

Namibia

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

CATEGORY 1: PREVENTING THE EMERGENCE OR RELEASE OF PATHOGENS WITH POTENTIAL FOR INTERNATIONAL CONCERN	4
1.1 Antimicrobial resistance (AMR)	4
1.2 Zoonotic disease	8
1.3 Biosecurity	15
1.4 Biosafety	23
1.5 Dual-use research and culture of responsible science	26
1.6 Immunization	29
CATEGORY 2: EARLY DETECTION AND REPORTING FOR EPIDEMICS OF POTENTIAL INTERNATIONAL CONCERN	30
2.1 Laboratory systems strength and quality	30
2.2 Laboratory supply chains	33
2.3 Real-time surveillance and reporting	35
2.4 Surveillance data accessibility and transparency	38
2.5 Case-based investigation	45
2.6 Epidemiology workforce	50
CATEGORY 3: RAPID RESPONSE TO AND MITIGATION OF THE SPREAD OF AN EPIDEMIC	52
3.1 Emergency preparedness and response planning	52
3.2 Exercising response plans	57
3.3 Emergency response operation	59
3.4 Linking public health and security authorities	62
3.5 Risk communications	63
3.6 Access to communications infrastructure	67

3.7 Trade and travel restrictions	68
-----------------------------------	----

CATEGORY 4: SUFFICIENT AND ROBUST HEALTH SECTOR TO TREAT THE SICK AND PROTECT HEALTH WORKERS 70

4.1 Health capacity in clinics, hospitals, and community care centers	70
---	----

4.2 Supply chain for health system and healthcare workers	74
---	----

4.3 Medical countermeasures and personnel deployment	80
--	----

4.4 Healthcare access	81
-----------------------	----

4.5 Communications with healthcare workers during a public health emergency	83
---	----

4.6 Infection control practices and availability of equipment	85
---	----

4.7 Capacity to test and approve new medical countermeasures	86
--	----

CATEGORY 5: COMMITMENTS TO IMPROVING NATIONAL CAPACITY, FINANCING PLANS TO ADDRESS GAPS, AND ADHERING TO GLOBAL NORMS 89

5.1 International Health Regulations (IHR) reporting compliance and disaster risk reduction	89
---	----

5.2 Cross-border agreements on public health and animal health emergency response	90
---	----

5.3 International commitments	92
-------------------------------	----

5.4 Joint External Evaluation (JEE) and Performance of Veterinary Services Pathway (PVS)	93
--	----

5.5 Financing	94
---------------	----

5.6 Commitment to sharing of genetic and biological data and specimens	99
--	----

CATEGORY 6: OVERALL RISK ENVIRONMENT AND VULNERABILITY TO BIOLOGICAL THREATS 101

6.1 Political and security risk	101
---------------------------------	-----

6.2 Socio-economic resilience	104
-------------------------------	-----

6.3 Infrastructure adequacy	107
-----------------------------	-----

6.4 Environmental risks	107
-------------------------	-----

6.5 Public health vulnerabilities	108
-----------------------------------	-----

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

1.1 ANTIMICROBIAL RESISTANCE (AMR)

1.1.1 AMR surveillance, detection, and reporting

1.1.1a

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

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

Current Year Score: 0

There is no evidence that Namibia has a national antimicrobial resistance (AMR) plan for the surveillance, detection and reporting of priority AMR pathogens. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that "the development of a national multisectoral plan for AMR in Namibia has not even begun". [1] Neither the World Health Organization (WHO) Library of National Action Plans nor the WHO Global Database for AMR Country Self Assessments lists any entry for Namibia. [2,3] The JEE states that Namibia has a good general awareness of AMR and that it would be relatively easy for the country to improve its AMR score within a year. [1] Further, a February 2018 report from the USAID Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program states that Namibia has developed a multisector AMR action plan that was, at the time of publication of the SIAPS report, awaiting high-level approval from the Ministry of Health and Social Services (MoHSS). [4] However, neither the MoHSS nor the Ministry of Agriculture, Water and Forestry shares any information via a public website that suggests a plan has been developed or is being developed. [5,6] There is no more recent evidence of a plan; for example, a statement from the Ministry of Agriculture, Water and Forestry from March 2020 stating the importance of addressing AMR makes no mention of such a plan. [7] Similarly, there is no evidence in media that an AMR plan has been published.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] World Health Organization (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments". [<http://amrcountryprogress.org/>]. Accessed 4 December 2020.

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

[4] Systems for Improved Access to Pharmaceuticals and Services (SIAPS). February 2018. "Containing Antimicrobial Resistance through Rational Antimicrobial Use in Namibia". [<http://siapsprogram.org/publication/containing-antimicrobial-resistance-through-rational-antimicrobial-use-in-namibia/>]. Accessed 4 December 2020.

[5] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[6] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[7] Ministry of Agriculture, Water and Forestry. "Speech by Mr. Percy W. Misika- MAWF Ed at the Animal Health-Stakeholders Awareness Workshop Antimicrobial Resistance (Amr) & Antimicrobial Use (Amu) on the 11th March 2020".

