

# Bahrain

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

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

### 1.1 ANTIMICROBIAL RESISTANCE (AMR)

#### 1.1.1 AMR surveillance, detection, and reporting

##### 1.1.1a

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

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

**Current Year Score: 2**

Bahrain has a national antimicrobial residues (AMR) plan that includes surveillance, detection, and reporting of priority AMR pathogens.

The website of the World Health Organization's (WHO) library of national action plans states that Bahrain has published its National Action Plan on Antimicrobial Resistance in March 2019 and the plan covers surveillance, detection and reporting of priority AMR pathogens. It states that "the plan aims to strengthen knowledge and evidence through surveillance of AMR, to reduce the incidence of infection through effective infection prevention and control in healthcare to reduce the burden of infection". The plan also states that part of its reporting is to cover "performance indicators, targets and timelines, data collection and reporting methods" [1].

Further, in the news section of its website, the Ministry of Health (MOH) states that it launched the National AMR plan on 22 November 2018, but it does not provide any more details. Several local media outlets reported the same announcement by the MOH. A further search did not result in more information about the plan or the text of the actual plan and, thus, the plan announced by the MOH is not publicly available yet [2].

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states, "No national plan for detection and reporting of priority AMR pathogens has been developed and no formal or official circular has been issued to describe the organizational structure of national AMR coordination. However, a document was submitted to the Supreme Council of Health in 2015 outlining achievements and future activities for human AMR plans with limited involvement of the animal sector" [3].

The WHO global database for AMR Country Self-assessment Survey of 2017 for Bahrain states that Bahrain's national AMR action plan is under development [4]. The website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide any information about Bahrain's national AMR plan [5].

[1] World Health Organisation (WHO). "Library of National Action Plans". [<https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 17 December 2020.

[2] Ministry of Health. November 2018. "Launching the National AMR Plan". [<https://www.moh.gov.bh/News/Details/3421>]. Accessed 17 December 2020.

[3] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4->

eng.pdf]. Accessed 17 December 2020.

[4] World Health Organisation (WHO). April 2017. "Global Database for Antimicrobial Resistance Country Self Assessment Survey, Bahrain". [<https://amrcountryprogress.org/>]. Accessed 17 December 2020.

[5] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 17 December 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: 0**

There is insufficient publicly available evidence that shows that Bahrain has a national laboratory/laboratory system that tests for priority antimicrobial residues (AMR) pathogens.

According to the Joint External Evaluation (JEE) mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, "no national plan for detection and reporting of priority AMR pathogens has been developed and no formal or official circular has been issued to describe the organizational structure of national AMR coordination. However, a document was submitted to the Supreme Council of Health in 2015 outlining achievements and future activities for human AMR plans with limited involvement of the animal sector. For the human sector, although no national AMR laboratory has been assigned, capacities for AMR detection are available at SMC (Salmaniya Medical Complex), BDF (Bahrain Defence Force), and KHUH (King Hamad University Hospital), where their laboratories can identify all pathogens and do advanced molecular characterization". The JEE report adds that "there is capacity in the animal health laboratory for testing AMR". However, no AMR pathogens for which testing occurs are revealed explicitly, and therefore, there is no publicly available information that shows that Bahrain does test for any of the WHO's 7+1 priority AMR pathogens.

Additionally, the JEE report mentions 3 sentinel surveillance sites. "AMR capacity and surveillance at SMC (Salmaniya Medical Complex), BDF (Bahrain Defence Force), and KHUH (King Hamad University Hospital) will facilitate sentinel surveillance sites for AMR reporting at national and international level"[1].

The website of the World Health Organization's (WHO) library of national action plans does not list Bahrain as one of the countries that have an existing publicly available national action plan on AMR and does not provide information regarding the country's national laboratory system [2].

Further, the WHO global database for AMR Country Self-assessment Survey of 2017 for Bahrain does not provide information on the country's national laboratory system [3]. The website of the Ministry of Health does not provide information about AMR testing capacity in the country's national laboratory system [4]. Further, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs section does not provide any information about Bahrain's national AMR plan [5].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 17 December 2020.

[2] World Health Organisation (WHO). "Library of National Action Plans". [<https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 17 December 2020.

[3] World Health Organisation (WHO). 2017. "Global Database for Antimicrobial Resistance Country Self Assessment Survey,

Bahrain". [<https://amrcountryprogress.org/>]. Accessed 17 December 2020.

[4] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 17 December 2020.

[5] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 17 December 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 evidence that the government conducts environmental detection or surveillance activities (e.g. in soil, waterways, etc.) for antimicrobial residues or antimicrobial resistance (AMR) organisms.

The Supreme Council for Environment website does not provide information that shows that the government conducts environmental detection or surveillance activities (e.g. in soil, waterways, etc.) for antimicrobial residues or AMR organisms [1].

The Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs section of the website does not provide information that shows that the government conducts environmental detection or surveillance activities (e.g. in soil, waterways, etc.) for antimicrobial residues or AMR organisms [2].

As per 1.1.1a, Bahrain has launched its national plan on AMR but it is not publicly available yet on the Ministry of Health website. Therefore the plan could not be checked to confirm if the government conducts environmental detection or surveillance activities (e.g. in soil, waterways, etc.) for antimicrobial residues or AMR organisms [3].

The website of the World Health Organization's (WHO) library of national action plans does not list Bahrain as one of the countries that have an existing publicly available national action plan on AMR [4].

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that Bahrain only focuses on chemical events when it comes to environmental tests (e.g. water and soil). The report does not provide information that shows that the government conducts environmental detection or surveillance activities (e.g. in soil, waterways, etc.) for AMRs or AMR organisms [5].

Further, the WHO global database for AMR country self-assessment survey of 2017 for Bahrain does not provide information that shows that the government conducts environmental detection or surveillance activities (e.g. in soil, waterways, etc.) for AMRs or AMR organisms [6].

[1] Supreme Council for Environment. [<http://www.sce.gov.bh/en>]. Accessed 17 December 2020.

[2] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 17 December 2020.

[3] Ministry of Health "Launching the National AMR Plan". November 2018. [<https://www.moh.gov.bh/News/Details/3421>]. Accessed 17 December 2020.

[4] World Health Organisation (WHO). "Library of National Action Plans". [<https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 17 December 2020.

[5] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain

Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 17 December 2020.

[6] World Health Organisation (WHO). 2017. "Global Database for Antimicrobial Resistance Country Self Assessment Survey, Bahrain". [<https://amrcountryprogress.org/>]. Accessed 17 December 2020.

## 1.1.2 Antimicrobial control

### 1.1.2a

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

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

**Current Year Score: 1**

There is a national regulation that requires prescriptions for antibiotic use for humans in Bahrain according to the Antibiotics Regulatory Committee at the Supreme Council of Health (SCH); however, there is evidence of gaps in enforcement.

The Committee issued new guidelines in December 2017 to all government and private hospitals regarding prescription requirements for antibiotic use for humans. A newspaper article in Alayam entitled "New national guidelines for prescribing antibiotics", published on 6 December 2017, states that "the Antibiotics Regulatory Committee at the Supreme Council of Health has issued new guidelines for government and private hospitals for antibiotic prescriptions"; it also states that the National Health Regulatory Authority (NHRA) is the enforcing body and all hospitals are being monitored and ranked based on their compliance with the guidelines. However, the article does not state the regulation's name and only highlights the enforcement of the regulation's guidelines [1].

In the news section of its website, the Ministry of Health (MOH) states that it launched the National AMR plan on 22 November 2018. There are no details about the plan and there is no evidence that it includes references to a national legislation or regulation requiring prescriptions for antibiotic use for humans. Several local media outlets reported the same announcement by the MOH. A further search did not result in more information about the plan or the text of the actual plan and, thus, the plan announced by the MOH is not publicly available yet [2].

Further, the Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that " a circular prohibiting antibiotic dispensing without prescription through pharmacies was issued in 2013"; however, it does provide more information and recent developments given that the report was completed in 2016 [3].

The website of the World Health Organization (WHO) library of national action plans does not list Bahrain as one of the countries that have an existing publicly available national action plan on AMR and, thus, does not provide information on regulations requiring prescriptions for antibiotics [4].

The WHO global database for AMR Country Self-assessment Survey of 2019-2020 gave Bahrain a score of "B" for its national monitoring system for consumption and rational use of antimicrobials in human health- in comparison with a score of "D" in the 2018-2019 survey edition (B = System designed for surveillance of antimicrobial use, that includes monitoring national level sales or consumption of antibiotics in health services ; D = Prescribing practices and appropriate antibiotic use are monitored in a national sample of healthcare settings.) [5].

As for enforcement, The Daily Tribune, a local paper, published on December 8, 2018, an article revealing that antibiotics is misused 25 to 30 percent of the time in Bahrain and leading to antibiotics resistance. The article is based on the award-

winning report by Dr Jameela Al-Salman, Chairperson of the Anti-biotics Committee of the Supreme Council of Health [6].

- [1] Alayam Newspaper. "New National Guidelines for Prescribing Antibiotics". [https://www.alayam.com/alayam/local/696000/News.html]. Accessed 17 December 2020.
- [2] Ministry of Health. November 2018. "Launching the National AMR Plan". [https://www.moh.gov.bh/News/Details/3421]. Accessed 17 December 2020.
- [3] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf]. Accessed 17 December 2020.
- [4] World Health Organisation (WHO). "Library of National Action Plans". [https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 17 December 2020.
- [5] World Health Organisation (WHO). 2017. "Global Database for Antimicrobial Resistance Country Self Assessment Survey, Bahrain". [https://amrcountryprogress.org/]. Accessed 17 December 2020.
- [6] The Daily Tribune. December 8, 2018. "Stop Antibiotic Overuse". [https://www.newsofbahrain.com/epaper/08-12-2018/single/page-05.pdf]. Accessed 17 December 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: 2**

Bahrain has national regulation in place requiring prescriptions for antibiotic use for animals; additionally, there is no evidence of systemic small or large-scale gaps in enforcement.

According to the Antibiotics Regulatory Committee at the Supreme Council of Health (SCH), it issued new guidelines in December 2017 regarding prescription requirements for antibiotic use for animals. An article in newspaper Alayam entitled "New national guidelines for prescribing antibiotics", published on 6 December 2017, states that "the Antibiotics Regulatory Committee at the Supreme Council of Health has issued new guidelines for antibiotic prescriptions and these guidelines are not limited to humans, but also includes animals"; moreover, it also states that the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs is the enforcing body and a main stakeholder of the committee. However, the article does not state the regulation's name and only highlights the enforcement of the regulation's guidelines [1].

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "antibiotics are not used for growth promotion in the animal sector and are only dispensed through the prescription of vets"; however, it does not provide more information on the regulation [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs section does not provide any information about the national legislation or regulation requiring prescriptions for antibiotic use for animals [3].

- [1] Alayam Newspaper. "New National Guidelines for Prescribing Antibiotics". [https://www.alayam.com/alayam/local/696000/News.html]. Accessed 17 December 2020.
- [2] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4 - 8 September 2016". [http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf]. Accessed 17 December 2020.
- [3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [https://www.mun.gov.bh/portal/].

Accessed 17 December 2020.

## 1.2 ZONOTIC 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: 0**

There is no evidence that Bahrain has a national law or plan on zoonotic disease.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "there are no written generic national plans or current disease-specific plans for response to zoonotic diseases" [1].

The website of the Ministry of Health does not provide information about a national law, plan, or equivalent strategy document on zoonotic disease [2].

Further, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information about a national law, plan, or equivalent strategy document, on zoonotic disease [3].

According to the OIE PVS evaluation reports website, Bahrain does not have an OIE PVS evaluation report that is publicly available and, therefore, does not provide information about a national law, plan, or equivalent strategy document on zoonotic disease [4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 18 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 18 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 18 December 2020.

[4] World Organization for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 18 December 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 Bahrain has 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.



The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that there is no generic national strategy for zoonoses or "One Health" in Bahrain. It also states that "there are no written generic national plans or current disease-specific plans for response to zoonotic diseases". The report further adds that "no established, written national plans exist for systematic information exchange and response to zoonoses" [1].

Further, the website of the Ministry of Health does not provide information about national legislation, plans or equivalent strategy document(s) which include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans [2]. The website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs also does not provide information about national legislation, plans or equivalent strategy document(s) which include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans [3].

According to the website of the OIE PVS evaluation reports, Bahrain does not have an OIE PVS evaluation report that is publicly available and, therefore, does not provide information about national plans, guidelines, or laws that tackle measures for risk identification and reduction for zoonotic disease spillover events [4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 18 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 18 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 18 December 2020.

[4] World Organization for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 18 December 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 Bahrain has national plans, guidelines, or laws that account for the surveillance and control of multiple zoonotic pathogens of public health concern.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that there is limited surveillance for zoonotic pathogens; however, it does not include control. The report states that "priority zoonotic diseases have been identified, albeit separately, by the public health and animal health sectors" and also states that "animal health surveillance systems are well established for certain diseases, especially for imported animals". The zoonotic diseases that are covered under surveillance are brucellosis, glanders, MERS-CoV, rabies, tuberculosis, and foodborne zoonoses [1].

Further, the website of the Ministry of Health does not provide information about national plans, guidelines, or laws that account for the surveillance and control of multiple zoonotic pathogens of public health concern [2].

The website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs also does not provide information about national plans, guidelines, or laws that account for the surveillance and control of multiple zoonotic

pathogens of public health concern [3].

According to the website of the OIE PVS evaluation reports, Bahrain does not have an OIE PVS evaluation report that is publicly available and, therefore, does not provide information about national plans, guidelines, or laws that account for the surveillance and control of multiple zoonotic pathogens of public health concern [4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 18 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 18 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 18 December 2020.

[4] World Organization for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 18 December 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: 0**

There is no evidence that Bahrain has a department, agency, or unit for zoonotic disease that functions across ministries.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "a formal, interministerial zoonoses committee that meets regularly to ensure communication and collaboration among ministries, while proposed, has not yet been established" [1].

The website of the Ministry of Health does not provide information about a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries [2].

Moreover, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information about a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries [3].

According to the website of the OIE PVS evaluation reports, Bahrain does not have an OIE PVS evaluation report that is publicly available and, therefore, does not provide information about a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries [4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 18 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 18 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 18 December 2020.

[4] World Organization for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 18 December 2020.

## 1.2.2 Surveillance systems for zoonotic diseases/pathogens

### 1.2.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Bahrain has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not provide information that indicates that Bahrain has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency [1].

The website of the Ministry of Health does not provide information that indicates that Bahrain has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information that indicates that Bahrain has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency [3].

According to the website of the OIE PVS evaluation reports, Bahrain does not have an OIE PVS evaluation report that is publicly available and, therefore, does not provide information that indicates that Bahrain has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency [4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 18 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 18 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 18 December 2020.

[4] World Organization for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 18 December 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 that Bahrain has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners).

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not provide information that indicates that Bahrain has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners) [1].

Further, the website of the Ministry of Health does not provide information that indicates that Bahrain has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners) [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs also does not provide information that indicates that Bahrain has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners) [3].

According to the OIE PVS evaluation reports website, Bahrain does not have an OIE PVS evaluation report that is publicly available and, therefore, does not provide information that indicates that Bahrain has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners) [4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 18 December, 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 18 December, 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 18 December, 2020.

[4] World Organization for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 18 December, 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 Bahrain conducts surveillance of zoonotic disease in wildlife (e.g. wild animals, insects, other disease vectors, etc.).

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that Bahrain "reports wildlife events to OIE via the "WAHID-wild" system"; however, it does not provide more information on the surveillance it conducts and what type of wildlife it includes [1].

Further, the website of the Ministry of Health does not provide information that indicates that Bahrain conducts surveillance of zoonotic disease in wildlife (e.g. wild animals, insects, other disease vectors, etc.) [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs also does not provide information that indicates that Bahrain conducts surveillance of zoonotic disease in wildlife (e.g. wild animals, insects, other disease vectors, etc.) [3].

According to the OIE PVS evaluation reports website, Bahrain does not have an OIE PVS evaluation report that is publicly available and, therefore, does not provide information that indicates that Bahrain conducts surveillance of zoonotic disease

in wildlife (e.g. wild animals, insects, other disease vectors, etc.) [4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 18 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 18 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 18 December 2020.

[4] World Organization for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 18 December 2020.

### 1.2.3 International reporting of animal disease outbreaks

#### 1.2.3a

Has the country submitted a report to OIE on the incidence of human cases of zoonotic disease for the last calendar year?

Yes = 1 , No = 0

Current Year Score: 0

2019

OIE WAHIS database

### 1.2.4 Animal health workforce

#### 1.2.4a

Number of veterinarians per 100,000 people

Input number

Current Year Score: 5.79

2017

OIE WAHIS database

#### 1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 6.09

2017

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 that Bahrain has a national law or plan on zoonotic disease.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "there are no written generic national plans or current disease-specific plans for response to zoonotic diseases" [1].

The website of the Ministry of Health does not provide information about a national law, plan, or equivalent strategy document on zoonotic disease that includes mechanisms for working with the private sector in controlling or responding to zoonoses [2].

Further, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information about a national law, plan, or equivalent strategy document on zoonotic disease that includes mechanisms for working with the private sector in controlling or responding to zoonoses [3].

Further, according to the website of the OIE PVS evaluation reports, Bahrain does not have an OIE PVS evaluation report that is publicly available and, therefore, does not provide information about a national law, plan, or equivalent strategy document on zoonotic disease that includes mechanisms for working with the private sector in controlling or responding to zoonoses [4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 18 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 18 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 18 December 2020.

[4] World Organization for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 18 December 2020.

## 1.3 BIOSECURITY

### 1.3.1 Whole-of- government biosecurity systems

#### 1.3.1a

Does the country have in place a record, updated within the past five years, of the facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of those facilities?

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that Bahrain has in place a record, updated within the past 5 years, of the facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of those facilities.

The Joint External Evaluation mission report of the Kingdom of Bahrain that was completed in September 2016 and published in April 2017, states that "MERS-CoV, Mycobacterium tuberculosis, and poliovirus have been identified nationally as dangerous pathogens for which a comprehensive inventory of the sites where they are kept and can be handled is maintained"[1]. However, the JEE report does not provide any additional information about inventory management systems.

No further information is available via the Ministry of Health, the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs, the Bahrain Defense Force or the Royal Medical Services [2,3,4].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence-Building Measures reports since 2008. The 2008 report is not publicly available, and as such, it is unknown if it contains information on this subject [5].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4 - 8 September 2016". (April 2017)[<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>] Accessed on 18 December 2020.

