gov.qa/HSF/Pages/NHS-18-22.aspx]. Accessed 20 October 2020.
[4] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 20 October 2020.
[5] Hamad Medical Corporation. [https://www.hamad.qa/EN/Pages/default.aspx]. Accessed 20 October 2020.
[6] Ministry of the Interior of the State of Qatar. "Permanent Committee for Emergency". [https://portal.moi.gov.qa/wps/portal/MOIInternet/departmentcommittees/permanentemergency]. Accessed 20 October 2020.
[7] Ministry of the Interior of the State of Qatar. "National Command Centre". [https://portal.moi.gov.qa/NCC/]. Accessed 20 October 2020.
[8] World Bank Group. "International Development Association". [http://ida.worldbank.org/about/borrowing-countries]. Accessed 20 October 2020.
[9] World Bank Group. December 2017. "Pandemic Emergency Financing Facility (PEF): Operational Brief for Eligible Countries". 20 October 2020.
[10] Ministry of Public Health "COVID-19 Qatar National Response Plan". [https://www.moph.gov.qa/Style/Library/MOPH/Videos/COVID-19/REPORT/WEB.pdf]. Accessed 3 October 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 insufficient evidence that a senior leader, in the last three years, has made a public commitment either to support other countries to improve capacity to address epidemic threats by providing financing or support and improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity. However, there is, evidence of support for response efforts. Sheikh Tamim bin Hamad al Thani, Emir of Qatar, has expressed in a statement his willingness for cooperation and the actions he has taken to strengthen the capacity of over 20 countries (including Qatar) to better face the pandemic [1]. According to the Emir, "Qatar did its best and will continue doing its best to respond quickly to the serious ramifications of the crisis, and went above and beyond, taking actions and preventive

measures to limit its impact and protect its citizens. Considering the significance of human solidarity in these testing times, we offered over 20 countries in the world medical equipment and supplies, and building field hospitals [...] I would like to renew Qatar's commitment to provide an additional 20 USD million to the WHO." This aid will be directed to strengthen the capacity of the Global Alliance for Vaccine and Immunization [2].

[1] GVS2020-06 | HE Sheikh Tamim bin Hamad al Thani, Emir of Qatar. [https://www.youtube.com/watch?v=D5jqFVwxCaU]. Accessed 3 October 2020.
[2] Gulf Times,"Amir Pledges $20mn for Vaccine Alliance". [https://www.gulf-times.com/story/664813/Amir-announces-Qatar-s-pledge-of-20-million-in-sup]. Accessed 2 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 the country has, in the past three years, received funding from other countries to improve capacity to address epidemic threats.

According to the Global Health Security Funding Tracker, Qatar has received a total of 467.51k USD between 2014 and 2020. Of this amount, 26.19k USD were allocated to immunization, 17.00k USD were allocated to real-time surveillance, and 14.03k USD were allocated to the national laboratory system. [4]

In addition, while there is evidence that the country has, in the past year, provided other countries—such as Lebanon, Yemen, and Afghanistan—with support, there is no evidence that this support contributes to building future preparedness and response [1]. However, such support included medical devices and equipment, sanitizers, disinfection and cleaning materials, preventive materials, masks, oxygen cylinders, medical ventilators, autoclaves, microscopes, and sterilization sprinklers to combat coronavirus but also food aid and cleaning and sterilization materials [2,3].

There is also evidence on the website of the Global Health Security Funding Tracker that Qatar has pledged 15 million USD for the World Health Organization (WHO); however, it is designated to improve preparedness and emergency response for COVID-19 [4]. There is no further evidence of such donations on the websites of the Ministry of Public Health, the Ministry of Foreign Affairs, the WHO, or GIDA [5,6,7,4].