[<https://mawf.gov.na/documents/37726/45469/MAWF+ED+Opening+rRemarks+on+AMR+10+March+2020.pdf/16551392-b15f-42b2-b299-cfccb88edcde>]. Accessed 4 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 no public evidence that Namibia has a national laboratory or laboratory system, with designated sentinel sites, which tests for priority antimicrobial resistant (AMR) pathogens. Neither the World Health Organization (WHO) Library of National Action Plans nor the WHO Global Database for AMR Country Self Assessments lists any entry for Namibia. [1,2] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that "the development of a national multisectoral plan for AMR in Namibia has not even begun". Further, it lists a need in Namibia to "identify laboratory capacity". [3] However, the JEE also states that "resistance against bacteria is routinely tested in human health laboratories through sensitivity tests," but the report provides no additional details about the nature of these tests. [3] Neither the Ministry of Health and Social Services nor the Ministry of Agriculture, Water and Forestry share any information via a public website on what AMR pathogens the country's laboratory system has the capacity to test for. [4,5] The Namibia Institute of Pathology (NIP), a state-owned enterprise that runs laboratories for human health in Namibia, does not share information on AMR testing abilities via a public website. [6] Similarly, its 2017/18 Annual Report (the most recent) does not contain any information on its laboratories' abilities to test for AMR pathogens. [7] There is no record in media reports or academic studies of Namibia's capacity to test for priority AMR pathogens. There is no evidence that Namibia has a national public health institute, though both the JEE and other sources indicate a plan to create one. [3,8]

[1] World Health Organization (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments. [<http://amrcountryprogress.org/>]. Accessed 4 December 2020.

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

[3] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[6] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[7] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 4 December 2020.

[8] Centers for Disease Control. 23 November 2016. 2016. "Namibia Envisions a Robust National Public Health Institute". [<https://www.cdc.gov/globalhealth/healthprotection/nphi/stories/namibia-nphi.html>]. Accessed 4 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 Namibian government conducts environmental detection or surveillance activities for antimicrobial resistant (AMR) organisms or antimicrobial residues. The Ministry of Environment and Tourism does not share any relevant information via a public website. [1] There is no record in media reports or academic studies of the Ministry conducting such surveillance. Neither the World Health Organization (WHO) Library of National Action Plans nor the WHO

Global Database for AMR Country Self Assessments lists any entry for Namibia. [2,3] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that "the development of a national multisectoral plan for AMR in Namibia has not even begun". [4] A February 2018 report from the USAID Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Programme states that Namibia has developed a multisector AMR action plan that was, at the time of publication of the SIAPS report, awaiting high-level approval from the Ministry of Health and Social Services (MoHSS). [5] However, neither the MoHSS nor the Ministry of Agriculture, Water and Forestry share any information via a public website that suggests a plan has been developed or is being developed. [6,7] There is also no evidence of other Namibian governmental agencies conducting such detection or surveillance activities.

[1] Ministry of Environment and Tourism. [<http://www.met.gov.na/>]. Accessed 4 December 2020.

[2] World Health Organization (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments." [<http://amrcountryprogress.org/>]. Accessed 4 December 2020.

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

[4] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[5] Systems for Improved Access to Pharmaceuticals and Services (SIAPS). February 2018. "Containing Antimicrobial Resistance through Rational Antimicrobial Use in Namibia". [<http://siapsprogram.org/publication/containing-antimicrobial-resistance-through-rational-antimicrobial-use-in-namibia/>]. Accessed 4 December 2020.

[6] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[7] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 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: 0

There is insufficient evidence to show that Namibia has national legislation in place requiring prescriptions for antibiotic use for humans. Although some academic sources describe antibiotics as requiring prescriptions, the precise legal basis for prescriptions cannot be identified using publicly available evidence. According to a 2015 study published in South African Family Practice , in Namibia "antibiotics are scheduled drugs and can therefore only be sold upon prescription by an authorised prescriber". The study says that this requirement exists under the Ministry of Health and Social Services' (MoHSS) National Medicines Policy. [1] However, this policy or related information is not shared via a public website by the MoHSS via a public website. [2] The Medicines and Related Substances Control Act, 2003, describes controls on scheduled drugs, including the procedures for writing a prescription, but does not define antibiotics as a scheduled substance, nor mention antibiotics in any capacity. [3] No other relevant laws are listed for Namibia in the FAOLEX database of the Food and Agriculture Organisation of the United Nations (FAO). [4] The Joint External Evaluation report (JEE) for Namibia, published in 2017, does not contain information about the use or requirement of prescriptions of antibiotics for humans in Namibia. [5] Aside from whether prescriptions are required for antibiotics, academic research has found that doctors in Namibia tend to prescribe antibiotics too readily. One study found that "wholesale data showed higher antibiotic use than prescription claims data", but that "antibiotic use in the private sector of Namibia is comparable to that of high-consuming European countries such as Italy". [6] The 2015 South African Family Practice study found that "first-line antibiotic choices of doctors are not informed by the Namibia Standard Treatment Guidelines and the local and regional antimicrobial sensitivity data". [1] The

Ministry of Health and Social Services has issues Standard Treatment Guidelines, which are supposed to inform prescription practices, but are not a prescription regulation themselves. [7] The World Health Organization Library of National Action Plans does not contain an entry for Namibia. [8] There is no relevant information shared via the public website of the MoHSS. [2]

[1] Pereko, Dawn D., Martie S. Lubbe and Sabiha Y. Essack. 2015. "Antibiotic Use in Namibia: Prescriber Practices for Common Community Infections". *South African Family Practice*, 57

[4] : 231-35.