[2] Ministry of Health [<https://www.moh.gov.bh>] Accessed on 18 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs [<https://www.mun.gov.bh/portal/>] Accessed on 18 December 2020.

[4] Bahrain Defense Force, Royal Medical Services [<https://www.bdfmedical.org/>] Accessed on 18 December 2020.

[5] UN Confidence Building Measures "Bahrain country profile" [<https://bwc-ecbm.unog.ch/state/bahrain>] Accessed on 18 December 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 evidence that Bahrain has 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.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "Bahrain currently has no specific biosafety or biosecurity laws", and part of the recommendations in the report is to "enact comprehensive national biorisk legislation covering both biosafety and biosecurity in laboratories across government sectors" [1].

The website of the Ministry of Health does not provide information that indicates that Bahrain has 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 [2].

Further, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information that indicates that Bahrain has 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 [3].

In addition, the website of the Bahrain Defense Force, Royal Medical Services does not provide information that indicates that Bahrain has 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 [4].

The VERTIC database does not provide information on biosecurity regulations in Bahrain and only includes criminal laws, anti-money laundering, customs, etc [5].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 19 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 19 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 19 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 19 December 2020.

[5] VERTIC Database. "Bahrain Profile". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 19 December 2020.

[6] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 19 December 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 evidence that Bahrain has in place legislation and/or regulations related to biosecurity and there is no evidence that specifies the established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states, "The Ministry of Health (MOH) is fully committed to creating a high-level biosafety and biosecurity (biorisk) environment in all laboratories." However, it does not mention if the MOH is the entity responsible for biosecurity in facilities that are not under its management [1].

Further, the website of the MOH does not provide information about the established agency (or agencies) responsible for the



enforcement of biosecurity legislation and regulations [2].

The website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information about the established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations [3].

In addition, the website of the Bahrain Defense Force, Royal Medical Services also does not provide information about the established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations [4].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [5].

The VERTIC database does not provide additional information in this regard; it only includes information on criminal laws, anti-money laundering, customs, etc [6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 19 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 19 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 19 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 19 December 2020.

[5] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 19 December 2020.

[6] VERTIC Database. "Bahrain Profile". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 19 December 2020.

### 1.3.1d

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no public evidence that shows that Bahrain has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not provide information that shows that Bahrain has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities [1].

The website of the Ministry of Health does not provide information that shows that Bahrain has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information that shows that Bahrain has taken action to consolidate its inventories of especially dangerous

pathogens and toxins into a minimum number of facilities [3].

The website of the Bahrain Defense Force, Royal Medical Services also does not provide information that shows that Bahrain has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities [4].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [5].

The VERTIC database does not provide additional information in this regard; it only includes information on criminal laws, anti-money laundering, customs, etc [6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 19 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 19 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 19 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 19 December 2020.

[5] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 19 December 2020.

[6] VERTIC Database. "Bahrain Profile". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 19 December 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 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 in Bahrain.

The Joint External Evaluation (JEE) mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "Polymerase chain reaction (PCR)-based tests are increasingly used in laboratories in Bahrain"; however, it does not specify if the PCR testing is for anthrax and/or Ebola [1].

The website of the Ministry of Health does not provide information related to in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen [2].

Further, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information related to in-country capacity to conduct PCR-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen [3].

The website of the Bahrain Defense Force, Royal Medical Services also does not provide information related to in-country

capacity to conduct PCR-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen [4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 19 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 19 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 19 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 19 December 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 train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential?**

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Bahrain requires biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that " Biosecurity training, focusing first on the national Public Health Laboratory (PHL), and some other laboratories in the public health sector has been implemented. There is uncertainty about sustainable academic-level training". However, it does not specify when was this implemented, how frequent is the training conducted and if it includes a common curriculum or train-the-trainer program [1].

Further, the website of the Ministry of Health does not provide information that shows that Bahrain requires biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information that shows that Bahrain requires biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential [3].

The website of the Bahrain Defense Force, Royal Medical Services also does not provide information that shows that Bahrain requires biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential [4].

The VERTIC database does not provide information that shows that Bahrain requires biosecurity training, using a

standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential; it only includes criminal laws, anti-money laundering, customs, etc [5].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 20 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 20 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 20 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 20 December 2020.

[5] VERTIC Database. "Bahrain Profile". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 20 December 2020.

[6] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 20 December 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 evidence that regulations or licensing conditions in Bahrain 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.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that Bahrain does not have biosafety laws in place and the National Health Regulatory Authority (NHRA) is responsible for laboratory licensing; however, it does not mention the type of checks required for personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential [1].

Further, the website of the Ministry of Health does not provide information that shows that Bahrain has regulations or licensing conditions that 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 [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information that shows that Bahrain has regulations or licensing conditions that 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 [3].

The website of the Bahrain Defense Force, Royal Medical Services also does not provide information that shows that Bahrain has regulations or licensing conditions that 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 [4].

The VERTIC database does not provide information that shows that Bahrain has regulations or licensing conditions that 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. It only includes criminal laws, anti-money laundering, customs, etc. [5].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [6]. No relevant articles or documents were found after conducting an online search.

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 20 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 20 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 20 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 20 December 2020.

[5] VERTIC Database. "Bahrain Profile". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 20 December 2020.

[6] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 20 December 2020.

## 1.3.4 Transportation security

### 1.3.4a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available information for Bahrain on national regulations on the safe and secure transport of infectious substances (Categories A and B).

The Ministry of Transportation and Telecommunications, Civil Aviation Publication 002 CAP02 published on 27 September 2017, mentions some guidelines regarding transportation of packages and infectious substances; however, it does not mention Categories A & B specifically. Further, the website of the Ministry of Transportation and Telecommunications does not provide information about national regulations on the safe and secure transport of infectious substances (Categories A and B) [1].

In addition, the website of the Ministry of Health does not provide information on national regulations on the safe and secure transport of infectious substances (Categories A and B) [2].

The website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs also does not provide information on national regulations on the safe and secure transport of infectious substances (Categories A and B) [3].

The website of the Bahrain Defense Force, Royal Medical Services does not provide information on national regulations on the safe and secure transport of infectious substances (Categories A and B) [4].

The VERTIC database does not provide information on national regulations on the safe and secure transport of infectious substances (Categories A and B). It only includes criminal laws, anti-money laundering, customs, etc [5].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [6].

[1] Ministry of Transport. 2017. "Civil Aviation Publication 002 CAP02".

[<http://www.mtt.gov.bh/sites/default/files/cap02.pdf>]. Accessed 20 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 20 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 20 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 20 December 2020.

[5] VERTIC Database. "Bahrain Profile". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 20 December 2020.

[6] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 20 December 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 no publicly available information for Bahrain with regard to a national legislation, regulation, or other guidance in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential.

The website of the Ministry of Transportation and Telecommunications website does not provide information about a national legislation, regulation, or other guidance in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential [1].

Further, the website of the Ministry of Health does not provide information on a national legislation, regulation, or other guidance in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information on a national legislation, regulation, or other guidance in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential [3].

The website of the Bahrain Defense Force, Royal Medical Services also does not provide information on a national legislation, regulation, or other guidance in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins and pathogens with pandemic potential [4].

The VERTIC database does not provide information on a national legislation, regulation, or other guidance in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential [5].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [6].

[1] Ministry of Transport. 2017. "Civil Aviation Publication 002 CAP02".

[<http://www.mtt.gov.bh/sites/default/files/cap02.pdf>]. Accessed 20 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 20 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 20 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 20 December 2020.

[5] VERTIC Database. "Bahrain Profile". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 20 December 2020.

[6] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 20 December 2020.

## 1.4 BIOSAFETY

### 1.4.1 Whole-of-government biosafety systems

#### 1.4.1a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Bahrain has in place a national biosafety legislation and/or regulations.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states, "Bahrain currently has no specific biosafety or biosecurity laws". The report also states that the National Health Regulatory Authority (NHRA) is responsible for "standards for health-care facilities and laboratories as part of licensure requirements"; however, it does not provide information related to a national biosafety legislation and/or regulations [1].

The website of the Ministry of Health does not provide information related to a national biosafety legislation and/or

regulations [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information related to a national biosafety legislation and/or regulations [3].

Further, the website of the Bahrain Defense Force, Royal Medical Services also does not provide information related to a national biosafety legislation and/or regulations [4].

The VERTIC database does not provide information related to a national biosafety legislation and/or regulations [5].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 21 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 21 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 21 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 21 December 2020.

[5] VERTIC Database. "Bahrain Profile". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 21 December 2020.

[6] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 21 December 2020.

### 1.4.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Bahrain has in place a national biosafety legislation and/or regulations and, therefore, there is no evidence that there is an established agency responsible for the enforcement of biosafety legislation and regulations.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "Bahrain currently has no specific biosafety or biosecurity laws". The report does not provide information on an established agency responsible for the enforcement of biosafety legislation and regulations [1].

The website of the Ministry of Health does not provide information on an established agency responsible for the enforcement of biosafety legislation and regulations [2].

Further, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information on an established agency responsible for the enforcement of biosafety legislation and regulations [3].

In addition, the website of the Bahrain Defense Force, Royal Medical Services also does not provide information on an established agency responsible for the enforcement of biosafety legislation and regulations [4].



The VERTIC database does not provide information on an established agency responsible for the enforcement of biosafety legislation and regulations [5].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 21 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 21 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 21 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 21 December 2020.

[5] VERTIC Database. "Bahrain Profile". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 21 December 2020.

[6] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 21 December 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 train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential?**

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient evidence that Bahrain requires biosafety training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential.

The Joint External Evaluation mission report of the Kingdom of Bahrain that was completed in September 2016 and published in April 2017, states that "biosafety training is ongoing: both training the trainers and training for staff has been implemented in the public sector laboratories and has started in private sector hospitals". The report also states that "biosafety training is offered for laboratory staff, and the country has a training programme in place at facilities housing or working with dangerous pathogens, identified currently as M. tuberculosis, MERS-CoV and poliovirus. Staff are trained in public laboratories on the transport of infectious substances according to international regulations. Bahrain has good cooperation with WHO on support for training in biosafety and emerging infections" [1]. However, it is not clear if this training is a requirement.

There is no further information on the required training from the websites of the Ministry of Health, Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs, or Bahrain Defense Force, Royal Medical Services [2,3,4].

The VERTIC database does not provide information that shows that Bahrain requires biosafety training, using a standardized,

required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential [5].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence-Building Measures reports since 2008. The 2008 report is not publicly available, and as such, it is unknown if it contains information on this subject [6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed on 21 December 2020.

[2] Ministry of Health [<https://www.moh.gov.bh>] Accessed on 21 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs [<https://www.mun.gov.bh/portal/>] Accessed on 21 December 2020.

[4] Bahrain Defense Force, Royal Medical Services [<https://www.bdfmedical.org/>] Accessed on 21 December 2020.

[5] VERTIC database "Bahrain profile" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>] Accessed on 21 December 2020.

[6] UN Confidence Building Measures "Bahrain country profile" [<https://bwc-ecbm.unog.ch/state/bahrain>] Accessed on 21 December 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 Bahrain has conducted an assessment to determine whether there is ongoing research on especially dangerous pathogens, toxins, pathogens with pandemic potential, and/or other dual use research.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not provide information that shows that Bahrain 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 [1].

The website of the Ministry of Health does not provide information that shows that Bahrain has conducted an assessment to determine whether there is ongoing research on especially dangerous pathogens, toxins, pathogens with pandemic potential, and/or other dual use research [2].

Further, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs website also does not provide information that shows that Bahrain has conducted an assessment to determine whether there is ongoing research on especially dangerous pathogens, toxins, and pathogens with pandemic potential, and/or other dual use research [3].

In addition, the website of the Bahrain Defense Force, Royal Medical Services also does not provide information that shows that Bahrain has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, and pathogens with pandemic potential, and/or other dual use research [4].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available, and as such, it is unknown if it contains information on this subject [5].

The VERTIC database does not provide additional information in this regard; it only includes information on criminal laws, anti-money laundering, customs, etc [6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 21 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 21 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 21 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 21 December 2020.

[5] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 21 December 2020.

[6] VERTIC Database. "Bahrain Profile". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 19 December 2020.

### 1.5.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence of a national policy requiring oversight of dual-use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not provide information about a national policy requiring oversight of dual use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential [1].

Further, the website of the Ministry of Health does not provide information about a national policy requiring oversight of dual-use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential [2].

The website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information about a national policy requiring oversight of dual-use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential [3].

In addition, the website of the Bahrain Defense Force, Royal Medical Services does not provide information about a national

policy requiring oversight of dual-use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential. [4]

The VERTIC database does not provide information that shows that Bahrain has regulations requiring oversight of dual-use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential [5].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 21 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 21 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 21 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 21 December 2020.

[5] VERTIC database "Bahrain profile" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>] Accessed 21 December 2020.

[6] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 21 December 2020.

### 1.5.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence of a national policy requiring oversight of dual-use research and therefore no evidence of an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual-use research.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not provide information about an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual-use research [1].

Further, the website of the Ministry of Health does not provide information about an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual-use research [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information about an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual-use research [3].

The website of the Bahrain Defense Force, Royal Medical Services does not provide information about an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual-use research [4].

The VERTIC database does not provide information about an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual-use research [5].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [6].

[1] World Health Organisation (WHO). April 2107. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 21 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 21 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 21 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 21 December 2020.

[5] VERTIC database "Bahrain profile" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>] Accessed 21 December 2020.

[6] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 21 December 2020.

## 1.5.2 Screening guidance for providers of genetic material

### 1.5.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Bahrain has a national legislation, regulation, policy, or other guidance requiring the screening of synthesized DNA before it is sold.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not provide information about a national legislation, regulation, policy, or other guidance, requiring the screening of synthesized DNA before it is sold [1].

Further, the website of the Ministry of Health does not provide information about a national legislation, regulation, policy, or other guidance, requiring the screening of synthesized DNA before it is sold [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information about a national legislation, regulation, policy, or other guidance, requiring the screening of synthesized DNA before it is sold [3].

The website of the Bahrain Defense Force, Royal Medical Services does not provide information about a national legislation, regulation, policy, or other guidance requiring the screening of synthesized DNA before it is sold [4].

The website of the Ministry of Transportation and Telecommunications also does not provide information about a national

legislation, regulation, policy, or other guidance, requiring the screening of synthesized DNA before it is sold [5].

The VERTIC database does not provide information about a national legislation, regulation, policy, or other guidance, requiring the screening of synthesized DNA before it is sold [6].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [7].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 21 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 21 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 21 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 21 December 2020.

[5] Ministry of Transportation & Telecommunication. 2017. "Civil Aviation Publication 002". [<https://www.mtt.gov.bh/sites/default/files/cap02.pdf>]. Accessed 21 December 2020.

[6] VERTIC database "Bahrain profile" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>] Accessed 21 December 2020.

[7] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 21 December 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**

There is publicly available information that shows that Bahrain's national laboratory system has the capacity to conduct diagnostic tests for at least 5 of the 10 World Health Organization (WHO)-defined core tests; however, the tests are not named.

According to the Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, "the national laboratory system in health care, animal care, as well as food and water safety in Bahrain has the ability to conduct most of the 10 core tests identified by IHR, and can transport specimens safely and quickly from all intermediate levels/districts to the national laboratory facilities for advanced diagnostics. Bahrain has agreements with regional laboratory networks to ensure testing for diseases for which facilities are not available in the country". The JEE report adds that "Bahrain is proficient in classical diagnostic techniques such as bacteriology and serology, and has introduced PCR-based testing in several laboratories"[1]. However, the list of tests that Bahrain can conduct is not mentioned specifically, nor is there evidence that Bahrain has publicly defined the four country-specific tests. However, the JEE report does state that "Ministry of Health (MOH) circulars specify Public Health Law (PHL) as the national reference laboratory for a number of diseases including Bacillus anthracis, influenza (National Influenza Centre), M. tuberculosis, MERS-CoV, poliovirus, and Zika virus. No national reference laboratory has been nominated for antimicrobial susceptibility testing, nor for some diseases covered in the national vaccination programme"[1]. The website of the Ministry of Health (MOH) does not provide evidence regarding Bahrain's capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests [2].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 21 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 21 December 2020.

##### 2.1.1b

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

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

**Current Year Score: 0**

There is no evidence that Bahrain has 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 .

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not provide information about 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 [1].

Further, the website of the Ministry of Health does not provide information about 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 [2]. In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information about a national plan or strategy for conducting testing during a public health emergency, which includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing [3]. The website of the Bahrain Defense Force, Royal Medical Services does not provide information about a national plan or strategy for conducting testing during a public health emergency, which includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing [4].

Although Bahrain is party to the BWC, there is no public evidence that it has submitted any Confidence Building Measures reports since 2008. The 2008 report is not publicly available and, as such, it is unknown if it contains information on this subject [5].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 22 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 22 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 22 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 22 December 2020.

[5] UN Confidence Building Measures. "Bahrain Country Profile". [<https://bwc-ecbm.unog.ch/state/bahrain>]. Accessed 22 December 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: 0**

There is no evidence that the national laboratory serves as an accredited reference facility (e.g. ISO 15189:2003, CLIA).

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that according to Public Health Law, "the ministerial laboratories are considered accredited



reference laboratories for all parties/sectors and its functions regulated by ministerial decree". It also mentions that "Ministry of Health (MOH) circulars specify Public Health Laboratory (PHL) as the national reference laboratory for a number of diseases including Bacillus anthracis, influenza (National Influenza Centre), M. tuberculosis, MERS-CoV, poliovirus, and Zika virus "[1]. The report does not provide more information on the type of accreditation for PHL [1]. PHL does not have a website; a further online search does not yield any additional information regarding PHL's accreditation developments.

Further, the website of the Ministry of Health does not provide information that shows that the national laboratory that serves as a reference facility is accredited [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs also does not provide information that shows that the national laboratory that serves as a reference facility is accredited [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 22 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 22 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 22 December 2020.

### 2.1.2b

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

Yes = 1, No = 0

**Current Year Score: 1**

The Public Health Laboratory (PHL), which serves as a reference facility, is subject to external quality assurance reviews.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "a number of key laboratories in the health sector, including PHL, participate regularly in international external quality assurance (EQA) schemes. The PHL has also begun to implement a limited EQA programme. There is no explicit provision for a national body or mechanism to access EQA results systematically, to monitor the performance of all laboratories, and to react in the case of failed results to facilitate corrective measures"; however, the report does not provide more details about the EQA programme [1].