[1] AA. "UN Chief Thanks Qatar for Assistance Against COVID-19". [https://www.aa.com.tr/en/latest-on-coronavirus-outbreak/un-chief-thanks-qatar-for-assistance-against-covid-19/1860815]. Accessed 20 October 2020.
[2] OHCA. "Qatar Fund for Development on Behalf of the State of Qatar, Sends Urgent Medical Aid to Several Friendly Countries Through Qatar Airways". [https://reliefweb.int/report/democratic-republic-congo/qatar-fund-development-behalf-state-qatar-sends-urgent-medical-aid]. Accessed 4 October 2020.
[3] OHCA. "Qatar Charity Provides Aid for Various Countries to Fight Coronavirus". [https://reliefweb.int/report/yemen/qatar-charity-provides-aid-various-countries-fight-coronavirus]. Accessed 4 October 2020.
[4] Global Health Security Funding Tracker, Qatar Data Page. [https://tracking.ghscosting.org/details/1029/recipient]. Accessed 22 November 2020.
[5] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 2 December

2020.
[6] Ministry of Foreign Affairs of the State of Qatar. [https://www.mofa.gov.qa/en]. Accessed 2 December 2020.
[7] World Health Organization (WHO). [https://www.who.int/]. Accessed 2 December 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 evidence that Qatar has a plan or policy for sharing genetic data, epidemiological data, clinical specimens, or other biological material with international organisations or countries. Law No. 9 of 2013 regarding DNA sets certain conditions on the collection, maintenance, and use of a national DNA database, primarily by law enforcement; however, Article 9 also provides for "DNA data and information shall be exchanged with foreign judicial authorities and international organizations, in accordance with applicable law" [1]. The law does not mention the sharing of genetic data, epidemiological data, clinical specimens, or other biological material that would be used for anything other than law enforcement purposes. The Ministry of Public Health, in conjunction with the Qatar Biobank's Qatar Genome project, drafted "Guidance for the Design, Ethical Review, and Conduct of Genomic Research in Qatar," which provide basic guidelines for technical and administrative procedures, de-identification of genetic data stored in databases, data security, rule for sharing data between institutions, and other ethical considerations [2]. However, these guidelines do not contain explicit provisions for the sharing of data outside Qatar. Other guidance from the Ministry of Public Health, the "Guidance for the Use of Stored Data and Biological Specimens in Human Research" [3], and "Guidance for the Use of Stored Data and Biological Specimens in Human Research" [4] include specific instructions for collecting, storing, handling, and sharing biological specimens and information as well as explicit instructions for the transfer of tissues to external institutions. There is no additional evidence of a genetic data sharing arrangement through the Ministry of Public Health [5] and the Ministry of Municipality and the Environment [6]. While there is evidence that isolated specimens (biological materials) along with the associated epidemiological data have been shared with other countries, there is no sufficient evidence that this process was part of a

plan or policy for these procedures but rather due a specific cooperation for this exchange [7].

[1] Al Meezan Legal Portal. 18 September 2013. "Law No. 9 of 2013 Regarding DNA". [http://www.almeezan.qa/LawPage.aspx?id=5042&language=en]. Accessed 4 October 2020.
[2] Ministry of Public Health of the State of Qatar. January 2018. "Guidance for the Design, Ethical Review, and Conduct of Genomic Research in Qatar". [https://www.moph.gov.qa/about-us/Documents/research/GuidancefortheDesignEthicalReviewandConductofGenomicResearchinQatar.pdf]. Accessed 4 October 2020.
[3] Ministry of Public Health of the State of Qatar. "Guidance for the Use of Stored Data and Biological Specimens in Human Research". [https://www.moph.gov.qa/about-us/Documents/research/GuidancefortheUseofStoredDataandBiologicalSpecimensinHumanResearch.pdf]. Accessed 4 October 2020.
[4] Ministry of Public Health of the State of Qatar. "Guidance for the Use of Stored Data and Biological Specimens in Human Research". [https://www.moph.gov.qa/about-us/Documents/research/GuidancefortheUseofStoredDataandBiologicalSpecimensinHumanResearch.pdf]. Accessed 4 October 2020.
[5] Ministry of Public Health of the State of Qatar. [https://www.moph.gov.qa/pages/default.aspx]. Accessed 4 October 2020.
[6] Ministry of Municipality and Environment of the State of Qatar. [http://www.mme.gov.qa/cui/index.dox?siteID=2]. Accessed 4 October 2020.
[7] Qatar Foundation, "Hopes High for COVID-19 Research Progress Following Qatar-Italy Cooperation". [https://www.qf.org.qa/stories/hopes-high-for-covid-19-research-progress-following-qatar-italy-cooperation]. Accessed 20 October 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 reporting that Qatar has failed to comply with the Pandemic Influenza Preparedness (PIP) framework agreement to share influenza samples in the last two years. On the contrary, there is evidence that international sample sharing is a practice in Qatar. In June 2020, plasma was flown to Italy as the result of cooperation between Qatar Foundation, Hamad Medical Corporation and the Embassy of Italy in Doha. There was no other publicly available information in global media sources that indicated that Qatar had been noncompliant with the PIP framework agreement [1].