[https://www.researchgate.net/publication/277981381_Antibiotic_use_in_Namibia_Prescriber_practices_for_common_community_infections]. Accessed 18 November 2018.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[3] Government of Namibia. Government Gazette of the Republic of Namibia. 28 August 2003. "Medicines and Related Substance Control Act, 2003". [<http://extwprlegs1.fao.org/docs/pdf/nam91928.pdf>]. Accessed 4 December 2020.

[4] Food and Agriculture Organisation of the United Nations (FAO). "FAOLEX: Namibia". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=NAM>]. Accessed 4 December 2020.

[5] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia".

[<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[6] Dineo Pereko, Dawn, Martie S. Lubbe, and Sabiha Y. Essack. 2016. "Surveillance of antibiotic use in the private sector in Namibia using sales and claims data". *Journal of Infection in Developing Countries*.

[<https://pubmed.ncbi.nlm.nih.gov/27886038/>]. Accessed 4 December 2020.

[7] Ministry of Health and Human Services. 2011. "Namibia Standard Treatment Guidelines".

[<https://man.com.na/files/news/1501069447namibia-standard-treatment-guidelines.pdf>]. Accessed 4 December 2020.

[8] World Health Organization (WHO). "Library of National Action Plans". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 4 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: 0

There is insufficient evidence of national legislation in place requiring prescriptions for antibiotic use for animals. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there is restricted use of antimicrobials in the animal health sector and antimicrobials can only be used on prescription by a veterinarian". [1] It is somewhat unclear from publicly available information which Namibian law or regulation specifically establishes this requirement, and there is no evidence of a mention of a regulation regulating antibiotic use in animals. The Medicines and Related Substances Control Act, 2003 describes controls on scheduled drugs, including the procedures for writing a prescription for humans and animals, but does not define antibiotics as a scheduled substance. However, the Act does not exclude antibiotics from the category of scheduled substances, either (it does not mention antibiotics at all). [2] The Prevention of Undesirable Residue in Meat Act, 1991, states that substances such as medicines (as defined under an earlier version of the Medicines and Related Substances Control Act) may not be administered to animals without a prescription. A 2017 news release from the World Health Organization (WHO) lauds Namibia as a model for veterinary antibiotic policy, and states that antibiotics are only administered to cattle with a prescription. The news release cites an unnamed 1991 law—presumably the Prevention of Undesirable Residue in Meat Act, 1991—as being responsible for strict Namibian policies on antibiotic use in the beef industry. [4] The Animal Health Act, 2011, does not mention the use of medicines or drugs whatsoever, let alone antibiotic or antimicrobial prescriptions. [5] Neither the Ministry of Health and Social Services nor the Ministry of Agriculture, Water and

Forestry share any information about antibiotic prescriptions for animals via a public website. [6,7]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [2] Government of Namibia. Government Gazette of the Republic of Namibia. 28 August 2003. "Medicines and Related Substance Control Act, 2003". [<http://extwprlegs1.fao.org/docs/pdf/nam91928.pdf>]. Accessed 4 December 2020.
- [3] Government of Namibia. Government Gazette of the Republic of Namibia. 17 December 1991. "Prevention of Undesirable Residue in Meat Act, 1991". [http://www.commonlii.org/na/legis/num_act/pourima1991397.pdf]. Accessed 4 December 2020.
- [4] World Health Organization (WHO). 14 November 2017. "Namibia's Ban on Antibiotics in Healthy Animals Drives Meat Exports". [<http://www.who.int/news-room/feature-stories/detail/namibia-s-ban-on-antibiotics-in-healthy-animals-drives-meat-exports>]. Accessed 4 December 2020.
- [5] Government of Namibia. Government Gazette of the Republic of Namibia. 20 April 2011. "Animal Health Act, 2011". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Animal_Health_Act_2011.pdf]. Accessed 4 December 2020.
- [6] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 14 October 2018.
- [7] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

1.2 ZOOBOTIC 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 insufficient evidence to show that Namibia has a national plan on zoonotic disease. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there is a national animal disease prevention plan for rabies, anthrax, brucellosis, and Rift Valley fever". [1] Further, the JEE notes that "a national policy to combat zoonoses is in place". [1] However, these policies are not currently shared via a public website by the Ministry of Agriculture, Water and Forestry or its Directorate of Veterinary Services, which the JEE says disseminates such documents. [2] Neither the Ministry of Health and Social Services nor the Ministry of Agriculture, Water and Forestry shares information on policies toward zoonoses via a public website. [3,4] The Organisation for Animal Health's (OIE) Performance of Veterinary Services (PVS) evaluation report for Namibia, published in August 2008, does not include any information on plans for zoonotic disease. [5] The Animal Health Act, 2011, describes the regulations for dealing with diseased animals in general, but does not discuss zoonoses. [6] Thus, while the JEE cites the existence of such a plan or plans, they do not appear to be available for review via a public website. There is no other evidence of relevant media reports or academic studies.

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate->

veterinary-services]. Accessed 4 December 2020.

[5] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.