Further, the website of the Ministry of Health does not provide information that shows that the national laboratory that serves as a reference facility is subject to external quality assurance review [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information that shows that the national laboratory that serves as a reference facility subject to external quality assurance review [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 22 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 22 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>].

Accessed 22 December 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**

Bahrain has a nationwide specimen transport system that complements its national laboratory system. The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that Bahrain has a nationwide system to "transport specimens safely and quickly from all intermediate levels/districts to the national laboratory facilities for advanced diagnostics. Laboratory sample and specimen referral systems are well established, specimen transportation logistics mechanisms are well developed, and international transport regulations are being followed and people involved trained" [1].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4 - 8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 22 December 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 plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak. The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "in addition to meeting 'demonstrated capacity', response plans are in place and describe scaled levels of response with resource requirements for each level and procedures for acquiring additional resources". The report does not provide specific information about rapid authorization or licensing of laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak [1]. Further, the website of the Ministry of Health does not provide information that shows that there is 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 [2]. In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs also does not provide information about 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 [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 22 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 22 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 22 December 2020.

## 2.3 REAL-TIME SURVEILLANCE AND REPORTING

### 2.3.1 Indicator and event-based surveillance and reporting systems

#### 2.3.1a

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

Yes, there is evidence of ongoing event-based surveillance and evidence that the data is being analyzed on a daily basis = 2,

Yes, there is evidence of ongoing event-based surveillance, but no evidence that the data are being analyzed on a daily basis

= 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence that Bahrain is conducting ongoing event-based surveillance (EBS) and analysis for infectious diseases.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "no structured system exists yet for event-based surveillance, which is carried out on an ad hoc basis in response to media alerts, rumours or identified social media, or through screening of the health map". The report does not provide more information on EBS [1].

Further, the website of the Ministry of Health does not provide information that shows that Bahrain is conducting ongoing event-based surveillance and analysis for infectious disease [2].

In addition, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs also does not provide information that shows that Bahrain is conducting ongoing event-based surveillance and analysis [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 22 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 22 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 22 December 2020.

#### 2.3.1b

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence that Bahrain has reported a potential public health emergency of international concern (PHEIC) to the WHO within the last two years.

According to the website of the WHO Disease Outbreak News, Bahrain has not reported infectious disease outbreaks in the last two years. Further, Bahrain has not reported a notifiable infectious disease to the WHO in 2019, 2018 and in 2017. Nor has Bahrain reported COVID-19 as a PHEIC to the WHO [1]. The website of the Ministry of Health does not include any announcement of an infectious disease outbreak that was reported to the WHO within the last two years [2].

[1] World Health Organization (WHO). "Disease Outbreak News in 2019".

[<https://www.who.int/csr/don/archive/year/2019/en/>]. Accessed 22 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 22 December 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**

Bahrain has an automated electronic notification surveillance system that is implemented at both the national and sub-national levels.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "Bahrain has a National Electronic Health Information System that connects all patient data on the public sector, and is used for surveillance purposes. Laboratory reporting is facilitated by the two systems being housed in the same building, and by electronic reporting".

The report also states that all private sector hospitals and laboratories are part of the electronic reporting surveillance system and the data is linked with the central surveillance unit at the Ministry of Health (MOH). Given Bahrain's small size and the coverage of the majority of hospitals of the system, it technically covers the national and sub-national levels [1].

Further, the website of the Ministry of Health does not provide information that shows that the government operates an electronic reporting surveillance system at both the national and sub-national levels [2].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4 - 8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 22 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 22 December 2020.

### 2.3.2b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that Bahrain has an electronic reporting surveillance system that collects ongoing/real time laboratory data.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and

published in April 2017, states that Bahrain has a "mature and competent interoperable, interconnected, electronic real-time reporting system. Bahrain has a functioning indicator-based surveillance system with 60+ reportable diseases and focal persons at reporting sites" [1].

However, the website of the Ministry of Health does not provide information that shows that the surveillance system can collect ongoing/real time laboratory data [2].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 23 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 23 December 2020.

## 2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

### 2.4.1 Coverage and use of electronic health records

#### 2.4.1a

##### Are electronic health records commonly in use?

Electronic health records are commonly in use = 2, Electronic health records are not commonly in use, but there is evidence they are used = 1, No evidence electronic health records are in use = 0

**Current Year Score: 1**

There is evidence of an electronic health record system in place but insufficient evidence that this system is commonly in use in Bahrain.

According to the Ministry of Health, I-SEHA Program Office document entitled "The National Health Information System", published in October 2014, Bahrain has been working to implement electronic health records called I-SEHA in partnership with Indra across all health care facilities. The document states that the system will be implemented across a majority of health care facilities [1].

Further, the website of the Ministry of Health states, on the I-SEHA page, that the I-SEHA program is in trial period and only available for patients being treated in health centers that are part of the Muharraq Governorate [2]. In 2017, Bahrain's total population was 1.5 million, and the population of Muharraq was around 246,000, according to the quote of the Central Organization for Information and Statistics in an article in Al-Watan, a daily newspaper. Since Muharraq represents only 16% of the population, electronic health records are not currently commonly used in Bahrain [3].

According to the Joint External Evaluation (JEE) mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, "Bahrain has a National Electronic Health Information System that connects all patient data on the public sector, and is used for surveillance purposes". However, the JEE does not mention anything about electronic health records [4].

[1] Ministry of Health, I-SEHA Program Office. October 2014. "The National Health Information System". [[https://www.slideshare.net/undp-india/bahrain-40048625?from\\_action=save](https://www.slideshare.net/undp-india/bahrain-40048625?from_action=save)]. Accessed 23 December 2020.

[2] Ministry of Health. "National Health Information Program I-SEHA". [<https://www.moh.gov.bh/eServices/PatientInformation>] Accessed 23 December 2020.

[3] Alwatan Bahraini Newspaper. February 2017. "Muharraq Governorate Population in 2017".

[<https://alwatannews.net/article/700604/Bahrain/%D8%A7%D9%84%D9%85%D8%B1%D9%83%D8%B2%D9%8A-%D9%84%D9%84%D9%85%D8%B9%D9%84%D9%88%D9%85%D8%A7%D8%AA-145-%D9%85%D9%84%D9%8A%D9%88%D9%86-%D8%B3%D9%83%D8%A7%D9%86-%D8%A7%D9%84%D8%A8%D8%AD%D8%B1%D9%8A%D9%86-%D9%81%D9%8A-2017>]. Accessed 23 December 2020.

[4] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 23 December 2020.

### 2.4.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

The national public health system does not have access to electronic health records of individuals in Bahrain; it has access to a limited number of electronic health records of around 16% of the population.

According to the Ministry of Health, I-SEHA Program Office document titled "The National Health Information System" that was published in October 2014, Bahrain has been working to implement electronic health records called I-SEHA in partnership with Indra across all healthcare facilities. The document states that the system will be implemented across the majority of healthcare facilities. The purpose of the I-SEHA is for the "quick transfer of health data between professionals," "unlimited access to health records between hospitals" and "integration of all medical and paramedical services given to patients"[1].

Per Bahrain's e-government portal I-SEHA, "will provide the patient medical record in electronic format to be seen by the other medical authorities that will be in charge of the patient's treatment in any hospital of the Ministry of Health or centers, in addition to the King Hamad University Hospital, Bahrain Defense Force and private hospitals as an advanced stage of the project"[2].

The Ministry of Health website on the I-SEHA page states that the I-SEHA program is in trial period and only available for patients treating in health centers within Muharraq Governorate [3]. Bahrain's total population was 1.5 million in 2017, and the population of Muharraq was around 246,000 according to the Central Organization for Information and Statistics quote in the article on Alwatan Newspaper. Since Muharraq represents only 16% of the population, electronic health records are not currently commonly used in Bahrain [4]. A further online search did not provide additional information in this regard.

[1] Ministry of Health, I-SEHA Program Office "The National Health Information System" (October 2014)

[[https://www.slideshare.net/undp-india/bahrain-40048625?from\\_action=save](https://www.slideshare.net/undp-india/bahrain-40048625?from_action=save)] Accessed on 23 December 2020.

[2] Government of Bahrain. "eGovernment and Integration Projects."

[[https://bahrain.bh/wps/portal/!ut/p/a1/tVRPn5owEP0qXDhGhoQ\\_oTeq1u6qa6utXbnsL0CCKCQlqN1--kb30Gp31T2UW8i8N\\_PezMSKrEcrkmyXZ6zNIWTF4Rx5T58n4NmY4ntKvhMIU153GvTBHoBr\\_bAiK0pkW7VLa8EztaU3bLiiUstlqrkJmy2ebI2ilyuGxMSroySNw3L9E275AYveNLWSuaJocG8liWXrcFkauSy5V19LMSoarXSc0hWaWxKW\\_yTB5PSZ5aC8xjwgQB5HGMlyfFLmICMHIFeYk7AQw0VoWWgu88YVwKhUI6R-k-l\\_8eYC\\_aqkv-AsBV6y6iPco3IYHPO7ad47Gj8e6avpxOvr2qQswlDe16glDxVcCDileAi54eFrFpO-GmmE-7g16DoCHzWP-dWGhZfpv2uxga\\_an78Bc1-YiRizwBXJcFyPmClyEE\\_hBQkVqY3yFcPh-wvsbJiVfbTZRqFdD6TH-2VqPZ7sRb5tc6kUwYdtwSS30uAtVI8dx17dMrnOZHfdA5JLhJ\\_LOOuv7s3snftwTjidUwjDwZ0\\_7A1s6Np\\_ExJPz4fLEmSnIkAO9oI2CFPEHS-IgVKuU5z78uoEX\\_PIP7wZMy4PpWWFio8v2iKUMaGZFdVc8JrXnW2tfy\\_btmo-mGDCfr\\_vZEplBe8kqjThNchSNbr200irKku6EsPhcORN-](https://bahrain.bh/wps/portal/!ut/p/a1/tVRPn5owEP0qXDhGhoQ_oTeq1u6qa6utXbnsL0CCKCQlqN1--kb30Gp31T2UW8i8N_PezMSKrEcrkmyXZ6zNIWTF4Rx5T58n4NmY4ntKvhMIU153GvTBHoBr_bAiK0pkW7VLa8EztaU3bLiiUstlqrkJmy2ebI2ilyuGxMSroySNw3L9E275AYveNLWSuaJocG8liWXrcFkauSy5V19LMSoarXSc0hWaWxKW_yTB5PSZ5aC8xjwgQB5HGMlyfFLmICMHIFeYk7AQw0VoWWgu88YVwKhUI6R-k-l_8eYC_aqkv-AsBV6y6iPco3IYHPO7ad47Gj8e6avpxOvr2qQswlDe16glDxVcCDileAi54eFrFpO-GmmE-7g16DoCHzWP-dWGhZfpv2uxga_an78Bc1-YiRizwBXJcFyPmClyEE_hBQkVqY3yFcPh-wvsbJiVfbTZRqFdD6TH-2VqPZ7sRb5tc6kUwYdtwSS30uAtVI8dx17dMrnOZHfdA5JLhJ_LOOuv7s3snftwTjidUwjDwZ0_7A1s6Np_ExJPz4fLEmSnIkAO9oI2CFPEHS-IgVKuU5z78uoEX_PIP7wZMy4PpWWFio8v2iKUMaGZFdVc8JrXnW2tfy_btmo-mGDCfr_vZEplBe8kqjThNchSNbr200irKku6EsPhcORN-)

1MKxK12v0bi4QGxmD6T\_TMpst\_x3H21/dl5/d5/L2dBISEvZ0FBIS9nQSEh]. Accessed on 23 December 2020.

[3] Ministry of Health "National Health Information Program I-SEHA [<https://www.moh.gov.bh/eServices/PatientInformation>] Accessed on 23 December 2020.

[4] Alwatan Bahraini Newspaper "Muharraq Governorate Population in 2017" (February 2017)

[<https://alwatannews.net/article/700604/Bahrain/%D8%A7%D9%84%D9%85%D8%B1%D9%83%D8%B2%D9%8A-%D9%84%D9%84%D9%85%D8%B9%D9%84%D9%88%D9%85%D8%A7%D8%AA-145-%D9%85%D9%84%D9%8A%D9%88%D9%86-%D8%B3%D9%83%D8%A7%D9%86-%D8%A7%D9%84%D8%A8%D8%AD%D8%B1%D9%8A%D9%86-%D9%81%D9%8A-2017>] Accessed on 23 December 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 evidence that Bahrain has adopted data standards to ensure that data is comparable (e.g. ISO standards).

According to the "National Laboratory System" section of the Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, "several hospitals are accredited according to international standards, and many others, as well as Public Health Laboratory (PHL), are in the accreditation process. The National Health Regulatory Authority (NHRA) actively promotes further accreditations. Central Veterinary Laboratory (CVL) is not accredited. A number of key laboratories in the health sector, including PHL, participate regularly in international external quality assurance (EQA) schemes. PHL has started implementing a limited EQA programme. There is no explicit provision for a national body or mechanism to access EQA results systematically, to monitor the performance of all laboratories, and to react in the case of failed results to facilitate corrective measures"[1]. The JEE does not mention anything regarding data standards used to ensure data comparability.

Further, the website of the Ministry of Health does not provide information that shows that there are data standards to ensure that data is comparable [2].

In addition, the website of the Bahrain National Laboratory does not provide information that shows that Bahrain has data standards to ensure data is comparable (e.g. ISO standards) [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 23 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 23 December 2020.

[3] Bahrain National Laboratory. [<https://www.moh.gov.bh/Services/Lab?lang=en>]. Accessed 23 December 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 evidence that there are established mechanisms in Bahrain at relevant ministries that are responsible for animal, human, and wildlife surveillance to share data (such as through mosquito surveillance, brucellosis surveillance, etc.). The website of the Ministry of Health does not provide information about established mechanisms at the relevant ministries responsible for animal, human, and wildlife surveillance to share data [1]. Further, the website of the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs does not provide information about established mechanisms at the relevant ministries responsible for animal, human, and wildlife surveillance to share data [2]. The website of the Supreme Council for Environment also does not provide information about established mechanisms at the relevant ministries responsible for animal, human, and wildlife surveillance to share data [3]. In addition, the website of the Bahrain National Laboratory does not provide information about established mechanisms at the relevant ministries responsible for animal, human, and wildlife surveillance to share data [4].

[1] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 24 December 2020.

[2] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 24 December 2020.

[3] Supreme Council for Environment. [<http://www.sce.gov.bh/en>]. Accessed 24 December 2020.

[4] Bahrain National Laboratory. [<https://www.moh.gov.bh/Services/Lab?lang=en>]. Accessed 24 December 2020.

## 2.4.3 Transparency of surveillance data

### 2.4.3a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Bahrain makes de-identified health surveillance data on disease outbreaks publicly available via reports (or other format) on government websites (such as the Ministry of Health and Ministry of Agriculture).

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not provide information that shows that Bahrain makes de-identified health surveillance data on disease outbreaks publicly available via reports (or other format) on government websites [1].

Further, the website of the Ministry of Health does not provide information that shows that Bahrain makes de-identified health surveillance data on disease outbreaks publicly available via reports (or other format) on government websites [2]. The website of the Bahrain National Laboratory also does not provide information that shows that the country makes de-identified health surveillance data on disease outbreaks publicly available via reports (or other format) on government websites [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 24 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 24 December 2020.

[3] Bahrain National Laboratory. [<https://www.moh.gov.bh/Services/Lab?lang=en>]. Accessed 24 December 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**

The Kingdom of Bahrain does 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. The Kingdom has an official platform for the latest COVID-19 health updates within Bahrain (healthalert.gov.bh), which is affiliated with the Kingdom's Ministry of Health (MOH). The platform publishes data daily [1].

[1] HEALTHALERT.GOV.BH. (2020). "Daily COVID-19 Report". [https://healthalert.gov.bh/en/category/daily-covid-19-report]. Accessed 24 December 2020.

## 2.4.4 Ethical considerations during surveillance

### 2.4.4a

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

Yes = 1, No = 0

**Current Year Score: 1**

Bahrain has guidelines that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities.

The Personal Data Protection Law (PDPL), which came into effect on August 1, 2019, applies to processing of patient data [1]. Under PDPL, "any data related to a person's health is categorised as 'sensitive personal data' and is subject to specific processing conditions". The PDPL includes provisions that "require a data controller to, amongst other things, notify data subjects of certain information, including the purpose and location of any data that is collected. Further, the data subject now has a statutory right to access their personal information and to object to processing of their data in certain circumstances"[1].

Furthermore, the PDPL includes strict requirements with regards to obtaining explicit consent to data processing, as well as including "appropriate technical and organisational measures to protect patient data against unauthorised or unlawful processing and against accidental loss, destruction of, or damage". The PDPL also regulates data processing agreements as well as data that is transferred outside the Kingdom of Bahrain [2].

[1] Government of the Kindom of Bahrain. Law No. 30, July 19, 2019. "Law No. 30 of 2018 Promulgating The Personal Data Protection Law". [https://www.bahrain.bh/wps/wcm/connect/40f1a510-96fb-40ba-b65d-a795c91d10b6/%D9%82%D8%A7%D9%86%D9%88%D9%86+%D8%B1%D9%82%D9%85+%2830%29+%D9%84%D8%B3%D9%86%D8%A9+2018+%D8%A8%D8%A7%D9%95%D8%B5%D8%AF%D8%A7%D8%B1+%D9%82%D8%A7%D9%86%D9%88%D9%86+%D8%AD%D9%85%D8%A7%D9%8A%D8%A9+%D8%A7%D9%84%D8%A8%D9%8A%D8%A7%D9%86%D8%A7%D8%AA+%D8%A7%D9%84%D8%B4%D8%AE%D8%B5%D9%8A%D8%A9.pdf?MOD=AJPERES]. Accessed 24 December 2020.

[2] Andrew Fawcett. November 2019. "How Does Bahrain's New Personal Data Protection Law Impact Patient Privacy". Al Tamimi & Co. [https://www.tamimi.com/law-update-articles/how-does-bahraains-new-personal-data-protection-law-impact-

patient-privacy/]. Accessed 24 December 2020.

#### 2.4.4b

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

Yes = 1, No = 0

**Current Year Score: 1**

There is 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).