[1] Qatar Foundation. "Hopes High for COVID-19 Research Progress Following Qatar-Italy Cooperation". [https://www.qf.org.qa/stories/hopes-high-for-covid-19-research-progress-following-qatar-italy-cooperation]. Accessed 4 October 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 publicly available evidence that Qatar has failed to share pandemic pathogen samples during an outbreak in the past two years. The most recent regional MERS-CoV outbreak event reported to the World Health Organization (WHO) was between April and May 2017, and there was no public indication that Qatar withheld samples [1]. Other global news reporting does not indicate that Qatar has failed to share samples in the past two years. Plasma from patients in Qatar, who had recovered from COVID-19, was sent to Italy in order to further research on how the body fights off the virus.The plasma was flown to Italy in June 2020 as the result of cooperation between Qatar Foundation, Hamad Medical Corporation, and the Embassy of Italy in Doha. According to Dr. Lucio Rispo, CEO of Sardinia Healthcare and Research Properties, the samples are being analyzed at the University Cattolica del Sacro Cuore in Rome and the Mater Olbia Hospital in Sardinia [2].

[1] World Health Organisation (WHO). 6 June 2017. "Middle East Respiratory Syndrome Coronavirus (MERS-CoV)—Saudi Arabia, United Arab Emirates, and Qatar". [http://www.who.int/csr/don/06-june-2017-mers/en/]. Accessed 20 October 2020.
[2] Qatar Foundation, "Hopes high for COVID-19 Research Progress Following Qatar-Italy Cooperation". [https://www.qf.org.qa/stories/hopes-high-for-covid-19-research-progress-following-qatar-italy-cooperation]. Accessed 4 October 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: 3

2020

Economist Intelligence

6.1.1b

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

Input number

Current Year Score: 2

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: 2

2020

Economist Intelligence

6.1.1e

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

Input number

Current Year Score: 63

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: 1

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: 2

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: 3

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: 3

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: 4

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: 3

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: 93.46

2017

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: 0.8

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: 0.03

2008-2018

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

There is no publicly available estimate on the share of employment in the informal sector in Qatar, despite checking the databases of ILOSTAT [1], the World Bank [2], and other research bodies which may have this information. However, it would be safe to estimate that the share of employment in the informal sector in Qatar is below 25% for a couple of reasons: the Qatar labor legislation is strictly implemented in the country. According to the World Bank, the unemployment rate in Qatar is currently at 0.1% [2] and this is realistic because Qataris have a privileged access to the job market through Qatarisation laws [3], and the import of labor is strictly monitored and controlled according to demand through a system where any incoming resident to the country must have a prior contract of employment [4]. Finally, due to the size of the country and population as well as the relatively large means of the government, it would be safe to assume that both these measures are strictly implemented and, therefore, there is no room for the development of an informal economy.

[1] ILOSTAT Database. "Country Profiles—Qatar". [https://ilostat.ilo.org/data/country-profiles/]. Accessed 23 November 2020.
[2] World Bank, Trade Economics. "Qatar Unemployment Rate 2019". [https://tradingeconomics.com/qatar/unemployment-rate]. Accessed 4 October 2020.
[3] Qatar Foundation. "Qatarization". [https://www.qf.org.qa/careers/qatarization]. Accessed 20 October 2020.
[4] Al Tamimi and Co. "Employment in Qatar as per Qatar Labour Law." [https://www.tamimi.com/law-update-articles/employment-in-qatar/]. Accessed October 2020.

6.2.3c

Coverage of social insurance programs (% of population)

Scored in quartiles (0-3, where 3=best)

Current Year Score: 2

2016, or latest available

World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions

Input number

Current Year Score: 2

2021

Economist Intelligence Democracy Index

6.2.5 Local media and reporting

6.2.5a

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

Input number

Current Year Score: 0

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.41

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: 3

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: 4

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: 4

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 99.19

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

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: 80.1

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: 650.1

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 1.52

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 14

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 35.1

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: 99

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 99

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: 2363.92

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: 1

2018

Wellcome Trust Global Monitor 2018