[6] Government of Namibia. Government Gazette of the Republic of Namibia. 20 April 2011. "Animal Health Act, 2011". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Animal_Health_Act_2011.pdf]. Accessed 4 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 insufficient evidence to show that Namibia has national legislation, plans or equivalent strategy documents which include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. There is insufficient evidence that Namibia has a plan on zoonotic disease, but not enough information on its contents to determine whether it includes details on preventing spillover events. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there is a national animal disease prevention plan for rabies, anthrax, brucellosis, and Rift Valley fever". [1] Further, the JEE notes that "a national policy to combat zoonoses is in place". [1] However, these policies are not currently shared via a public website by the Ministry of Agriculture, Water and Forestry or its Directorate of Veterinary Services, which the JEE says disseminates such documents. [2] The Ministry of Health and Social Services does not share information on policies toward zoonoses via a public website. [3,4] The Organisation for Animal Health's (OIE) Performance of Veterinary Services (PVS) evaluation report for Namibia, published in August 2008, does not include any information on plans for zoonotic disease. [5] The Animal Health Act, 2011, describes the regulations for dealing with diseased animals in general, but does not discuss zoonoses. [6] Thus, while the JEE cites the existence of such a plan or plans, they do not appear to be available for review via a public website.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[5] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.

[6] Government of Namibia. Government Gazette of the Republic of Namibia. 20 April 2011. "Animal Health Act, 2011". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Animal_Health_Act_2011.pdf]. Accessed 4 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 insufficient evidence to establish that Namibia has national plans that account for both the surveillance and control of multiple zoonotic pathogens of public health concern. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there is a national animal disease prevention plan for rabies, anthrax, brucellosis, and Rift Valley fever". [1] Further, the JEE notes that "a national policy to combat zoonoses is in place". [1] However, these policies are not currently shared via a public website by the Ministry of Agriculture, Water and Forestry or its Directorate of Veterinary Services, which the JEE says disseminates such documents. [2,3] The Ministry of Health and Social Services does not share information on policies toward zoonoses via a public website. [4] The Organisation for Animal Health's (OIE) Performance of Veterinary Services (PVS) evaluation report for Namibia, published in August 2008, does not include any information on plans for zoonotic disease. [5] The Animal Health Act, 2011, describes the regulations for dealing with diseased animals in general, but does not discuss zoonoses; neither does it discuss surveillance, aside from designating "veterinary officials" as being responsible for it. [6] Thus, while the JEE cites the existence of such plans, they do not appear to be available for public review, and it is thus not possible to say with certainty that they cover both surveillance and control of pathogens.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[5] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.

[6] Government of Namibia. Government Gazette of the Republic of Namibia. 20 April 2011. "Animal Health Act, 2011". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Animal_Health_Act_2011.pdf]. Accessed 4 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 there is a Namibian department, agency, or similar unit dedicated zoonotic disease that functions across ministries. The Joint External Evaluation report (JEE) for Namibia, published in 2017, describes well-developed zoonotic disease surveillance and reporting mechanisms, but notes that information sharing across sectors and between the Ministry of Agriculture, Water and Forestry (MAWF) and the Ministry of Health and Social Services (MoHSS) occurs only when necessary. [1] Further, the JEE recommends that creation of "formal mechanisms for sharing information on zoonotic diseases and outbreaks between the animal, human and environment/wildlife sectors at national and regional levels"; this recommendation reflects the fact that no single entity is currently performing this task. [1] Neither the MoHSS, the MAWF, nor the latter's Directorate of Veterinary Services shares information on policies toward zoonotic diseases via public websites. [2,3,4] The Organisation for Animal Health's (OIE) Performance of Veterinary Services (PVS) evaluation report for Namibia, published in August 2008, does not include any information on plans for zoonotic disease, or entities that execute such plans. [5] The Animal Health Act, 2011, describes the regulations for dealing with diseased animals in general, but does

not discuss zoonoses specifically. [6] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[5] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.

[6] Government of Namibia. Government Gazette of the Republic of Namibia. 20 April 2011. "Animal Health Act, 2011". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Animal_Health_Act_2011.pdf]. Accessed 4 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 insufficient evidence to show that Namibia has a national mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency. According to a description of epidemiological surveillance in Namibia in the Organisation for Animal Health's (OIE) Performance of Veterinary Services (PVS) evaluation report for Namibia, published in August 2008, "farmers and private veterinarians contribute to the passive surveillance by completing an animal health questionnaire, and submitting samples when reportable animal health events are observed". [1] But does OIE PVS evaluation does not go into any more detail this process or which government agency it involves. The Joint External Evaluation report (JEE) for Namibia, published in 2017, does not describe any such reporting system. [2] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, nor the latter's Directorate of Veterinary Services shares via public websites details of the process for owners of livestock to conduct surveillance. [3,4,5] The Animal Health Act, 2011, describes measures required for controlling disease in animals (such as limiting movement), but does not deal with disease surveillance, other than to state that "veterinary officials" are responsible for it. [6] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.

[2] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[5] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[6] Government of Namibia. Government Gazette of the Republic of Namibia. 20 April 2011. "Animal Health Act, 2011". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Animal_Health_Act_2011.pdf]. Accessed 4 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 Namibia has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals. Namibia's electronic animal disease surveillance system, the Namibian Livestock Identification and Traceability System, or NamLITS, does not contain on its public website information about the confidentiality of data. [1] The website of the Ministry of Agriculture, Water and Forestry lists the information sharing of NamLITS as "confidential", but contains no elaboration and does not make it clear what this means. [2] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, nor the latter's Directorate of Veterinary Services shares additional information via public websites details of the mechanism for owners of livestock to conduct surveillance. [3,4,5] Neither the August 2008 OIE PVS evaluation nor the Joint External Evaluation report (JEE) for Namibia, published in 2017, report whether or not disease animal surveillance mechanisms in Namibia protect confidentiality. [6,7] No other relevant laws are listed for Namibia in the FAOLEX database of the Food and Agriculture Organisation of the United Nations, or in the Government of Namibia's online list of acts and policies. [8,9] The Animal Health Act, 2011, does not deal with disease surveillance at all (other than briefly designating "veterinary officials" as being responsible for it), let alone the management or confidentiality of data generated by disease surveillance. [10] There is no evidence of media reports or academic studies with additional relevant information.