The Personal Data Protection Law (PDPL), which came into effect on August 1, 2019, applies to processing of patient data [1]. Under PDPL, "any data related to a person's health is categorised as 'sensitive personal data' and is subject to specific processing conditions". The PDPL includes provisions that " require a data controller to, amongst other things, notify data subjects of certain information, including the purpose and location of any data that is collected. Further, the data subject now has a statutory right to access their personal information and to object to processing of their data in certain circumstances"[1].

Furthermore, the PDPL includes strict requirements with regards to obtaining explicit consent to data processing, as well as including "appropriate technical and organisational measures to protect patient data against unauthorised or unlawful processing and against accidental loss, destruction of, or damage". The PDPL also regulates data processing agreements as well as data that is transferred outside the Kingdom of Bahrain [2].

According to PWC, a consulting firm, the PDPL is heavily modelled on EU data protection legislation and "ensures the security of the personal data against unintentional or unauthorised destruction, accidental loss, unauthorised alteration, disclosure or access, or any other form of processing". Additionally, it requires the data manager and data processors to employ technical and organisational security measures that are appropriate for protecting the type of personal data that is processed having regard for (i) the standard market practices of their industry and (ii) state-of-the-art technological protection methods and the costs of these" [3].

[1] Government of the Kindom of Bahrain. Law No 30, July 19, 2019. "Law No. 30 of 2018 Promulgating The Personal Data Protection Law". [<https://www.bahrain.bh/wps/wcm/connect/40f1a510-96fb-40ba-b65d-a795c91d10b6/%D9%82%D8%A7%D9%86%D9%88%D9%86+%D8%B1%D9%82%D9%85+%2830%29+%D9%84%D8%B3%D9%86%D8%A9+2018+%D8%A8%D8%A7%D9%95%D8%B5%D8%AF%D8%A7%D8%B1+%D9%82%D8%A7%D9%86%D9%88%D9%86+%D8%AD%D9%85%D8%A7%D9%8A%D8%A9+%D8%A7%D9%84%D8%A8%D9%8A%D8%A7%D9%86%D8%A7%D8%AA+%D8%A7%D9%84%D8%B4%D8%AE%D8%B5%D9%8A%D8%A9.pdf?MOD=AJPERES>]. Accessed 24 December 2020.

[2] Andrew Fawcett. November 2019. "How Does Bahrain's New Personal Data Protection Law Impact Patient Privacy". Al Tamimi & Co. [<https://www.tamimi.com/law-update-articles/how-does-bahrains-new-personal-data-protection-law-impact-patient-privacy/>]. Accessed 24 December 2020.

[3] PWC. "Bahrain Personal Data Protection Law". [<https://www.pwc.com/m1/en/services/tax/legal-services/data-privacy/bahrain-personal-data-protection-law/core-principles.html>]. Accessed 24 December 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, Yes, commitments have been made to share data only for one disease = 1, No = 0

**Current Year Score: 0**

There is no evidence that the government made a commitment via public statements, legislation, and/or a cooperative agreement to share surveillance data during a public health emergency with other countries in the region for one or more diseases.

The Joint External Evaluation mission report of the Kingdom of Bahrain that was completed in September 2016 and published in April 2017, does not provide information that shows that 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 [1].

The website of the Ministry of Health does not provide information that shows that the government 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 [2]. The website of the Bahrain National Laboratory does not provide information that shows that 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 [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 24 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 24 December 2020.

[3] Bahrain National Laboratory. [<https://www.moh.gov.bh/Services/Lab?lang=en>]. Accessed 24 December 2020.

## 2.5 CASE-BASED INVESTIGATION

### 2.5.1 Case investigation and contact tracing

#### 2.5.1a

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

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

**Current Year Score: 1**

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; however, the evidence is insufficient to prove this system is in place to prepare for future public health emergencies rather than being limited to the current COVID-19 pandemic.

In light of the COVID-19 pandemic, the Ministry of Health publishes weekly contact tracing statistics, clearly showing that contact tracing is being conducted as part of the efforts to tackle the pandemic [1]. Additionally, Bahrain's National Taskforce for Combatting the Coronavirus in 2020 introduced the "BeAware Bahrain" contact tracing application, which all incoming travelers must have downloaded upon arrival, and which alerts individuals in case they come in contact with a recent confirmed active case within the previous 14 days [5]. This shows that the government has a system to conduct contact tracing, but there is no evidence that it goes beyond the active emergency of the covid-19 Pandemic.

The Joint External Evaluation mission report of the Kingdom of Bahrain that was completed in September 2016 and published in April 2017, states that "Bahrain has a very well defined emergency response system involving all the tiers of the administrative mechanism. The incident command and control system of health is well connected to a multisectoral structure at the national level". However, while "response plans are in place and describe scaled levels of response with resource requirements for each level and procedures for acquiring additional resources", there is no specific reference to provision of 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 [2].

The website of the Ministry of Health does not provide information that shows that the government has 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 [3]. The website of the Bahrain National Laboratory does not provide information that shows that the government has 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 [4].

[1] Ministry of Health. "HealthAlert.Gov - Weekly Contact Tracing Update". [<https://healthalert.gov.bh/en/category/weekly-contact-tracing>]. Accessed 25 December 2020.

[2] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 25 December 2020.

[3] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 25 December 2020.

[4] Bahrain National Laboratory. [<https://www.moh.gov.bh/Services/Lab?lang=en>]. Accessed 25 December 2020.

[5] Emirates Airlines. "Travel to Bahrain". [<https://www.emirates.com/english/help/faqs/travel-advisory-bahrain/>]. Accessed 25 December 2020.

### 2.5.1b

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

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

**Current Year Score: 0**

There is no publicly available evidence that Bahrain provides wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended; while medical attention was provided in the country's Covid-19 response, it was not based on a pre-existing plan but rather as a direct response to the pandemic.

According to a PR Newswire article, Bahrain provided free COVID-19 testing and treatment to all citizens and residents in the Kingdom of Bahrain [1]. Additionally, the Salmaniya Medical Complex (SMC) has launched the home delivery service of

prescribed medicines to ensure the health, safety and comfort of the patients as part of the precautionary measures implemented by the kingdom to curb the spread of COVID-19 [2].

With respect to economic support, Bahrain has rolled out a big economic stimulus package that includes utility bill exemptions, municipal fee exemptions, industrial land rental fees exemptions, loan installment delays for individuals and businesses etc.. However, there is no evidence that economic support was provided for self-isolating patients specifically [1].

The Joint External Evaluation mission report of the Kingdom of Bahrain that was completed in September 2016 and published in April 2017, does not provide information that shows that the government provides wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended, particularly economic support (paycheck, job security) and medical attention [3]. The website of the Ministry of Health does not provide information that shows that the government provides wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended, particularly economic support (paycheck, job security) and medical attention [4].

[1] PR Newswire. April 16, 2020. "Combating the Coronavirus, Bahrain Offers Health & Economic Success Story". [https://www.prnewswire.com/ae/news-releases/combating-the-coronavirus-bahrain-offers-health-amp-economic-success-story-886015040.html]. Accessed 25 December 2020.

[2] Bahrain News Agency. April 2, 2020. "SMC Launches Medicine Home Delivery Service". [https://www.bna.bh/en/SMClaunchesmedicinehomedeliveryservice.aspx?cms=q8FmFJgiscL2fwlZON1%2bDI2VWsTzryyaVEznj8rt18%3d]. Accessed 25 December 2020.

[3] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf]. Accessed 25 December 2020.

[4] Ministry of Health. [https://www.moh.gov.bh]. Accessed 25 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**

Bahrain does not 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.

The kingdom has an official platform for the latest COVID-19 health updates within Bahrain (healthalert.gov.bh), which is affiliated with the Kingdom's Ministry of Health (MOH). The platform publishes weekly contact tracing updates, and the published statistics do not include the percentage of new cases from identified contacts [1].

The website of the Ministry of Health does not provide information that shows that the government makes de-identified data on contact tracing efforts for COVID-19 (including the percentage of new cases from identified contacts) available via daily reports [2].

The website of the Bahrain National Laboratory does not provide information that shows that the government makes de-identified data on contact tracing efforts for COVID-19 (including the percentage of new cases from identified contacts)

available via daily reports [3].

[1] HEALTHALERT.GOV.BH. 2020. "Daily COVID-19 Report". [<https://healthalert.gov.bh/en/category/daily-covid-19-report>]. Accessed 25 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 25 December 2020.

[3] Bahrain National Laboratory. [<https://www.moh.gov.bh/Services/Lab?lang=en>]. Accessed 25 December 2020.

## 2.5.2 Point of entry management

### 2.5.2a

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

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

**Current Year Score: 0**

There is no publicly available information that shows that there is 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 or future public health emergency.

Bahrain's National Taskforce for Combatting the Coronavirus introduced the "BeAware Bahrain" contact tracing application, which all incoming travelers must have downloaded upon arrival, and which alerts individuals in case they come in contact with a recent confirmed active case within the past 14 days [1].

The Joint External Evaluation mission report of the Kingdom of Bahrain that was completed in September 2016 and published in April 2017, states that "strong medical capacity exists at Points of Entry (POE). Medical facilities at the seaport and airport are well developed with diagnostic equipment and trained medical officers". It also mentions that "guidelines and procedures for the management of infectious diseases are in place at the seaport and airport", including "work flow charts, contact lists and identified PoE and for transportation". Furthermore, the JEE also states that "the points of entry have strong communication with the Ministry of Health (MOH), International Health Regulation (IHR), National Focal Point (NFP) and all stakeholders. However, there is no additional information that suggests that Bahrain 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 a public health emergency [2].

The websites of the Ministry of Health, the Bahrain National Laboratory, and the Ministry of Transport and Telecommunication do not provide information that shows that there is 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 [3,4, 5].

[1] Emirates Airlines. "Travel to Bahrain". [<https://www.emirates.com/english/help/faqs/travel-advisory-bahrain/>]. Accessed 25 December 2020.

[2] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 25 December 2020.

[3] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 25 December 2020.

[4] Bahrain National Laboratory. [<https://www.moh.gov.bh/Services/Lab?lang=en>]. Accessed 25 December 2020.

[5] Ministry of Transport and Telecommunication. [<https://www.mtt.gov.bh>]. Accessed 25 December 2020.

## 2.6 EPIDEMIOLOGY WORKFORCE

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

#### 2.6.1a

Does the country meet one of the following criteria?

- Applied epidemiology training program (such as FETP) is available in country
- Resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs (such as FETP)

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

**Current Year Score: 1**

There is no evidence that the country has an applied epidemiology training programme (such as FETP). Instead, resources are provided by the government to send citizens to another country to participate in applied epidemiology training programmes (such as FETP).

The Eastern Mediterranean Public Health Network (EMPHNET) website states that Bahrain is not in the list of countries in the region that have an FETP programme [1].

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "while there is currently no FETP available in the country, an adequate number of staff have been trained in other programmes within and outside the region". However, it does not provide more details on which countries the staff travel to in order to join the training programmes [2].

The website of the Task Force for Global Health (TEPHINET) states that Bahrain is not a member and does not provide applied epidemiology training programmes [3].

Further, the website of the Ministry of Health does not provide information about the availability of applied epidemiology training program (such as FETP) in Bahrain or whether resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs (such as FETP) [4].

[1] The Eastern Mediterranean Public Health Network (EMPHNET). "Country Programs". [[http://emphnet.net/?page\\_id=491](http://emphnet.net/?page_id=491)]. Accessed 25 December 2020.

[2] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 25 December 2020.

[3] The Task Force for Global Health (TEPHINET). "Training Programs". [<https://www.tephinet.org/training-programs>]. Accessed 25 December 2020.

[4] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 25 December 2020.



### 2.6.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that field epidemiology training programmes are not available in Bahrain. Further, there is no evidence that there are field epidemiology training programmes available that are inclusive of animal health professionals or that there is a specific animal health field epidemiology training program offered, such as a Field Epidemiology Training Programme for Veterinarians (FETPV).

The website of the Eastern Mediterranean Public Health Network (EMPHNET) states that Bahrain is not in the list of countries in the region that have an FETP programme that is inclusive of animal health staff or an FETPV programme [1].

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states, "Some training is available for animal health sector staff, but no access to epidemiology training programmes or a Field Epidemiology Training Programme for Veterinarians (FETPV)" [2].

Further, the website of the Task Force for Global Health (TEPHINET) states that Bahrain is not a member and does not provide an applied epidemiology training programme that is inclusive of animal health staff or an FETPV programme [3].

In addition, the website of the Ministry of Health also does not provide information about field epidemiology training programmes availability that are inclusive of animal health professionals or that there is a specific animal health field epidemiology training program offered (such as FETPV) [4].

[1] The Eastern Mediterranean Public Health Network (EMPHNET). "Country Programs". [[http://emphnet.net/?page\\_id=491](http://emphnet.net/?page_id=491)]. Accessed 25 December 2020.

[2] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 25 December 2020.

[3] The Task Force for Global Health (TEPHINET). "Training Programs". [<https://www.tephinet.org/training-programs>]. Accessed 25 December 2020.

[4] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 25 December 2020.

## 2.6.2 Epidemiology workforce capacity

### 2.6.2a

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

Yes = 1 , No = 0

**Current Year Score: 1**

2020

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



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

### 3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

#### 3.1.1 National public health emergency preparedness and response plan

##### 3.1.1a

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

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

**Current Year Score: 1**

There is publicly available information that shows that Bahrain has in place disease-specific public health emergency response plans, which address planning for multiple communicable diseases with pandemic potential; however, there is no evidence of an overarching plan in place.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "the national public health emergency response plan(s) is implemented/tested in actual emergency or simulation exercises and updated as needed. Contingency plans for Ebola, MERS-CoV, pandemic and epidemic influenza, polio, and measles have been developed and tested. Another drill specifically for polio was conducted in November 2016. Primary and secondary health care facilities are all part of the national health sector plan for emergency preparedness and response". However, the report does not state the plan's specific name, therefore, there is no evidence of an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential [1].

The website of the Ministry of Health does not provide information that shows that Bahrain has in place a national public health emergency response plan which addresses planning for multiple communicable diseases with pandemic potential. Even the Ministry's website does not state the plan's specific name [2].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 26 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 26 December 2020.

##### 3.1.1b

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

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

**Current Year Score: 0**

There is no evidence of an overarching national public health emergency response plan in place in Bahrain which addresses planning for multiple communicable diseases with epidemic or pandemic potential; only disease-specific plans are in place.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "the national public health emergency response plan(s) is implemented/tested in actual emergency or simulation exercises and updated as needed. Contingency plans for Ebola, MERS-CoV, pandemic and epidemic influenza, polio, and measles have been developed and tested. Another drill specifically for polio was conducted in November 2016. Primary and secondary health care facilities are all part of the national health sector plan for emergency preparedness and response". However, the report does not state the plan's specific name, therefore, there is no evidence of an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential [1].

The website of the Ministry of Health does not provide information that shows that Bahrain has in place a national public health emergency response plan which addresses planning for multiple communicable diseases with pandemic potential. Even the Ministry's website does not state the plan's specific name [2].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 26 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 26 December 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 of an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential; only disease-specific plans are in place.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "the national public health emergency response plan(s) is implemented/tested in actual emergency or simulation exercises and updated as needed. Contingency plans for Ebola, MERS-CoV, pandemic and epidemic influenza, polio, and measles have been developed and tested. Another drill specifically for polio was conducted in November 2016. Primary and secondary health care facilities are all part of the national health sector plan for emergency preparedness and response". However, the report does not state the plan's specific name, therefore, there is no evidence of an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential [1].

The website of the Ministry of Health does not provide information that shows that Bahrain has in place a national public health emergency response plan which addresses planning for multiple communicable diseases with pandemic potential. Even the Ministry's website does not state the plan's specific name [2].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 26 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 26 December 2020.

### 3.1.1d

Does the country have a publicly available plan in place specifically for pandemic influenza preparedness that has been updated since 2009?

Yes = 1, No = 0

Current Year Score: 0

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

## 3.1.2 Private sector involvement in response planning

### 3.1.2a

Does the country have a specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not provide information about specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response [1].

Further, the website of the Ministry of Health does not provide information about specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response [2].

In addition, the website for Bahrain Defense Force, Royal Medical Services, the entity responsible for emergency management, also does not provide information about specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 26 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 26 December 2020.

[3] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 26 December 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: 0**

There is no evidence that the Kingdom of Bahrain has a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic for one or more diseases.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, does not mention anything about Non-Pharmaceutical Intervention (NPI) [1]. The Ministry of Health's (MOH) International Health Regulations (IHR) page, does not provide publicly available information that shows that Bahrain has a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic [2]. Additionally, the websites of the Ministry of Health (MOH) and the Bahrain National Laboratory do not provide information that shows that Bahrain has a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic [3,4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 26 December 2020.

[2] Ministry of Health. "Guidance and Tools". [<https://www.moh.gov.bh/IHR/Guidance?lang=en>]. Accessed 26 December 2020.

[3] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 26 December 2020.

[4] Bahrain National Laboratory. [<https://www.moh.gov.bh/Services/Lab?lang=en>]. Accessed 26 December 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: 0**

There is no publicly available evidence that shows that Bahrain has activated a national emergency response plan for an infectious disease outbreak in the past year; additionally, there is no evidence that Bahrain has completed a national-level biological threat-focused exercise (either with WHO or separately) in the past year.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, indicates that a national emergency response plan exists. It states that "the national public health emergency response plan(s) is implemented/tested in actual emergency or simulation exercises and updated as needed. Contingency plans for Ebola, MERS-CoV, pandemic and epidemic influenza, polio, and measles have been developed and tested. Another drill specifically for polio was conducted in November 2016. Primary and secondary health care facilities are all part of the national health sector plan for emergency preparedness and response" [1].

In the aftermath of the emergence of the COVID-19 pandemic, the WHO had commended "Bahrain's strenuous efforts and precautionary measures" in combatting the coronavirus, citing particularly "the implementation of a comprehensive national strategy to contain and prevent the spread of the virus, led by HRH the Crown Prince" [2]. However, there is no evidence of the existence of the national strategy document. A further online search does not reveal additional information in this regard.

Additionally, there is no evidence that Bahrain has completed a national-level biological threat-focused exercise (either with WHO or separately) in the past year. The website of the WHO Simulation Exercise does not provide information indicating that in the past year, Bahrain had undergone a national-level biological threat-focused exercise (either with WHO or separately) [3].