[1] NamLITS Online. [<http://www.namlits.com/scripts/cgiip.exe/WService=LITBR/NCA/litwHome.p>]. Accessed 4 December 2020.

[2] Ministry of Agriculture, Water and Forestry. "Veterinary Databases Services". [<http://www.mawf.gov.na/veterinary-databases>]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[5] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[6] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.

[7] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[8] Food and Agriculture Organisation of the United Nations (FAO). "FAOLEX: Namibia". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=NAM>]. Accessed 4 December 2020.

[9] Government of Namibia. "Acts and Policies". [<http://www.gov.na/acts-and-policies>]. Accessed 4 December 2020.

[10] Government of Namibia. Government Gazette of the Republic of Namibia. 20 April 2011. "Animal Health Act, 2011". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Animal_Health_Act_2011.pdf]. Accessed 4 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 not enough publicly available evidence to show that Namibia conducts surveillance of zoonotic disease in wildlife. Neither the August 2008 OIE PVS evaluation nor the Joint External Evaluation report (JEE) for Namibia, published in 2017, describe wildlife surveillance activities. [1,2] The latter simply notes the need for greater coordination between the wildlife sector and other sectors, and notes that the Ministry of Environment and Tourism collaborates with the Ministry of Agriculture, Water and Forestry's (MAWF's) Directorate of Veterinary Services (DVS) to manage diseases in wildlife. [1] Individual national parks describe their disease monitoring activities, but do not go into a level of detail that would make it possible to show a comprehensive surveillance system. [3] Neither the Ministry of Health and Social Services, the MAWF, the DVS, nor the Ministry of Environment and Tourism shares additional information via public websites about zoonotic disease surveillance in wildlife. [4,5,6,7] The Animal Health Act, 2011, describes the regulations for dealing with diseased animals in general, but does not discuss wildlife at all, nor define surveillance mechanisms (other than to briefly designate "veterinary officials" as being responsible for surveillance). [8] There is evidence of wildlife disease surveillance activities following outbreaks among domestic animals. See, for example, a study of Rift Valley fever among ruminants in Etosha National Park in 2011; or the response to an anthrax outbreak among hippopotamuses and Cape buffalo in Bwabwata National Park in 2017. [9,10] Additionally, individual national parks may introduce surveillance as part of their management plan: the 2011 Framework and Guidelines for Development of Park Management Plans gives individual parks latitude for managing and monitoring disease among animals, though it provides few details and does not mention zoonoses. [10] However, there is no evidence that these activities are centrally coordinated or directed by national authorities. There is no additional evidence of media reports or academic studies with additional relevant information.

[1] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.

[2] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[3] Ministry of Environment and Tourism. September 2013. "Management Plan: Namib Naukluft Park". [<http://www.met.gov.na/files/files/Namib%20Naukluft%20Management%20Plan.pdf>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[7] Ministry of Environment and Tourism. [<http://www.met.gov.na/>]. Accessed 4 December 2020.

[8] Government of Namibia. Government Gazette of the Republic of Namibia. 20 April 2011. "Animal Health Act, 2011". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Animal_Health_Act_2011.pdf]. Accessed 4 December 2020.

[9] Dondona A., O. Aschenborn, C. Pinoni, L. Di Gialleonardo, A. Maseke, and G. Bortone, A. Polci, M. Scacchia, U. Molini and F. Monaco. 2016. "Rift Valley Fever Virus among Wild Ruminants, Etosha National Park, Namibia, 2011." *Emerging Infectious Diseases* 22[1]:128-130. [https://wwwnc.cdc.gov/eid/article/22/1/15-0725_article]. Accessed 4 December 2020.

[10] Caitlin M. Cossaboom et al., May 2019. "Anthrax Epizootic in Wildlife, Bwabwata National Park, Namibia, 2017".

Emerging Infectious Diseases 25

[5]. [https://wwwnc.cdc.gov/eid/article/25/5/18-0867_article]. Accessed 4 December 2020.

[11] Ministry of Environment and Tourism. August 2011. "Framework and Guidelines for Development of Park Management Plans." [<http://www.met.gov.na/files/files/Framework%20and%20guidelines%20for%20Park%20Management%20Plans.pdf>]. Accessed 4 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: 10.62

2018

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 9.14

2018

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1, No = 0

Current Year Score: 0

There is not enough publicly available evidence to determine whether Namibia's plans on zoonotic disease include mechanisms for working with the private sector in controlling or responding to zoonoses. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there is a national animal disease prevention plan for rabies, anthrax, brucellosis, and Rift Valley fever". [1] Further, the JEE notes that "a national policy to combat zoonoses is in place". [1] However, these policies are not currently shared via a public website by the Ministry of Agriculture, Water and Forestry or its Directorate of Veterinary Services, which the JEE says disseminates such documents. [2] The Ministry of Health and Social Services does not share information on policies toward zoonoses via a public website. [3,4] The Organisation for Animal Health's (OIE) Performance of Veterinary Services (PVS) evaluation report for Namibia, published in August 2008, does not include any information on plans for zoonotic disease. [5] It does, however, state that Namibia's animal health management activities, including Namibia's electronic animal disease surveillance system, the Namibian Livestock Identification and Traceability System (NamLITS), has robust private sector partnerships. [5] Thus, there is insufficient evidence that plans for zoonoses exist, the plans do not appear to be available for review via a public website. There is no evidence of media reports or academic studies with additional relevant information. There is no evidence that Namibia has a national public health institute (the JEE states that there are plans for one) or a national reference laboratory. [1] Neither the Central Veterinary Laboratory nor the Namibia Institute of Pathology (NIP), a state-owned enterprise that runs laboratories for human health in Namibia, shares information via a public website on responding to zoonoses. [6]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.
- [5] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.
- [6] Government of Namibia. Government Gazette of the Republic of Namibia. 20 April 2011. "Animal Health Act, 2011". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Animal_Health_Act_2011.pdf]. Accessed 4 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: 0

There is no evidence that Namibia publicly shares an up-to-date record of facilities in which especially dangerous pathogens and toxins are stored or processed. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that work

with dangerous pathogens is rare in Namibia, and "there is no strategic national laboratory plan for biosafety and biosecurity in place". [1] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Ministry of Higher Education, Innovation and Training, nor the Ministry of Defence shares a list of such facilities or other relevant information via public websites. [2,3,4,5,6,] Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [7] The VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database does not list any relevant legislation. [8]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.
- [5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.
- [6] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.
- [7] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 December 2020.
- [8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 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 Namibia has in place legislation or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. As noted in the Joint External Evaluation report (JEE) for Namibia, published in 2017, "while there is specific legislation on biosafety addressing only genetically modified organisms, there is not yet legislation specifically addressing both biosafety and biosecurity for pathogens of human, animals and agriculture sources". [1] Confirming this, the Biosafety Act, 2006 deals only with genetically modified organisms, and does not deal with biosecurity as it relates to dangerous pathogens. [2] No other relevant law is listed for Namibia in the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database, the FAOLEX database of the Food and Agriculture Organisation of the United Nations, or in the Government of Namibia's online list of acts and policies. [3,4,5] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Ministry of Higher Education, Innovation and Training, nor the Ministry of Defence shares relevant information via public websites. [6,7,8,9,10] Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [11]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [2] Government of Namibia. Government Gazette of the Republic of Namibia. 30 December 2006. "Biosafety Act, 2006". [https://www.vertic.org/media/National%20Legislation/Namibia/NA_Biosafety_Act_2006.pdf]. Accessed 15 October 2018.
- [3] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 December 2020.
- [4] Food and Agriculture Organisation of the United Nations (FAO). "FAOLEX: Namibia". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=NAM>]. Accessed 4 December 2020.
- [5] Government of Namibia. "Acts and Policies". [<http://www.gov.na/acts-and-policies>]. Accessed 4 December 2020.
- [6] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [7] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [8] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.
- [9] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.
- [10] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 15 October 2018.
- [11] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 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 Namibia has in place legislation or regulations related to biosecurity, or that it has designated any agency responsible for biosecurity. As noted by the Joint External Evaluation report (JEE) for Namibia, published in 2017, "while there is specific legislation on biosafety addressing only genetically modified organisms, there is not yet legislation specifically addressing both biosafety and biosecurity for pathogens of human, animals and agriculture sources". [1] Confirming this, the Biosafety Act, 2006 deals only with genetically modified organisms, and does not deal with biosecurity as it relates to dangerous pathogens. [2] No other relevant law is listed for Namibia in the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database, the FAOLEX database of the Food and Agriculture Organisation of the United Nations, or in the Government of Namibia's online list of acts and policies. [3,4,5] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Ministry of Higher Education, Innovation and Training, nor the Ministry of Defence shares relevant information via public websites. [6,7,8,9,10] Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [11]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [2] Government of Namibia. Government Gazette of the Republic of Namibia. 30 December 2006. "Biosafety Act, 2006". [https://www.vertic.org/media/National%20Legislation/Namibia/NA_Biosafety_Act_2006.pdf]. Accessed 15 October 2018.
- [3] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4

December 2020.

[4] Food and Agriculture Organisation of the United Nations (FAO). "FAOLEX: Namibia". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=NAM>]. Accessed 4 December 2020.

[5] Government of Namibia. "Acts and Policies". [<http://www.gov.na/acts-and-policies>]. Accessed 4 December 2020.

[6] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[7] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[8] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[9] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[10] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 15 October 2018.

[11] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 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 Namibia has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities, nor that that the country has such inventories. There is no mention of facilities for the management of dangerous pathogens and toxins on the websites of the Ministry of Health and Social Services (MoHSS) or the Ministry of Agriculture, Water and Forestry (MAWF). [1,2] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that work with dangerous pathogens is rare in Namibia, and "there is no strategic national laboratory plan for biosafety and biosecurity in place". [3] Neither the MoHSS, the MAWF, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Ministry of Higher Education, Innovation and Training, nor the Ministry of Defence shares a list of such facilities or other relevant information via public websites. [1,2,4,5,6] Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [7] The VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database does not list any relevant legislation. [8]

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[3] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[6] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.

[7] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 December 2020.