The website of the Ministry of Health does not provide any additional information [4]. Both the World Health Organization (WHO) Bahrain country page, as well as the Regional Office for the Eastern Mediterranean (EMRO) do not provide any additional information [5,6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 26 December 2020.

[2] Bahrain News Agency. March 4, 2020. "World Health Organization: Bahrain should be commended on its efforts to contain COVID 19 and has set a good example to other countries". [<https://www.bna.bh/en/WorldHealthOrganizationBahrainshouldbecommededonitseffortstocontainCOVID19andhassetagoodexampletoothercountries.aspx?cms=q8FmFJgiscL2fwizON1%2BDnwQ1MRwzd%2BIKxCJbAyAyy%3D>]. Accessed 26 December 2020.

[3] World Health Organisation (WHO). "Simulation Exercise". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 26 December 2020.

[4] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 26 December 2020.

[5] World Health Organisation (WHO) Bahrain Country Page. [<http://www.emro.who.int/countries/bahrain/index.html>]. Accessed 26 December 2020.

[6] World Health Organisation (WHO) Regional Office for the Eastern Mediterranean. [<http://www.emro.who.int/index.html>]. Accessed 26 December 2020.

### 3.2.1b

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

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

**Current Year Score: 0**

There is no evidence that Bahrain 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.

The websites of the WHO After Action Review and the Simulation Exercise do not provide information indicating that Bahrain 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. Nor is there publicly available information about planned future exercises [1,2].

The websites of the Ministry of Health and the Ministry of Works, Municipalities Affairs and Urban Planning (Agriculture Affairs section) do not provide any additional information [3,4]. Both the World Health Organization (WHO) Bahrain country page, as well as the Regional Office for the Eastern Mediterranean (EMRO) do not provide any additional information [5,6].

[1] World Health Organisation (WHO). "After Action Review". [<https://extranet.who.int/sph/after-action-review>]. Accessed 26 December 2020.

[2] World Health Organisation (WHO). "Simulation Exercise". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 26 December 2020.

[3] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 26 December 2020.

[4] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 26 December 2020.

[5] World Health Organisation (WHO) Bahrain Country Page. [<http://www.emro.who.int/countries/bahrain/index.html>]. Accessed 26 December 2020.

[6] World Health Organisation (WHO) Regional Office for the Eastern Mediterranean. [<http://www.emro.who.int/index.html>]. Accessed 26 December 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 evidence that Bahrain has completed a national-level biological threat-focused exercise (either with WHO or separately) that has included private sector representatives in the past year.

The website of the WHO Simulation Exercise does not provide information indicating that in the past year, Bahrain had undergone a national-level biological threat-focused exercise (either with WHO or separately). Nor is there publicly available information about planned future exercises [1].

The websites of the Ministry of Health and the Ministry of Works, Municipalities Affairs and Urban Planning (Agriculture Affairs section) do not provide any additional information [2,3].

Both the World Health Organization (WHO) Bahrain country page, as well as the Regional Office for the Eastern Mediterranean (EMRO) do not provide any additional information [4,5].

[1] World Health Organisation (WHO). "Simulation Exercise". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 27 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 27 December 2020.

[3] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 27 December 2020.

[4] World Health Organisation (WHO) Bahrain Country Page. [<http://www.emro.who.int/countries/bahrain/index.html>]. Accessed 27 December 2020.

[5] World Health Organisation (WHO) Regional Office for the Eastern Mediterranean. [<http://www.emro.who.int/index.html>].

Accessed 27 December 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**

Bahrain has in place an Emergency Operations Center (EOC).

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "Bahrain has an Emergency Operations Center located within the MOH premises, that is well equipped including a hotline running 24/7 and staffed with back-up support and adequate space. Bahrain has developed a very well-defined emergency response system involving all the tiers of the administrative mechanism. The incident command and control system of health is well connected to a multisectoral structure at the national level" [1].

Further, the website of the Ministry of Health does not provide information about the country's EOC [2].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4–8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 27 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 27 December 2020.

#### 3.3.1b

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is insufficient evidence that the Emergency Operations Center (EOC) in Bahrain is required to conduct a drill at least twice a year; however, there is evidence that the EOC conducts a drill at least once per year.

According to the Joint External Evaluation (JEE) mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, "exercises are conducted at least twice a year to test Emergency Operations Center (EOC) activation. There are clear triggers for the activation of EOC within 24 hours of an incident at full scale. This has been tested through exercise drills." That said, there is no evidence in the JEE of a requirement to conduct these drills bi-annually [1].

Further, the website of the Ministry of Health does not provide information to show that the EOC is required to conduct a drill at least once every year [2].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 27 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 27 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 insufficient public evidence to show that the EOC can conduct 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) mission report of the Kingdom of Bahrain that was completed in September 2016 and published in April 2017, states that "There are clear triggers for the activation of EOC within 24 hours of an incident at full scale. This has been tested through exercise drills." However it does not specify that the emergency response drill was activated within 120 minutes of the identification of the public health emergency/scenario [1].

That said, the JEE scores Bahrain a 5 for indicator R.2.2 (which represents the 'Emergency operations centre operating procedures and plans') [1]. According to the JEE scoring criteria, Bahrain does have the capacity to conduct a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario [2].

The Ministry of Health website does not provide more information that shows that the EOC can conduct, or has conducted within the last year, a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 27 December 2020.

[2] World Health Organisation (WHO). 2005. "Joint External Evaluation Tool: International Health Regulations". [[https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1)]. Accessed 27 December 2020.

[3] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 27 December 2020.

## 3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

#### 3.4.1a

Does the country meet one of the following criteria?

- Is there public evidence that public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event (i.e., bioterrorism attack)?



- Are there publicly available standard operating procedures, guidelines, memorandums of understanding (MOUs), or other agreements between the public health and security authorities to respond to a potential deliberate biological event (i.e., bioterrorism attack)?

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

**Current Year Score: 0**

There is no 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), nor 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.

Moreover, no such evidence was found in the Joint External Evaluation (JEE) of The Kingdom of Bahrain, which was completed in September 2016, published in 2017 [1].

Similarly, neither the World Organization for Animal Health (OIE) nor the Ministry of Health provide any information on their websites [2, 3].

Further, the Bahrain Defense Force, Royal Medical Services, which is the entity that is responsible for public health emergencies, does not provide any information on its website that shows that public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event (i.e. bioterrorism attack), nor does it provide information about standard operating procedures, guidelines, MOUs, or other agreements between the public health and security authorities to respond to a potential deliberate biological event (i.e. bioterrorism attack) [4].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4–8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 27 December 2020.

[2] World Organization for Animal Health (OIE). "OIE PVS Evaluation Reports" [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 27 December 2020.

[3] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 27 December 2020.

[4] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 27 December 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 the strategy (or other legislation, regulation, or strategy document used to guide national public health response) outlines how messages will reach populations and sectors with different communication needs.

Neither the Joint External Evaluation (JEE) for Bahrain, completed in September 2016, nor the Ministry of Health's "Health Improvement Strategy" mention whether or not the strategy outlines how messages will reach populations and sectors with different communication needs [1, 2].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4–8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 27 December 2020.

[2] Ministry of Health. "Health Improvement Strategy (2015-2018)". [[https://www.moh.gov.bh/Content/Files/Health\\_Improvement\\_Strategy\(2015-2018\).pdf](https://www.moh.gov.bh/Content/Files/Health_Improvement_Strategy(2015-2018).pdf)]. Accessed 27 December 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 insufficient evidence that Bahrain has 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.

According to the Joint External Evaluation (JEE) for Bahrain, completed in September 2016, "Bahrain has a well developed approach to risk communication, including coordination between different sectors, community and media engagement, and capacity-building through regular training of communication staff. The Ministry of Health communication staff also participate in regional training programmes and networks led by the World Health Organization (WHO) to share best practices". However, only a draft version of a health sector risk communications strategy has been developed and "has gone through several drafts." There is no further evidence of a plan or any other legislation.

The JEE does state that "Bahrain's risk communication structure benefits from informal processes and agreements through which resources between different ministries are coordinated, using both top- and bottom-down approaches depending on the nature of the emergency or disease outbreak. This risk communication system is tested through regular, high-level, multisector, and national disaster response exercises" [1]. However, there is no information on this in Bahrain's "Health Improvement Strategy" (2015-2018), which lays out Bahrain's plans and strategies concerning public health [2].

There is also no information on the website of the Ministry of Health in this regard [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 27 December 2020.

[2] Ministry of Health. "Health Improvement Strategy (2015-2018)".

[[https://www.moh.gov.bh/Content/Files/Health\\_Improvement\\_Strategy\(2015-2018\).pdf](https://www.moh.gov.bh/Content/Files/Health_Improvement_Strategy(2015-2018).pdf)]. Accessed 27 December 2020.

[3] Ministry of Health. [[https://www.moh.gov.bh/.](https://www.moh.gov.bh/)] Accessed 27 December 2020.

### 3.5.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available information that shows that Bahrain's 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.

The Joint External Evaluation (JEE) for Bahrain, completed in September 2016, states that "communication with the public is managed through coordination between the Public Health, Public and International Relations and Health Promotion Directorates within Ministry of Health (MOH). The Public and International Relations directorates regularly reach out to diverse media (TV, radio, and social media). During an emergency they are mandated to update public information every 45 minutes".

The JEE also mentions that "a Directorate, within the National Committee for Disaster Management (NCDM), led by the Undersecretary of the Ministry of Health (MOH), is being formalized to coordinate all public health and risk communication processes, linking them to other sectors during a disaster or an emergency" [1]. However, there is no evidence that shows that 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.

The Ministry of Health (MOH) does not provide any additional information in this regard [2]. The Bahrain Defense Force, Royal Medical Services, the entity that is responsible for public health emergencies, also does not provide additional information that shows that Bahrain's 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 [3].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 27 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh>]. Accessed 27 December 2020.

[3] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 27 December 2020.

## 3.5.2 Public communication

### 3.5.2a

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

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

**Current Year Score: 2**

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

According to the Joint External Evaluation (JEE) for Bahrain, completed in September 2016, "communication with the public is managed through coordination between the Public Health, Public and International Relations and Health Promotion Directorates within the Ministry of Health (MOH). Further, the Public and International Relations directorates regularly reach out to diverse media (TV, radio, and social media). During an emergency, they are mandated to update public information every 45 minutes. Health information behaviour-seeking surveys, focus groups and polls are conducted regularly as part of target audience analyses and for message validation" [1, 2].

The social media channels that are used have been listed on the website of the Ministry of Health and include YouTube, Twitter, Facebook, and Instagram [3]. A review of MOH's social media accounts on Twitter, Facebook, Youtube and Instagram provides evidence that all are up to date and have been used to inform the public about ongoing public health concerns and/or dispel rumors, misinformation or disinformation [4]. For example, recently, the Ministry of Health posted a tweet to debunk rumors that had associated the death of a 53-year-old man with the COVID-19 vaccine. The Ministry of Health dispelled the rumor on Twitter and Instagram, providing an explanation regarding the real cause of the death, as well as urging citizens to exercise caution when exposed to misinformation and rumors circulating on social media [5,6].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 27 December 2020.

[2] Ministry of Health. "Health Improvement Strategy (2015-2018)". [[https://www.moh.gov.bh/Content/Files/Health\\_Improvement\\_Strategy\(2015-2018\).pdf](https://www.moh.gov.bh/Content/Files/Health_Improvement_Strategy(2015-2018).pdf)]. Accessed 27 December 2020.

[3] Ministry of Health. "Social Media Networks". [<https://www.moh.gov.bh/HealthInfo/SocialMediaNetworks>]. Accessed 27 December 2020.

[4] Ministry of Health "Social Media Examples". [<https://www.facebook.com/MoHBahrain/>].

[[https://twitter.com/MOH\\_Bahrain](https://twitter.com/MOH_Bahrain)]. [<https://www.instagram.com/mohbahrain/>].

[<https://www.youtube.com/user/TheMoHBahrain/videos>]. Accessed 27 December 2020.

[5] Twitter. December 23, 2020. Ministry of Health, Bahrain.

[[https://twitter.com/MOH\\_Bahrain/status/1341631265380954113?s=20](https://twitter.com/MOH_Bahrain/status/1341631265380954113?s=20)]. Accessed 27 December 2020.

[6] Instagram. December 23, 2020. Ministry of Health, Bahrain.

[<https://www.instagram.com/p/CJIUk2sLHay/?igshid=1u3focma6bgr0>]. Accessed 27 December 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 in Bahrain have shared misinformation or disinformation on infectious diseases in the past two years (2019 & 2020).

The criminal offense laws in Bahrain inflict huge penalties on any "person who i) deliberately submits false, misleading or contrary information on records or documents at his disposal to; or ii) withholds any data, information, records or documents that he shall furnish or allow access thereto to perform the function of the Supreme Council of Health (SCH) or to the Centre;

or iii) hinders the National Health Regulatory Authority's inspectors from performing their work, or obstructs any investigation performed by the NHRA"[1]. However, there is no evidence that senior leaders in Bahrain have shared misinformation or disinformation on infectious diseases in the past two years.

Upon conducting an online search at the Bahrain News Agency (BNA), the BBC, and CNN, there is no publicly available evidence that shows that senior leaders in Bahrain have shared, knowingly or unknowingly, misinformation or disinformation on infectious diseases in the past two years [2,3,4,5].

[1] Noor Al Rayes. November 2018. "Universal Healthcare Coverage in Bahrain". Al Tamimi & Co.

[<https://www.tamimi.com/law-update-articles/universal-healthcare-coverage-in-bahrain/>]. Accessed 24 December 2020.

[2] Bahrain News Agency. "Search Results". [<https://www.bna.bh/en/search.aspx?search-input=misinformation>]. Accessed 26 December 2020.

[3] Bahrain News Agency. "Search Results". [<https://www.bna.bh/en/search.aspx?search-input=infectious%20diseases#2>]. Accessed 26 December 2020.

[4] BBC. "Search Results- Bahrain". [<https://www.bbc.com/news/topics/cx1m7zg01ndt/bahrain>]. Accessed 26 December 2020.

[5] CNN. "Search Results- Bahrain".

[<https://edition.cnn.com/search?q=bahrain&size=10&page=5&from=40&category=us,politics,world,opinion,health>].

Accessed 26 December 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: 99.7**

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: 115.79**

2019

International Telecommunication Union (ITU)

### 3.6.3 Female access to a mobile phone

#### 3.6.3a

Percentage point gap between males and females whose home has access to a mobile phone

Input number

Current Year Score: 0

2019

Gallup; Economist Impact calculation

### 3.6.4 Female access to the Internet

#### 3.6.4a

Percentage point gap between males and females whose home has access to the Internet

Input number

Current Year Score: 0

2019

Gallup; Economist Impact calculation

## 3.7 TRADE AND TRAVEL RESTRICTIONS

### 3.7.1 Trade restrictions

#### 3.7.1a

In the past year, has the country issued a restriction, without international/bilateral support, on the export/import of medical goods (e.g. medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak?

Yes = 0, No = 1

Current Year Score: 0

Bahrain 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 in the past year.

According to both the World Trade Organization (WTO) and Market Access Map, Bahrain has issued a "temporary export ban on face masks (effective 8 April 2020), certain Personal Protective Equipment (PPE), hand sanitizers and disinfectants (effective 26 March 2020), due to the COVID-19" [1,2].

Neither the World Health Organisation's 'Disease Outbreak News', the World Organisation for Animal Health (OIE), the Ministry of Health, nor the Ministry of Municipalities & Agriculture Affairs have made any mention of a restriction on the export/import of medical goods (e.g. medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak in the past year [3,4,5,6].

[1] World Trade Organization. "Covid-19: Measures Affecting Trade in Goods".

[[https://www.wto.org/english/tratop\\_e/covid19\\_e/trade\\_related\\_goods\\_measure\\_e.htm](https://www.wto.org/english/tratop_e/covid19_e/trade_related_goods_measure_e.htm)]. Accessed 27 December 2020.

[2] Market Access Map. "Covid-19 Temporary Trade Measures". [<https://www.macmap.org/covid19>]. Accessed 27 December 2020.

[3] World Health Organization (WHO). "WHO Disease Outbreak News". [<https://www.who.int/csr/don/archive/country/bhr/en/>]. Accessed 27 December 2020.

[4] World Organization for Animal Health. "OIE Weekly disease information". [[https://www.oie.int/wahis\\_2/public/wahid.php/Diseaseinformation/WI](https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI)]. Accessed 27 December 2020.

[5] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 27 December 2020.

[6] Ministry of Municipalities & Agriculture Affairs [<https://www.mun.gov.bh>]. Accessed 27 December 2020.

### 3.7.1b

**In the past year, has the country issued a restriction, without international/bilateral support, on the export/import of non-medical goods (e.g. food, textiles, etc) due to an infectious disease outbreak?**

Yes = 0, No = 1

**Current Year Score: 1**

There is no evidence that Bahrain 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 in the past year.

Neither the World Health Organisation's 'Disease Outbreak News', the World Organisation for Animal Health (OIE), the Ministry of Health, nor the Ministry of Municipalities & Agriculture Affairs have made any mention of a restriction on the export/import of non-medical goods (e.g. food, textiles, etc) due to an infectious disease outbreak in the past year [1, 2, 3, 4].

[1] World Health Organization (WHO). "WHO Disease Outbreak News".

[<https://www.who.int/csr/don/archive/country/bhr/en/>]. Accessed 27 December 2020.

[2] World Organization for Animal Health. "OIE Weekly disease information".

[[https://www.oie.int/wahis\\_2/public/wahid.php/Diseaseinformation/WI](https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI)]. Accessed 27 December 2020.

[3] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 27 December 2020.

[4] Ministry of Municipalities & Agriculture Affairs [<https://www.mun.gov.bh>]. Accessed 27 December 2020.

## 3.7.2 Travel restrictions

### 3.7.2a

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

Yes = 0, No = 1

**Current Year Score: 0**

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

The Ministry of Foreign Affairs in coordination with the Ministry of Health and the Ministry of Interior, announced on February 21, 2020 that it had activated "several procedures related to arrivals to the Kingdom of Bahrain in light of the outbreak of the Coronavirus (COVID-19)". The procedures include "banning entry to all foreign visitors who have visited the Islamic Republic of Iran, the Kingdom of Thailand, the Republic of Singapore, the Kingdom of Malaysia and the Republic of South Korea within 14 days of their date of arrival in the Kingdom ". The procedures also stipulate that "Bahraini citizens, GCC

citizens and Bahraini residents who have visited Iran, Thailand, Singapore, Malaysia or South Korea within 14 days of arriving in Bahrain will be subject to quarantine and enhanced testing procedures, recommended by the World Health Organization (WHO)" [1].