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4

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: 1

There is public evidence of in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for Ebola. The Joint External Evaluation report (JEE) for Namibia, publication in 2017, states that the Central Veterinary Laboratory, run by the Ministry of Agriculture, Water and Forestry (MAWF), offers veterinary sector diagnostic services for anthrax, but it is unclear whether or not this is PCR testing. However, the JEE states that "essential diagnostic capacities in the country's laboratories include ... molecular diagnostics (polymerase chain reaction)" for Ebola. [1] Elsewhere, public evidence of this testing provided by Namibian government sources is sparse. The Central Veterinary Laboratory does not have a publicly available website, and neither the MAWF nor its Directorate of Veterinary Services shares relevant information via a public website. [2,3] The 2017/18 Annual Report of the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia) states that its laboratories have the capacity to conduct PCR diagnostic testing for HIV, but does not mention anthrax or Ebola; the NIP does not share additional relevant information via a public website. [4,5] The Ministry of Defence also does not share relevant information via a public website. [6] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[4] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [https://nip.com.na/?page_id=152#prettyPhoto]. Accessed 4 December 2020.

[6] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 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 public evidence that Namibia requires biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer programme, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. Indeed, it is not clear that Namibia has such facilities, or if it has them, whether they are operational. There is no mention of facilities for the management of

dangerous pathogens and toxins on the websites of the Ministry of Health and Social Services (MoHSS) or the Ministry of Agriculture, Water and Forestry (MAWF). [1,2] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that work with dangerous pathogens is rare in Namibia, and "there is no strategic national laboratory plan for biosafety and biosecurity in place". [3] Neither the MoHSS, the MAWF, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Ministry of Higher Education, Innovation and Training, nor the Ministry of Defence shares other relevant information via public websites. [1,2,4,5,6] There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [7] The VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database does not list any relevant legislation. [8]

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[3] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[6] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.

[7] United Nations. "Confidence Building Measures: Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 December 2020.

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 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 public evidence that regulations or licensing conditions specify that security and other personnel in Namibia with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential are subject to drug testing, background checks, and psychological or mental fitness checks. Indeed, it is not clear that Namibia has facilities that are equipped to house such materials, or if such facilities exist, whether they are operational. There is no mention of facilities for the management of dangerous pathogens and toxins on the websites of the Ministry of Health and Social Services (MoHSS) or the Ministry of Agriculture, Water and Forestry (MAWF). [1,2] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that work with dangerous pathogens is rare in Namibia, and "there is no strategic national laboratory plan for biosafety and biosecurity in place". [3] Neither the MoHSS, the MAWF, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Ministry of Higher Education, Innovation and Training, nor the Ministry of

Defence shares other relevant information via public websites. [1,2,4,5,6] There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [7] The VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database does not list any relevant legislation. [8]

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[3] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia".

[<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[6] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.

[7] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 December 2020.

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 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 on Namibian national regulations on the safe and secure transport of infectious substances (Categories A and B). There is no relevant information shared, via public websites, by the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, the Ministry of Works and Transport, the Ministry of Defence, the Ministry of Higher Education, Innovation and Training, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), or the Central Veterinary Laboratory [1,2,3,4,5]. Namibia's 1997 Regulations Relating to the Health and Safety of Employees at Work, issued under the Labour Act, 1992 deal generally with the transport of hazardous substances, saying for example that they should be transported "in accordance with the recommendations on the transport of hazardous substances or dangerous goods made by the United Nations". [6] However, it does not go into any greater detail about the transportation of infectious substances specifically. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that "training has been conducted for biosafety" in Namibian laboratories "including in the shipping and transport of regulated biological materials"; it also praises the specimen transportation system at the NIP. [7] However, there is no information shared via a public website on these practices by the entities mentioned above. There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [8] The VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database does not list any relevant legislation. [9]

- [1] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [3] Ministry of Works and Transport. [<http://www.mwt.gov.na/>]. Accessed 4 December 2020.
- [4] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.
- [5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.
- [6] Government of Namibia. Government Gazette of the Republic of Namibia. 1 August 1997. "Labour Act 1992: Regulations Relating to the Health and Safety of Employees at Work". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Reg_Health_Safety_1997.pdf]. Accessed 4 December 2020.
- [7] World Health Organization (WHO). 28 November to 22 December 2016. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017-36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [8] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 December 2020..
- [9] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 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 evidence of a Namibian 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. Namibia's 1997 Regulations Relating to the Health and Safety of Employees at Work, issued under the Labour Act, 1992 deal generally with the transport of hazardous substances, saying for example that they should be transported "in accordance with the recommendations on the transport of hazardous substances or dangerous goods made by the United Nations". [1] However, these regulations do not deal with or mention pathogens or cross-border transfer. Further, the following Namibian laws that deal with cross-border activities do not mention the transfer of pathogens or toxins: the Import and Export Control Act, 1994; the Namibian Ports Authority Act, 1994; and the Customs and Excise Act, 1998. [2,3,4] There is no evidence of more recent legislation addressing this issue. Neither the Ministry of Health and Social Services; the Ministry of Agriculture, Water and Forestry; the Ministry of Industrialisation, Trade, and SME Development; the Ministry of Defence; nor the Ministry of Higher Education, Innovation and Training shares relevant information via public websites [5,6,7,8]. There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [9] The VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database does not list any other relevant legislation. [10]

- [1] Government of Namibia. Government Gazette of the Republic of Namibia. 1 August 1997. "Labour Act 1992: Regulations Relating to the Health and Safety of Employees at Work". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Reg_Health_Safety_1997.pdf]. Accessed 4 December 2020.