Additionally, the Ministry of Foreign Affairs announced on February 21, 2020 that "Bahraini citizens will be temporarily barred from travelling to the Islamic Republic of Iran until further notice, in order to ensure their safety and avoid possible COVID-19 infection" [2]. Neither the World Health Organisation's 'Disease Outbreak News', the World Organisation for Animal Health (OIE), the Ministry of Health, nor the Ministry of Telecommunication and Transport have made any mention of Bahrain implementing a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak in the past year [3, 4, 5, 6].

[1] Ministry of Foreign Affairs. February 21, 2020. "Citizens warned not to travel to Iran, Thailand, Singapore, Malaysia and South Korea because of COVID-19". [<https://www.mofa.gov.bh/Default.aspx?tabid=7824&language=en-US&ItemId=12481>]. Accessed 28 December 2020.

[2] Ministry of Foreign Affairs. February 25, 2020. "Ministry of Foreign Affairs of Kingdom of Bahrain temporarily bars citizens from travelling to Islamic Republic of Iran until further notice".

[<https://www.mofa.gov.bh/Default.aspx?tabid=7824&language=en-US&ItemId=12503>]. Accessed 28 December 2020.

[3] World Health Organization (WHO). "WHO Disease Outbreak News".

[<https://www.who.int/csr/don/archive/country/bhr/en/>]. Accessed 28 December 2020.

[4] World Organization for Animal Health. "OIE Weekly disease information".

[[https://www.oie.int/wahis\\_2/public/wahid.php/Diseaseinformation/WI](https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI)]. Accessed 28 December 2020.

[5] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 28 December 2020.

[6] Ministry of Telecommunication and Transport. [<http://www.mtt.gov.bh/>]. Accessed 28 December 2020.

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

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

#### 4.1.1 Available human resources for the broader healthcare system

##### 4.1.1a

##### Doctors per 100,000 people

Input number

Current Year Score: 92.57

2015

WHO; national sources



#### 4.1.1b

##### Nurses and midwives per 100,000 people

Input number

Current Year Score: 249.44

2015

WHO; national sources

#### 4.1.1c

##### Does the country have a health workforce strategy in place (which has been updated in the past five years) to identify fields where there is an insufficient workforce and strategies to address these shortcomings?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that shows that Bahrain has a health workforce strategy in place (which has been updated in the last five years) to identify fields where there is an insufficient workforce and strategies to address these shortcomings.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that "the JEE team was not able to review a workforce strategy document". It also mentions that "a public health training plan specifying the number of personnel at various levels and specialities is said to exist" [1].

The Ministry of Education, at end of 2014, announced its "National Higher Education Strategy 2014-2024". The report mentions that the "strategy, in combination with the new national research strategy approved by the Higher Education Council, provides an integrated approach to providing skills, supporting students and contributing to the creation of jobs through enterprise and innovation". It also states that the strategy "has been developed in alignment with the national priorities for the next three years, as well as with the 2030 vision of a knowledge economy, or the SMART economy. The shift for this sector is clear: the focus is now on achieving positive outcomes for students as being the measure of success for institutions". However, this strategy is centered around the educational system, and does not address health staff (nurses, doctors, etc) [2].

The Health Improvement Strategy 2015-2018, which is published on the website of the Ministry of Health, mentions staff shortage but it does not provide any information about a workforce strategy to identify fields where there is an insufficient workforce and strategies to address these shortcomings [3].

Further, the website of the Ministry of Labour & Social Development does not provide information about a workforce strategy in place to identify fields where there is an insufficient workforce and strategies to address these shortcomings [4].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 28 December 2020.

[2] Ministry of Education. October 18, 2014. "National Higher Education Strategy 2014-2024". [<https://moe.gov.bh/hec/UploadFiles/HEC%2010%20year%20Strategy%20Final-18-10-2014.pdf>]. Accessed 28 December 2020.

[3] Ministry of Health. "Health Improvement Strategy (2015-2018)".

[[https://www.moh.gov.bh/Content/Files/Health\\_Improvement\\_Strategy\(2015-2018\).pdf](https://www.moh.gov.bh/Content/Files/Health_Improvement_Strategy(2015-2018).pdf)]. Accessed 28 December 2020.

[4] Ministry of Labour & Social Development. [<http://www.mlsd.gov.bh>]. Accessed 28 December 2020.

## 4.1.2 Facilities capacity

### 4.1.2a

#### Hospital beds per 100,000 people

Input number

**Current Year Score: 174**

2017

WHO/World Bank; national sources

### 4.1.2b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available information that shows that Bahrain 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 an article by Zawya (Refinitiv Middle East), a "special isolation ward has been designated at Salmaniya Medical Complex (SMC) for those diagnosed with coronavirus, while another isolation facility is allocated at the Ebrahim Khalil Kanoo Community Medical Centre for those who came in close contact with a patient" [1].

Another article by Zawya mentions that the "public treatment and quarantine facilities in Bahrain include those at Hidd, Sitra field unit, Muharraq Geriatric Hospital, Jidhafs Maternity Hospital and the Hereditary Blood Disorder Centre at Salmaniya Medical Complex (SMC). The isolation facility is the Ebrahim Khalil Kanoo Health Centre in Salmaniya" [2].

A third article by Zawya, on July 23, 2020, mentioned that the "absorptive capacity of the isolation and treatment centres is 8,357 beds, of which 2,083 are occupied, representing 25 percent" [3]. Aside from the SMC isolation ward, there is no evidence that Bahrain's measures to increase capacity to isolate patients are permanent instead of temporary during the Covid-19 pandemic.

Additionally, in 2015, an article by TradeArabia announced that isolation rooms will "soon be set up in 10 health centres across the country in a bid to combat the spread of fatal diseases". It added that "as part of this project every health centre in the country will be equipped with an isolation room with an attached toilet", and that "the newer health centres, more than 12, have an isolation room with toilet as per the accreditation criteria". All isolation rooms are implemented according to specifications of the Canadian Council, which requires isolation rooms to have their own toilet and separate air-conditioning facility, isolated from the centralised air-conditioning system [4]. However, there is no evidence that the new health centres have been developed or are equipped with isolation capacities.

Furthermore, the Joint External Evaluation mission report of the Kingdom of Bahrain that was completed in September 2016 and published in April 2017, does not clarify if there is an isolation unit in place [5].

Neither the Ministry of Health nor the Bahrain Defense Force (BDF) Hospital website provide information that shows that Bahrain has the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit and/or patient isolation facility located within the country [6,7].

[1] Zawya. 6 February, 2020. "New isolation facility at medical centre in Bahrain". [https://www.zawya.com/mena/en/life/story/New\_isolation\_facility\_at\_medical\_centre\_in\_Bahrain-SNG\_166489322/]. Accessed 28 December 2020.

[2] Zawya. 13 May, 2020. "Beds increased in Bahrain's quarantine centres". [https://www.zawya.com/mena/en/life/story/Beds\_increased\_in\_Bahrains\_quarantine\_centres-SNG\_174416593/]. Accessed 28 December 2020.

[3] Zawya. 23 July, 2020. "25% of Covid facilities 'occupied' in Bahrain isolation and treatment centers". [https://www.zawya.com/mena/en/life/story/25\_of\_Covid\_facilities\_occupied\_in\_Bahrain\_isolation\_and\_treatment\_centers-SNG\_180322757/]. Accessed 28 December 2020.

[4] TradeArabia. 25 January, 2015. "Bahrain Hospitals to Set Up Isolation Wards". [http://www.tradearabia.com/news/HEAL\_274040.html]. Accessed 28 December 2020.

[5] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf]. Accessed 28 December 2020.

[6] Ministry of Health. [https://www.moh.gov.bh/]. Accessed 28 December 2020.

[7] Bahrain Defense Force, Royal Medical Services. [https://www.bdfmedical.org/]. Accessed 28 December 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 publicly available information that shows that Bahrain has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years; however, there is no evidence that Bahrain has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years.

According to a February 2020 article by Zawya (Refinitiv Middle East), a "special isolation ward has been designated at Salmaniya Medical Complex (SMC) for those diagnosed with coronavirus, while another isolation facility is allocated at the Ebrahim Khalil Kanoo Community Medical Centre for those who came in close contact with a patient" [1]. Another article by Zawya in May 2020 mentions that the "public treatment and quarantine facilities in Bahrain include those at Hidd, Sitra field unit, Muharraq Geriatric Hospital, Jidhafs Maternity Hospital and the Hereditary Blood Disorder Centre at Salmaniya Medical Complex (SMC). The isolation facility is the Ebrahim Khalil Kanoo Health Centre in Salmaniya" [2].

Additionally, in 2015, an article by TradeArabia announced that isolation rooms will "soon be set up in 10 health centres across the country in a bid to combat the spread of fatal diseases". It added that "as part of this project every health centre in

the country will be equipped with an isolation room with an attached toilet", and that "the newer health centres, more than 12, have an isolation room with toilet as per the accreditation criteria". All isolation rooms are implemented according to specifications of the Canadian Council, which requires isolation rooms to have their own toilet and separate air-conditioning facility, isolated from the centralised air-conditioning system [3].

Furthermore, the Joint External Evaluation mission report of the Kingdom of Bahrain that was completed in September 2016 and published in April 2017, does not provide information that shows that Bahrain has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years; additionally, there is no evidence that Bahrain has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years [4]. Neither the Ministry of Health nor the Bahrain Defense Force (BDF) Hospital website provide information that shows that Bahrain has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years; additionally, there is no evidence that Bahrain has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years [5,6].

[1] Zawya. 6 February, 2020. "New isolation facility at medical centre in Bahrain".

[[https://www.zawya.com/mena/en/life/story/New\\_isolation\\_facility\\_at\\_medical\\_centre\\_in\\_Bahrain-SNG\\_166489322/](https://www.zawya.com/mena/en/life/story/New_isolation_facility_at_medical_centre_in_Bahrain-SNG_166489322/)]. Accessed 28 December 2020.

[2] Zawya. 13 May, 2020. "Beds increased in Bahrain's quarantine centres".

[[https://www.zawya.com/mena/en/life/story/Beds\\_increased\\_in\\_Bahrains\\_quarantine\\_centres-SNG\\_174416593/](https://www.zawya.com/mena/en/life/story/Beds_increased_in_Bahrains_quarantine_centres-SNG_174416593/)]. Accessed 28 December 2020.

[3] TradeArabia. 25 January, 2015. "Bahrain Hospitals to Set Up Isolation Wards".

[[http://www.tradearabia.com/news/HEAL\\_274040.html](http://www.tradearabia.com/news/HEAL_274040.html)]. Accessed 28 December 2020.

[4] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4–8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 28 December 2020.

[5] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 28 December 2020.

[6] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 28 December 2020.

## 4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

### 4.2.1 Routine health care and laboratory system supply

#### 4.2.1a

**Is there a national procurement protocol in place which can be utilized by the Ministries of Health and Agriculture for the acquisition of laboratory supplies (e.g. equipment, reagents and media) and medical supplies (e.g. equipment, PPE) for routine needs?**

Yes for both laboratory and medical supply needs = 2, Yes, but only for one = 1, No = 0

**Current Year Score: 2**

Bahrain has 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.

According to the website of the Tender Board, all government entities in Bahrain, including Ministry of Health and Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs, utilize the central government tendering system for all

their purchases, including the acquisition of laboratory supplies (e.g. equipment, reagents and media) and medical supplies (e.g. equipment, PPE) [1].

Searching the tender system's 'Open Bids List' for the term "health" yields 48 results. Of these results, tender number "RFP/MOH/2020/5" refers to the Ministry of Health's tender "to supply and install 111 type of medical equipment and devices, covering medical, laboratory, physiotherapy, radiology and imaging devices to equip the new Multiple Sclerosis Hospital"[2]. Tender number "RFP202012426227823", titled "Supply and Installation of Various Radiology/Laboratory/Medical/Physiotherapy Devices for the new Khalifa Health Center & Askar", is another tender by the Ministry of Health [3]. Tender number "RFP201912426209540", titled "Supply Medical Equipment for Oral & Dental Health Services-2018", is another tender made by the Ministry of Health [4].

Searching the tender system's 'Open Bids List' for the term "PPE" yields 15 results. While the Ministry of Health and the Ministry of Agriculture do not feature in this list of public entities that have acquired Personal Protective Equipment (PPE) through the tender system, it is clear that various entities, including the "Bahrain Petroleum Company (Bapco)", "Electricity and Water Authority", "Bahrain Airport Company", "Central Stores Directorate - EWA", "TATWEER PETROLEUM W.L.L", etc.- all use the national procurement system to acquire PPE equipment [5].

[1] Bahrain Tender Board. [<http://www.tenderboard.gov.bh/>]. Accessed on 28 December, 2020.

[2] Bahrain Tender Board. "Supply and Installation of Various Radiology/Laboratory/Medical/Physiotherapy Devices for the new Multiple Sclerosis Hospital". [<http://www.tenderboard.gov.bh/TenderDetails.aspx?id=RFP/MOH/2020/5>]. Accessed on 28 December, 2020.

[3] Bahrain Tender Board. "Supply and Installation of Various Radiology/Laboratory/Medical/Physiotherapy Devices for the new Multiple Sclerosis Hospital". [<http://www.tenderboard.gov.bh/OpenedTenderDetails.aspx?id=MOH/119/2020>]. Accessed on 28 December, 2020.

[4] Bahrain Tender Board. "Supply and Installation of Various Radiology/Laboratory/Medical/Physiotherapy Devices for the new Multiple Sclerosis Hospital". [<http://www.tenderboard.gov.bh/OpenedTenderDetails.aspx?id=MOH/132/2018>]. Accessed on 28 December, 2020.

[5] Bahrain Tender Board. Search Results for term 'PPE'.

[<http://www.tenderboard.gov.bh/OpenedBids.aspx?cms=iQRpheuphYtJ6pyXUGiNqgSxn9EcJfZs>]. Accessed on 28 December, 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 Bahrain maintains some stockpiles of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency although there is no evidence of what they contain.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that the "Ministry of Health (MOH) maintains medical stockpiles, although deficiencies in the logistics system are currently being assessed with the aim of strengthening the system." The report also states that while Bahrain "has limited production of medical equipment, it has vendor agreements in place to maintain supplies during a surge,

which were used and tested during an avian influenza outbreak to stockpile and distribute medicine through the existing plan" [1]. However, there is no additional information that shows that this involves medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency. A further online search fails to provide any additional information.

Further, the website of the Ministry of Health does not provide information that Bahrain maintains a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency [2]. In addition, the website of the Bahrain Defense Force, Royal Medical Services, the entity that is responsible for public health emergencies, does not provide information that shows that Bahrain maintains a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency [3].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 29 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 29 December 2020.

[3] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 29 December 2020.

#### 4.2.2b

**Does the country have a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency?**

Yes = 2, Yes, but there is limited evidence about what the stockpile contains = 1, No = 0

**Current Year Score: 0**

There is no publicly available information that shows that Bahrain maintains a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that the "Ministry of Health (MOH) maintains medical stockpiles, although deficiencies in the logistics system are currently being assessed with the aim of strengthening the system." The report also states that while Bahrain "has limited production of medical equipment, it has vendor agreements in place to maintain supplies during a surge, which were used and tested during an avian influenza outbreak to stockpile and distribute medicine through the existing plan". However, it does not mention any information about laboratory supplies specifically [1].

Further, the website of the Ministry of Health does not provide information that shows that Bahrain maintains a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency [2].

In addition, the website of the Bahrain Defense Force, Royal Medical Services, the entity that is responsible for public health emergencies, does not provide information that shows that Bahrain maintains a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency [3].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 29 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 29 December 2020.

[3] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 29 December 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 insufficient evidence that Bahrain 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 mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that the "Ministry of Health (MOH) maintains medical stockpiles, although deficiencies in the logistics system are currently being assessed with the aim of strengthening the system." The report also states that while Bahrain "has limited production of medical equipment, it has vendor agreements in place to maintain supplies during a surge, which were used and tested during an avian influenza outbreak to stockpile and distribute medicine through the existing plan" [1]. However, there is no additional information that shows that this involves conducting or requiring an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. A further online search fails to provide any additional information.

Further, the website of the Ministry of Health does not provide information that Bahrain conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency [2]. In addition, the website of the Bahrain Defense Force, Royal Medical Services, the entity that is responsible for public health emergencies, does not provide information that shows that Bahrain conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency [3].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 29 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 29 December 2020.

[3] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 29 December 2020.

### 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 of a plan/mechanism to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency; however, there is insufficient 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.



The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that Bahrain "has plans and procedures for receiving and sending medical countermeasures and deploying personnel in certain hazards (for example, nuclear exposure)". It also states that the "Ministry of Health (MOH) maintains medical stockpiles, although deficiencies in the logistics system are currently being assessed with the aim of strengthening the system." The report also states that while Bahrain "has limited production of medical equipment, it has vendor agreements in place to maintain supplies during a surge, which were used and tested during an avian influenza outbreak to stockpile and distribute medicine through the existing plan" [1]. However, there is no additional information that shows that this involves medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE). A further online search fails to provide any additional information.

Further, the website of the Ministry of Health does not provide information that Bahrain has a plan/mechanism to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency. There is also no 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 [2]. In addition, the website of the Bahrain Defense Force, Royal Medical Services, the entity that is responsible for public health emergencies, does not provide information that shows that Bahrain has a plan/mechanism to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency, or to leverage domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency [3].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 29 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 29 December 2020.

[3] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 29 December 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 domestic manufacturing capacity to produce laboratory supplies (e.g. reagents, media) for national use during a public health emergency; nor is there evidence of a plan/mechanism to procure laboratory supplies (e.g. reagents, media) for national use during a public health emergency.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that the "Ministry of Health (MOH) maintains medical stockpiles, although deficiencies in the logistics system are currently being assessed with the aim of strengthening the system." The report also states that while Bahrain "has limited production of medical equipment, it has vendor agreements in place to maintain supplies during a surge, which were used and tested during an avian influenza outbreak to stockpile and distribute medicine through the existing plan". However the report does not mention anything regarding laboratory supplies in specific [1].



Further, the website of the Ministry of Health does not provide information that Bahrain has a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies (e.g. reagents, media) for national use during a public health emergency; nor does it provide evidence of a plan/mechanism to procure laboratory supplies (e.g. reagents, media) for national use during a public health emergency [2].

In addition, the website of the Bahrain Defense Force, Royal Medical Services, the entity that is responsible for public health emergencies, does not provide information that shows that Bahrain has a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies (e.g. reagents, media) for national use during a public health emergency; nor does it provide evidence of a plan/mechanism to procure laboratory supplies (e.g. reagents, media) for national use during a public health emergency [3].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 29 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 29 December 2020.

[3] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 29 December 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 shows that Bahrain 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).

On April 2, 2020, Bahrain launched a medical prescriptions delivery system, which is an eService that "facilitates the process of booking a medical prescription delivery service" with the hospital or health center's pharmacy as it "allows the user to request the delivery service online without the need to stand in a queue or visit the Health Center. The service will send the user an SMS with the request number as soon as the appointment is added". The medication will be delivered to the user's home address. This eService is available at the Salmaniya Medical Complex (SMC), Health Centers, and the Psychiatric Hospital [1,2,3].

An article by the Bahrain News Agency (BNA) mentioned that the Salmaniya Medical Complex (SMC) delivered medicines "within 48 hours after the receipt of the demand"[4]. However, there is no evidence that this system is part of a wider plan that covers factors such as surge deliveries, agreements with courier services, rationing plans etc. Therefore, there is no publicly available information that shows that Bahrain 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). A further online search did not provide additional information in this regard.

[1] Ministry of Health. "Health Centers Pharmacy Appointments". [<https://www.moh.gov.bh/eServices/hcpharmacy>]. Accessed 29 December 2020.

[2] Ministry of Health. "SMC Medical Prescriptions Delivery Service". [<https://www.moh.gov.bh/eServices/pharmacy>]. Accessed 29 December 2020.

[3] Ministry of Health. "Psychiatric Hospital Pharmacy". [<https://www.moh.gov.bh/eServices/PsychiatricPharmacy>]. Accessed 29 December 2020.

[4] Bahrain News Agency. April 2, 2020. "SMC Launches Medicine Home Delivery Service".

[<https://www.bna.bh/en/SMClaunchesmedicinehomedeliveryservice.aspx?cms=q8FmFJgiscL2fwlzON1%2BDI2VWsTzryyaVEzjn8rt18%3D>]. Accessed 29 December 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 no evidence of a public plan in place to receive health personnel from other countries to respond to a public health emergency.

Although Bahrain scores highly on its system for "sending and receiving health personnel during a public health emergency" according to the Joint External Evaluation (JEE) report for Bahrain, completed in September 2016, a public copy of a plan could not be located [1].

The JEE also notes that Bahrain has "good functional plans and procedures to send and receive medical personnel within the GCC network", but more information could not be found on the website of the Ministry of Health [1, 2].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 29 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 29 December 2020.

## 4.4 HEALTHCARE ACCESS

### 4.4.1 Access to healthcare

#### 4.4.1a

**Does the constitution explicitly guarantee citizens' right to medical care?**

Guaranteed free = 4, Guaranteed right = 3, Aspirational or subject to progressive realization = 2, Guaranteed for some groups, not universally = 1, No specific provision = 0

**Current Year Score: 3**

2020

World Policy Analysis Center

#### 4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 99.7

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: 692.09

2017

WHO Global Health Expenditure database

### 4.4.2 Paid medical leave

#### 4.4.2a

Are workers guaranteed paid sick leave?

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

Current Year Score: 2

2020

World Policy Analysis Center

### 4.4.3 Healthcare worker access to healthcare

#### 4.4.3a

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

Yes = 1, No = 0

Current Year Score: 0

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

Bahrain signed the WHO's Health Worker Safety Charter in September 2020, however, the Charter doesn't provide any

information about providing prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency [1,2].

The Ministry of Health and the "Health Improvement Strategy" (2015-2018) provide no information that shows that the government issued a legislation, policy, or public statement committing to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency [3,4].

Further, the "HealthAlert.Gov" website does not provide any additional information [5]. It is to note that Bahrain has authorized the emergency use of the coronavirus (COVID-19) vaccine among frontline healthcare workers, who are in direct contact with active COVID-19 cases, as a measure to "prioritize frontline healthcare workers when administering the vaccine"[6].

[1] World Health Organization. September 17, 2020. "Health Worker Safety Charter". [[https://www.who.int/docs/default-source/world-patient-safety-day/health-worker-safety-charter-wpsd-17-september-2020-3-1.pdf?sfvrsn=2cb6752d\\_2](https://www.who.int/docs/default-source/world-patient-safety-day/health-worker-safety-charter-wpsd-17-september-2020-3-1.pdf?sfvrsn=2cb6752d_2)]. Accessed 29 December 2020.

[2] TradeArabia. September 19, 2020. "Bahrain Adopts WHO's Health Worker Safety Charter". [[http://www.tradearabia.com/news/HEAL\\_372906.html](http://www.tradearabia.com/news/HEAL_372906.html)]. Accessed 29 December 2020.

[3] Ministry of Health. "Information for Health Care Workers". [[https://www.moh.gov.bh/HealthInfo/Corona\\_Guidelines?lang=en](https://www.moh.gov.bh/HealthInfo/Corona_Guidelines?lang=en)]. Accessed 29 December 2020.

[4] Ministry of Health. "Health Improvement Strategy (2015-2018)". [[https://www.moh.gov.bh/Content/Files/Health\\_Improvement\\_Strategy\(2015-2018\).pdf](https://www.moh.gov.bh/Content/Files/Health_Improvement_Strategy(2015-2018).pdf)]. Accessed 29 December 2020.

[5] HEALTHALERT.GOV.BH. 2020. "Latest Decisions". [<https://healthalert.gov.bh/en/category/latest-decisions>]. Accessed 29 December 2020.

[6] Saudi Gazette. November 3, 2020. "Bahrain approves emergency use of COVID-19 vaccine among frontline healthcare workers". [<https://saudigazette.com.sa/article/599906/World/Mena/Bahrain-approves-emergency-use-of-COVID-19-vaccine-among-frontline-healthcare-workers>]. Accessed 29 December 2020.

## 4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

### 4.5.1 Communication with healthcare workers

#### 4.5.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

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

The Joint External Evaluation mission report of the Kingdom of Bahrain that was completed in September 2016 and published in April 2017, states that " Bahrain has a well developed approach to risk communication, including coordination between different sectors, community and media engagement, and capacity-building through regular training of communication staff. MOH communication staff also participate in WHO-led regional trainings and networks to share best practices"[1] The report also states that "Bahrain's risk communication structure benefits from informal processes and agreements, through which

resources between different ministries are coordinated, using both top- and bottom-down approaches depending on the nature of the emergency or disease outbreak. This risk communication system is tested through regular, high-level, multisector and national disaster response exercises." [1]

The Ministry of Health website does not provide further information that shows that there is a system in place for public health officials and healthcare workers to communicate during a public health emergency [2].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 30 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 30 December 2020.

#### 4.5.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence of a system for public health officials and healthcare workers to communicate during an emergency encompassing healthcare workers in both the public and private sectors.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and published in April 2017, states that the emergency communication plan includes "different sectors, the community and media". It does not explicitly mention the private sector [1].

Further, the website of the Ministry of Health does not provide information that shows that the system for public health officials and healthcare workers to communicate during an emergency encompasses healthcare workers in both the public and private sectors [2].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 30 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 30 December 2020.

## 4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

### 4.6.1 Healthcare associated infection (HCAI) prevention and control programs

#### 4.6.1a

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is publicly available evidence that Bahrain's national public health system monitors for and tracks the number of infections associated with health care that take place in health care facilities.

Indeed, according to the Joint External Evaluation (JEE) report for Bahrain, completed in September 2016, surveillance systems have been implemented at the Salmaniya Medical Complex (SMC), the Bahrain Defence Force (BDF), and King Hamad University Hospital (KHUH) and "have been capturing AMR data through active health care-associated infection (HCAI) surveillance and community-acquired infection surveillance for over five years" [1].

[1] World Health Organisation (WHO). "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 30 December 2020.

## 4.7 CAPACITY TO TEST AND APPROVE NEW MEDICAL COUNTERMEASURES

### 4.7.1 Regulatory process for conducting clinical trials of unregistered interventions

#### 4.7.1a

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

Yes = 1, No = 0

**Current Year Score: 1**

There is a national requirement for ethical review before beginning a clinical trial in Bahrain.

The Annex I of the "National Health Regulatory Authority (NHRA) Clinical Trials Regulations", published in 2016, provides standards and requirements for Independent Research Ethics Committee (IREC) involved in clinical trials in Bahrain. The report states that IREC decisions shall be made decisions either through a "Full review process" or a "Expedite review process". Articles 23, 24 and 25 in the document delineate the modes of use of both the "full" and "expedited" review processes.

The scope of a full review includes "a new medicine (drug or biologics) being used for the first time" as well as "an approved medicine (or biologics) being used for a new indication or through a new mode of administration" among others [1]. The scope of an expedited review includes "A- all new applications for which full review is not required (including studies of low risk medical devices 'class I' where none of the other features making full review appropriate are present); B- substantial amendments to approved studies that were INITIALLY reviewed through the expedited review pathway or were determined to be low risk studies; C- annual progress reports of studies that were initially reviewed through the expedited review pathway or those studies that were determined to be of low risk; D- final reports; E- protocol deviations or violations; F- notifications of the conclusion or early termination of a study"[1].

[1] National Health Regulatory Authority (NHRA). September 2016. "Standards and Requirements for Independent Research Ethics Committee (IREC) Involved in Clinical Trials in the Kingdom of Bahrain". [<https://globi-reg.com/wp-content/uploads/2019/07/Standards-and-Requirements-for-Independent-Research-Ethics-Committee-IREC-Involved-in-Clinical-Trials-in-the-kingdom-of-Bahrain.pdf>]. Accessed 30 December 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 evidence of an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics.

The Annex I of the "National Health Regulatory Authority (NHRA) Clinical Trials Regulations", published in 2016, provides standards and requirements for Independent Research Ethics Committee (IREC) involved in clinical trials in Bahrain. The report states that IREC decisions shall be made decisions either through a "Full review process" or a "Expedite review process". While there is an expedited process, there is no information that shows it was designed to handle a scenario such as approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics, as evidenced by Articles 23, 24 and 25 in the document, which delineate the modes of use of both the "full" and "expedited" review processes. The scope of a full review includes "a new medicine (drug or biologics) being used for the first time" as well as "an approved medicine (or biologics) being used for a new indication or through a new mode of administration" among others [1]. The scope of an expedited review includes "A- all new applications for which full review is not required (including studies of low risk medical devices 'class I' where none of the other features making full review appropriate are present); B- substantial amendments to approved studies that were INITIALLY reviewed through the expedited review pathway or were determined to be low risk studies; C- annual progress reports of studies that were initially reviewed through the expedited review pathway or those studies that were determined to be of low risk; D- final reports; E- protocol deviations or violations; F- notifications of the conclusion or early termination of a study"[1].

Additionally, the websites of the National Health Regulatory Authority (NHRA) and the Ministry of Health (MOH), as well as the National Health Regulatory Authority's "A Short Guide to the Procedure for a Clinical Trial Application in the Kingdom of Bahrain" document, all do not provide evidence that there is an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics [2,3,4].

[1] National Health Regulatory Authority (NHRA). September 2016. "Standards and Requirements for Independent Research Ethics Committee (IREC) Involved in Clinical Trials in the Kingdom of Bahrain". [<https://globi-reg.com/wp-content/uploads/2019/07/Standards-and-Requirements-for-Independent-Research-Ethics-Committee-IREC-Involved-in-Clinical-Trials-in-the-kingdom-of-Bahrain.pdf>]. Accessed 30 December 2020.

[2] National Health Regulatory Authority, Bahrain. "A Short Guide to the Procedure for a Clinical Trial Application in the Kingdom of Bahrain". [<https://vdocuments.mx/a-short-guide-to-the-procedure-for-a-clinical-the-procedure-for-a-clinical-trial.html>]. Accessed 30 December 2020.

[3] National Health Regulatory Authority (NHRA). [<http://www.nhra.bh/>]. Accessed 30 December 2020.

[4] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 30 December 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 National Health Regulatory Authority (NHRA) of Bahrain, established in 2010, is an "independent regulatory body" that aims to "regulate the provision of healthcare in Bahrain and ensure appropriateness, continuity, efficiency, and safety in delivering health services, both in the governmental and private sector". Before any medical or pharmaceutical products can be sold in Bahrain, the Pharmaceutical Products Regulation department of the NHRA must approve them [1].

The Annex I of the "National Health Regulatory Authority (NHRA) Clinical Trials Regulations" document, published in 2016, provides standards and requirements by the National Health Regulatory Authority (NHRA) for Independent Research Ethics Committee (IREC) involved in clinical trials in Bahrain. The document states that IREC decisions shall be made decisions either through a "Full review process" or a "Expedite review process". The scope of a full review includes "a new medicine (drug or biologics) being used for the first time", and "an approved medicine (or biologics) being used for a new indication or through a new mode of administration", as well as "a medical device that is not defined as a low-risk medical device (class II and III devices)". This is found directly in Articles 23, 24 and 25 of the document [2].

The website of the Ministry of Health (MOH) does not provide additional information [3].

[1] National Health Regulatory Authority (NHRA). [<http://www.nhra.bh/>]. Accessed 30 December 2020.

[2] National Health Regulatory Authority (NHRA). September 2016. "Standards and Requirements for Independent Research Ethics Committee (IREC) Involved in Clinical Trials in the Kingdom of Bahrain". [<https://globi-reg.com/wp-content/uploads/2019/07/Standards-and-Requirements-for-Independent-Research-Ethics-Committee-IREC-Involved-in-Clinical-Trials-in-the-kingdom-of-Bahrain.pdf>]. Accessed 30 December 2020.

[3] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 30 December 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 (MCM) for human use during public health emergencies .

The Annex I of the "National Health Regulatory Authority (NHRA) Clinical Trials Regulations", published in 2016, provides standards and requirements for Independent Research Ethics Committee (IREC) involved in clinical trials in Bahrain. The report states that IREC decisions shall be made decisions either through a "Full review process" or a "Expedite review process". While there is an expedited process, there is no information that shows it was designed to handle a scenario such as approving medical countermeasures (MCM) for human use during public health emergencies, as evidenced by Articles 23, 24 and 25 in the document, which delineate the modes of use of both the "full and expedited" review processes. The scope of a full review includes "a new medicine (drug or biologics) being used for the first time" as well as "an approved medicine (or biologics) being used for a new indication or through a new mode of administration" among others [1].

Additionally, the websites of the National Health Regulatory Authority (NHRA) and the Ministry of Health (MOH), as well as the National Health Regulatory Authority's "A Short Guide to the Procedure for a Clinical Trial Application in the Kingdom of Bahrain" document, all do not provide evidence that there is an expedited process for approving medical countermeasures



(MCM) for human use during public health emergencies [2,3,4].

[1] National Health Regulatory Authority (NHRA). September 2016. "Standards and Requirements for Independent Research Ethics Committee (IREC) Involved in Clinical Trials in the Kingdom of Bahrain". [<https://globi-reg.com/wp-content/uploads/2019/07/Standards-and-Requirements-for-Independent-Research-Ethics-Committee-IREC-Involved-in-Clinical-Trials-in-the-kingdom-of-Bahrain.pdf>]. Accessed 30 December 2020.

[2] National Health Regulatory Authority, Bahrain. "A Short Guide to the Procedure for a Clinical Trial Application in the Kingdom of Bahrain". [<https://vdocuments.mx/a-short-guide-to-the-procedure-for-a-clinical-the-procedure-for-a-clinical-trial.html>]. Accessed 30 December 2020.

[3] National Health Regulatory Authority (NHRA). [<http://www.nhra.bh/>]. Accessed 30 December 2020.

[4] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 30 December 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: 0

2020

World Health Organization

#### 5.1.2 Integration of health into disaster risk reduction

##### 5.1.2a

Are epidemics and pandemics integrated into the national risk reduction strategy or is there a standalone national disaster risk reduction strategy for epidemics and pandemics?

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient publicly available information that shows that Bahrain has a risk reduction strategy for pandemics.

The Joint External Evaluation mission report of the Kingdom of Bahrain, which was completed in September 2016 and

published in April 2017, states that a "national plan for emergency preparedness and response, including nuclear and chemical events, is in place and updated following hazard mapping exercises". However, pandemics are not mentioned specifically and it is unclear if this strategy includes risk reduction measures [1].

Moreover, the plan itself could not be located. The website of the Ministry of Health does not provide information that shows that pandemics are integrated into the national risk reduction strategy or that there is a standalone national disaster risk reduction strategy for pandemics [2].

[1] World Health Organisation (WHO). April 2017. "Joint External Evaluation of IHR Core Capacities of The Kingdom of Bahrain Mission Report, 4-8 September 2016". [<http://apps.who.int/iris/bitstream/handle/10665/254638/WHO-WHE-CPI-2017.4-eng.pdf>]. Accessed 31 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 31 December 2020.

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

### 5.2.1 Cross-border agreements

#### 5.2.1a

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

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

**Current Year Score: 0**

There is no evidence that Bahrain has cross-border agreements, protocols, or memorandums of understanding (MOUs) with neighbouring countries, or as part of a regional group, with regard to public health emergencies.

In terms of cooperation within the Gulf Cooperation Council (GCC), there is no evidence that "The Council of the GCC Health Ministers" has signed any such agreements, protocols, or memorandums of understanding (MOUs) [1].

A newspaper article published in Al-Wasat in April 2003 entitled "Bahraini and Egyptian Ministers of Health Sign Cooperation Agreement", states that Bahrain has signed an agreement with Egypt that includes cooperation across all hospitals and clinics that are under the Ministry of Health. It also includes cooperation in medical education across universities, knowledge sharing, and medical research. However, it does not state that the agreement includes public health emergencies [2].

Further, an article published in Al-Ittihad, an Emirati newspaper, in January 2008 entitled "MOH at Bahrain signs an agreement with Abu Dhabi Health Authority", states that the agreement between Bahrain and the UAE includes providing consultation services in the public health domain; however, it does not state that the agreement includes public health emergencies [3]. The website of the Ministry of Health does not provide further information, nor does the website for the Bahrain Defense Force, Royal Medical Services, which is the entity that is responsible for public health emergencies in Bahrain [4,5].

[1] Gulf Cooperation Council. "Cooperation in the Field of Human and Environment Affairs". [<https://www.gcc-sg.org/en-us/CooperationAndAchievements/Achievements/CooperationinthefieldofHumanandEnvironmentAffairs/Pages/CooperationintheFieldofHealth.aspx>]. Accessed 31 December 2020.

[2] Al-Wasat Bahraini Newspaper. April 2003. "Bahraini and Egyptian Ministers of Health Sign Cooperation Agreement".

[<http://www.alwasatnews.com/news/204299.html>]. Accessed 31 December 2020.

[3] Alittihad Emirati Newspaper. January 2008. "MOH at Bahrain Signs an Agreement with Abu Dhabi Health Authority".

[<https://www.alittihad.ae/article/3952/2008/%D9%87%D9%8A%D8%A6%D8%A9-%D8%A7%D9%84%D8%B5%D8%AD%D8%A9-%D8%A3%D8%A8%D9%88%D8%B8%D8%A8%D9%8A-%D8%AA%D9%88%D9%82%D8%B9-%D8%A7%D8%AA%D9%81%D8%A7%D9%82%D9%8A%D8%A9-%D9%85%D8%B9-%D8%B5%D8%AD%D8%A9-%D8%A7%D9%84%D8%A8%D8%AD%D8%B1%D9%8A%D9%86>]. Accessed 31 December 2020.

[4] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 31 December 2020.

[5] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 31 December 2020.

### 5.2.1b

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

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

**Current Year Score: 0**

There is no evidence that Bahrain has cross-border agreements, protocols, or memorandums of understanding (MOUs) with neighbouring countries, or as part of a regional group, with regard to animal health emergencies.

A newspaper article in Al-Wasat, published in April 2003 and entitled "Bahraini and Egyptian Ministers of Health Sign Cooperation Agreement", states that Bahrain has signed an agreement with Egypt that includes cooperation across all hospitals and clinics that are under the Ministry of Health. It also includes cooperation in medical education across universities, knowledge sharing, and medical research. However, it does not state that the agreement includes animal health emergencies [1].

An article in Al-Ijtihad, an Emirati newspaper, that was published in January 2008 and entitled "MOH at Bahrain signs an agreement with Abu Dhabi Health Authority", states that the agreement between Bahrain and the UAE includes providing consultation services in the public health domain; however, it does not state that the agreement includes animal health emergencies [2].

The website of the Gulf Cooperation Council (GCC) does not provide information that suggests that there are cross-border agreements, protocols, or MOUs with member states with regards to animal health emergencies [3].

Further, the website of the Ministry of Health does not provide further information, nor does the website for the Bahrain Defense Force, Royal Medical Services, which is the entity that is responsible for public health emergencies in Bahrain [4,5].

[1] Al-Wasat Bahraini Newspaper. April 2003. "Bahraini and Egyptian Ministers of Health Sign Cooperation Agreement". [<http://www.alwasatnews.com/news/204299.html>]. Accessed 31 December 2020.

[2] Al-Ittihad Emirati Newspaper. January 2008. "MOH at Bahrain signs an agreement with Abu Dhabi Health Authority". [<https://www.alittihad.ae/article/3952/2008/%D9%87%D9%8A%D8%A6%D8%A9-%D8%A7%D9%84%D8%B5%D8%AD%D8%A9-%D8%A3%D8%A8%D9%88%D8%B8%D8%A8%D9%8A-%D8%AA%D9%88%D9%82%D8%B9-%D8%A7%D8%AA%D9%81%D8%A7%D9%82%D9%8A%D8%A9-%D9%85%D8%B9-%D8%B5%D8%AD%D8%A9-%D8%A7%D9%84%D8%A8%D8%AD%D8%B1%D9%8A%D9%86>]. Accessed 31 December 2020.

[3] Gulf Cooperation Council. "Cooperation in the Field of Human and Environment Affairs". [<https://www.gcc-sg.org/en-us/CooperationAndAchievements/Achievements/CooperationinthefieldofHumanandEnvironmentAffairs/Pages/CooperationintheFiledofHealth.aspx>]. Accessed 31 December 2020.

[4] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 31 December 2020.

[5] Bahrain Defense Force, Royal Medical Services. [<https://www.bdfmedical.org/>]. Accessed 31 December 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: 0

2021

Biological Weapons Convention

#### 5.3.1c

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

Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

#### 5.3.1d

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

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

Current Year Score: 2

2021

Biological Weapons Convention

## 5.3.2 Voluntary memberships

### 5.3.2a

Does the country meet at least 2 of the following criteria?

- Membership in Global Health Security Agenda (GHSA)
- Membership in the Alliance for Country Assessments for Global Health Security and IHR Implementation (JEE Alliance)
- Membership in the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction (GP)
- Membership in the Australia Group (AG)
- Membership in the Proliferation Security Initiative (PSI)

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

Current Year Score: 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: 0

There is no evidence that Bahrain has allocated national funds to improve the capacity to address epidemic threats within the past three years.

The Kingdom of Bahrain's state budget does not provide information that shows that Bahrain has allocated national funds to improve capacity to address epidemic threats within the past three years [1].

The websites of the Ministry of Health and the Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs do not provide information that shows that Bahrain has allocated national funds to improve the capacity to address epidemic threats within the past three years [2,3].

[1] Bahrain.bh. "Kingdom of Bahrain State Budget".

[[https://www.bahrain.bh/wps/portal/!ut/p/a1/IZFNT4NAElb\\_Ch44wi7fxBuHSiVNTIOxZS9m\\_0AhV0KW7H-](https://www.bahrain.bh/wps/portal/!ut/p/a1/IZFNT4NAElb_Ch44wi7fxBuHSiVNTIOxZS9m_0AhV0KW7H-)

erfVi4ltdW4zeWfmeWcAAluAJH5rBdatkrg75ih-Xj7A2PNTv8ijRQDXeV6u1v5qcf8Ugg1AANVSD7oBVa-4Db3lhq-tFFT1luIWwc2IW2lNGmtmkT0VTB97hrqloOJ-6HFQC4cnNXZCFicO5iF1WEJmIcFQwwNRGUg4JnI4DXGkskvzguyuhbcGFNZTiScxOyMADIP40V18iN8\_Zlt00ZubGSmr1rsP3zkc100Sly-mKVSrKkAqCRcTay0d2PptxoPUy3NrThPM-uUEp0zK1Vb8PfWho1mfU\_WD0-zQ4OMXy45H3GweRw3zzCXGa7qM!/dl5/d5/L2dBISevZ0FBIS9nQSEh/]. Accessed 31 December 2020.

[2] Ministry of Works, Municipalities Affairs and Urban Planning, Agriculture Affairs. [<https://www.mun.gov.bh/portal/>]. Accessed 31 December 2020.

[3] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 31 December 2020.

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

### 5.5.2a

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

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

Current Year Score: 0

2021

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

### 5.5.2b

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

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

Current Year Score: 0

2021

OIE PVS assessments

## 5.5.3 Financing for emergency response

### 5.5.3a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of 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).

Further, the website of the International Development Association (IDA) does not list Bahrain as an eligible country to borrow from the IDA and, thus, the country is not eligible for the World Bank Pandemic Financing Facility [1,2,3].

The United Nations (UN) Central Emergency Response Fund 10 Years report, published in 2016, does not provide information that shows that Bahrain has access to emergency funds [4]. In addition, the website of the Ministry of Health does not provide information that shows that Bahrain has access to emergency funds [5].

[1] International Development Association (IDA). "Borrowing Countries". [<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 31 December 2020.

[2] Pandemic Emergency Financing Facility (PEF). November 2017. "Operational Brief for Eligible Countries". [<http://pubdocs.worldbank.org/en/574211510673362977/PEF-Operational-Brief-Nov-2017.pdf>]. Accessed 31 December 2020.

[3] Pandemic Emergency Financing Facility (PEF). February 2019. "Operational Brief for Eligible Countries". [<http://pubdocs.worldbank.org/en/134541557247094502/PEF-Operational-Brief-Feb2019.pdf>]. Accessed 31 December 2020.

[4] UN Central Emergency Response Fund. 2016. "10 Years Report". [[https://reliefweb.int/sites/reliefweb.int/files/resources/CERF10layout\\_AR\\_20160518.compressed.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/CERF10layout_AR_20160518.compressed.pdf)]. Accessed 31 December 2020.

[5] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 31 December 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 senior leaders, in the past three years, have made a public commitment to improve Bahrain's own domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity; additionally, there is no evidence that senior leaders in Bahrain have made a public commitment to support other countries to improve capacity to address epidemic threats by providing financing or support in the last three years.

The website of the World Health Organization's (WHO) Bahrain country profile does not provide information that shows that senior leaders have made a public commitment in the last three years, nor do both the United Nations (UN) Bahrain website and the UN News website [1, 2, 3].



Further, there is no evidence of commitments from senior leaders on the websites of the Ministry of Health or Ministry of Foreign Affairs [4, 5]. Additionally, upon conducting an online search at the Bahrain News Agency (BNA), the BBC, and CNN, there is no publicly available evidence that shows that senior leaders, in the past three years, have made a public commitment to improve Bahrain's own domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity. Additionally, there is no evidence that senior leaders in Bahrain have made a public commitment to support other countries to improve capacity to address epidemic threats by providing financing or support in the last three years [6, 7, 8, 9].

[1] WHO. "Bahrain Country Profile". [<https://www.who.int/countries/bhr/en/>]. Accessed 31 December 2020.

[2] UN Bahrain. [<https://www.un.org/sg/en/countries/bahrain>]. Accessed 31 December 2020.

[3] UN News. [<https://news.un.org/en/tags/bahrain>]. Accessed 31 December 2020.

[4] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 31 December 2020.

[5] Ministry of Foreign Affairs. "News". [<https://www.mofa.gov.bh/Default.aspx?tabid=65&language=en-US>]. Accessed 31 December 2020.

[6] Bahrain News Agency. "Search Results". [<https://www.bna.bh/en/search.aspx?search-input=improve%20capacity>]. Accessed 26 December 2020.

[7] Bahrain News Agency. "Search Results". [<https://www.bna.bh/en/search.aspx?search-input=epidemic%20threat>]. Accessed 26 December 2020.

[8] BBC. "Search Results- Bahrain". [<https://www.bbc.com/news/topics/cx1m7zg01ndt/bahrain>]. Accessed 26 December 2020.

[9] CNN. "Search Results- Bahrain".

[<https://edition.cnn.com/search?q=bahrain&size=10&page=5&from=40&category=us,politics,world,opinion,health>]. Accessed 26 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: 0**

There is insufficient evidence that Bahrain has, in the past three years, either provided other countries with financing or technical support to improve capacity to address epidemic threats, or requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats.

The website of the World Health Organization's (WHO) Bahrain country profile does not provide additional information, nor do both the United Nations (UN) Bahrain website and the UN News website [1,2,3]. Further, the website of the Ministry of Health and the Ministry of Foreign Affairs do not provide any additional information [4,5].

There is also no evidence of funding on the GHS Tracking Dashboard. Note that Bahrain did receive funds from organizations like the World Health Organization (WHO) towards improving non-pandemic related capacities [6].

[1] WHO. "Bahrain Country Profile". [<https://www.who.int/countries/bhr/en/>]. Accessed 31 December 2020.

[2] UN Bahrain. [<https://www.un.org/sg/en/countries/bahrain>]. Accessed 31 December 2020.

[3] UN News. [<https://news.un.org/en/tags/bahrain>]. Accessed 31 December 2020.

[4] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 31 December 2020.

[5] Ministry of Foreign Affairs. "News". [<https://www.mofa.gov.bh/Default.aspx?tabid=65&language=en-US>]. Accessed 31 December 2020.

[6] Talus Analytics. "GHS Tracking Dashboard". [<https://tracking.ghscosting.org/>]. Accessed 31 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 evidence of a publicly available plan in Bahrain or policy for sharing genetic data, epidemiological data, clinical specimens, and/or isolated specimens with international organizations and/or other countries that goes beyond influenza.

The website for the Centre for Arab Genomic Studies states that Bahrain is a member of the centre and that it aims to "develop a comprehensive open-access database of up-to-date information on genetic diseases in the Arab World". It does not provide further information about any plan or policy issued by Bahrain for sharing relevant data or specimens [1].

Further, there is no publicly available evidence of any such agreements on the websites of the Ministry of Health nor Ministry of Agriculture [2, 3]. A search in media outlets in both Arabic and English did not result in relevant studies or articles.

[1] Centre for Arab Genomic Studies. "CAGS Profile Book 2020".

[[https://www.cags.org.ae/img/CAGS\\_Profile\\_Book\\_2020.pdf](https://www.cags.org.ae/img/CAGS_Profile_Book_2020.pdf)]. Accessed 31 December 2020.

[2] Ministry of Health. [<https://www.moh.gov.bh/>]. Accessed 31 December 2020.

[3] Ministry of Municipalities & Agriculture Affairs. [<https://www.mun.gov.bh/>]. Accessed 31 December 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 publicly available evidence that Bahrain has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years.

Bahrain's country profile on the website of the World Health Organization (WHO) and the recent announcements/news do not indicate that Bahrain has not shared samples, nor does the WHO PIP framework website [1, 2]. A search in three local and global media outlets (Bahrain News Agency, Arab News, and the BBC) did not result in any article that indicates Bahrain not sharing samples in accordance with the PIP framework in the last two years.

[1] World Health Organization (WHO). "Bahrain Country Profile".

[<https://www.who.int/countries/bhr/en/>][<https://www.who.int/csr/don/archive/year/2019/en/>]. Accessed 31 December 2020.

[2] World Health Organization (WHO). "Pandemic Influenza Preparedness Activities in the Region".

[<http://www.emro.who.int/pandemic-epidemic-diseases/pip-framework/index.html>]. Accessed 31 December 2020.

### 5.6.1c

**Is there public evidence that the country has not shared pandemic pathogen samples during an outbreak in the past two years?**

Yes = 0 , No = 1

**Current Year Score: 1**

There is no public evidence that shows that Bahrain has not shared pandemic pathogen samples during an outbreak in the last two years, including during the current COVID-19 pandemic.

The World Health Organization's (WHO) Bahrain country profile website does not provide information that shows that Bahrain has not shared pandemic pathogen samples during an outbreak in the last two years [1].

The WHO news release website also does not provide information that shows that Bahrain has not shared pandemic pathogen samples during an outbreak in the last two years [2].

A search in three local and global media outlets (Bahrain News Agency, Arab News, and BBC) did not result in any information that shows that Bahrain has not shared pandemic pathogen samples during an outbreak in the last two years, including during the current COVID-19 pandemic.

[1] World Health Organization (WHO). "Bahrain Country Profile". [<https://www.who.int/countries/bhr/en/>]. Accessed 31 December 2020.

[2] World Health Organization (WHO). "News Releases". [<https://www.who.int/csr/don/archive/year/2019/en/>]. Accessed 31 December 2020.

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

### 6.1 POLITICAL AND SECURITY RISK

#### 6.1.1 Government effectiveness

##### 6.1.1a

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

Input number

Current Year Score: 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: 1

2020

Economist Intelligence

### 6.1.1e

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

Input number

Current Year Score: 42

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: 0

2020

Economist Intelligence

## 6.1.2 Orderly transfers of power

### 6.1.2a

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

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

Current Year Score: 1

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: 0**

2021

Economist Intelligence

### 6.1.4 Illicit activities by non-state actors

#### 6.1.4a

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

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

**Current Year Score: 2**

2021

Economist Intelligence

#### 6.1.4b

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

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

**Current Year Score: 0**

2020

UN Office of Drugs and Crime (UNODC)

#### 6.1.4c

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

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

**Current Year Score: 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: 2

2021

Economist Intelligence

## 6.1.6 Government territorial control

### 6.1.6a

Does the government's authority extend over the full territory of the country?

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

## 6.1.7 International tensions

### 6.1.7a

Is there a threat that international disputes/tensions could have a negative effect?

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

Current Year Score: 1

2021

Economist Intelligence

## 6.2 SOCIO-ECONOMIC RESILIENCE

### 6.2.1 Literacy

#### 6.2.1a

Adult literacy rate, population 15+ years, both sexes (%)

Input number

Current Year Score: 97.46

2018

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

## 6.2.2 Gender equality

### 6.2.2a

United Nations Development Programme (UNDP) Gender Inequality Index score

Input number

Current Year Score: 0.79

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: 2

The share of employment in the informal sector in Bahrain is 65% (2015).

According to the Arab NGO Network for Development's 2016 publication, "Informal Employment", the share of employment in the informal sector in Bahrain is 65% (2015) [1]. Other sources such as the ILOSTAT database and the World Bank fail to provide any measures of the share of employment in the informal sector in Bahrain.

[1] Arab NGO Network for Development (ANND). "Informal Employment". 2016.

[<https://www.fordfoundation.org/media/4555/arab-watch-on-economic-and-social-rights-2016-informal-labor.pdf>].

Accessed January 1, 2021.

### 6.2.3c

Coverage of social insurance programs (% of population)

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



**Current Year Score: 2**

2016, or latest available

World Bank; Economist Impact calculations

## 6.2.4 Public confidence in government

### 6.2.4a

**Level of confidence in public institutions**

Input number

**Current Year Score: 1**

2021

Economist Intelligence Democracy Index

## 6.2.5 Local media and reporting

### 6.2.5a

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

Input number

**Current Year Score: 0**

2021

Economist Intelligence Democracy Index

## 6.2.6 Inequality

### 6.2.6a

**Gini coefficient**

Scored 0-1, where 0=best

**Current Year Score: -**

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: 3

2021

Economist Intelligence

### 6.3.3 Adequacy of power network

#### 6.3.3a

What is the risk that power shortages could be disruptive?

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

Current Year Score: 2

2021

Economist Intelligence

## 6.4 ENVIRONMENTAL RISKS

### 6.4.1 Urbanization

#### 6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 89.39

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: 0.2

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: 77.16

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: 644.3

2019

WHO

### **6.5.1c**

Population ages 65 and above (% of total population)

Input number

Current Year Score: 2.52

2019

World Bank

### **6.5.1d**

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 25.1

2018

World Bank

### **6.5.1e**

Prevalence of obesity among adults

Input number

Current Year Score: 29.8

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: 1150.38**

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