- [2] Government of Namibia. Government Gazette of the Republic of Namibia. 30 November 1994. "Import and Export Control Act, 1994".
[http://www.vertic.org/media/National%20Legislation/Namibia/NA_Import_Export_Control_Act_1994.pdf]. Accessed 4 December 2020.
- [3] Government of Namibia. Government Gazette of the Republic of Namibia. 28 February 1994. "Namibian Ports Authority Act, 1994". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Ports_Authority_Act_1994.pdf]. Accessed 4 December 2020.
- [4] Government of Namibia. Government Gazette of the Republic of Namibia. 30 June 1998. "Customs and Excise Act, 1998". [http://www.vertic.org/media/National%20Legislation/Namibia/NA_Customs_Excise_Act_1998_Act.pdf]. Accessed 4 December 2020.
- [5] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [6] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [7] Ministry of Industrialisation, Trade, and SME Development. [<http://www.mti.gov.na/>]. Accessed 4 December 2020.
- [8] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.
- [9] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 December 2020.
- [10] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 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 of national biosafety legislation and/or regulations in Namibia, except for the Biosafety Act, 2006, which deals only with genetically modified organisms, and does not deal with biosecurity as it relates to dangerous pathogens or toxins. [1] As noted by the Joint External Evaluation report (JEE) for Namibia, published in 2017, "while there is specific legislation on biosafety addressing only genetically modified organisms, there is not yet legislation specifically addressing both biosafety and biosecurity for pathogens of human, animals and agriculture sources". [2] No other relevant law is listed for Namibia in the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database, the FAOLEX database of the Food and Agriculture Organisation of the United Nations, or in the Government of Namibia's online list of acts and policies. [3,4,5] Neither the Ministry of Health and Social Services; the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia); the Central Veterinary Laboratory; the Ministry of Higher Education, Innovation and Training; nor the Ministry of Defence shares relevant information via public websites. [6,7,8,9,10] There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [11]

- [1] Government of Namibia. Government Gazette of the Republic of Namibia. 30 December 2006. "Biosafety Act, 2006". [https://www.vertic.org/media/National%20Legislation/Namibia/NA_Biosafety_Act_2006.pdf]. Accessed 15 October 2018.
- [2] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia".

[<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[3] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 December 2020.

[4] Food and Agriculture Organisation of the United Nations (FAO). "FAOLEX: Namibia". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=NAM>]. Accessed 4 December 2020.

[5] Government of Namibia. "Acts and Policies". [<http://www.gov.na/acts-and-policies>]. Accessed 4 December 2020.

[6] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[7] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[8] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[9] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[10] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.

[11] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 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 of national biosafety legislation and/or regulations in Namibia (except for the Biosafety Act, 2006, which deals only with genetically modified organisms), nor of any specific established agency responsible for enforcing such measures. [1] As noted by the Joint External Evaluation report (JEE) for Namibia, published in 2017, "while there is specific legislation on biosafety addressing only genetically modified organisms, there is not yet legislation specifically addressing both biosafety and biosecurity for pathogens of human, animals and agriculture sources". [2] No other relevant law is listed for Namibia in the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database, the FAOLEX database of the Food and Agriculture Organisation of the United Nations, or in the Government of Namibia's online list of acts and policies. [3,4,5] Neither the Ministry of Health and Social Services; the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia); the Central Veterinary Laboratory; the Ministry of Higher Education, Innovation and Training; nor the Ministry of Defence shares relevant information via public websites. [6,7,8,9,10] There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [11]

[1] Government of Namibia. Government Gazette of the Republic of Namibia. 30 December 2006. "Biosafety Act, 2006". [https://www.vertic.org/media/National%20Legislation/Namibia/NA_Biosafety_Act_2006.pdf]. Accessed 15 October 2018.

[2] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[3] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 December 2020.

[4] Food and Agriculture Organisation of the United Nations (FAO). "FAOLEX: Namibia". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=NAM>]. Accessed 4 December 2020.

- [5] Government of Namibia. "Acts and Policies". [<http://www.gov.na/acts-and-policies>]. Accessed 4 December 2020.
- [6] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [7] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [8] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.
- [9] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.
- [10] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.
- [11] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 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 no evidence that Namibia 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. Indeed, it is not clear that Namibia has such facilities, or if it has them, whether they are operational. There is no mention of facilities for the management of dangerous pathogens and toxins on the websites of the Ministry of Health and Social Services (MoHSS) or the Ministry of Agriculture, Water and Forestry (MAWF). [1,2] The Joint External Evaluation report (JEE) for Namibia, published in December 2017, states that work with dangerous pathogens is rare in Namibia, and "there is no strategic national laboratory plan for biosafety and biosecurity in place". [3] Neither the MoHSS; the MAWF, its Directorate of Veterinary Services; the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia); the Central Veterinary Laboratory; the Ministry of Defence; nor the Ministry of Higher Education, Innovation and Training, shares other relevant information via public websites. [1,2,4,5] Namibia's 1997 Regulations Relating to the Health and Safety of Employees at Work, issued under the Labour Act, 1992 deal generally with protection of workers from hazardous substances, explicitly including pathogens, stating for example that "only employees duly authorised by the employer concerned and, to the satisfaction of an inspector, adequately trained for such purpose, shall participate in operations concerning hazardous substances". [6] However, the law does not go into any greater detail about what this provision entails in the context of working with pathogens or biological materials. There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [7] The VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database does not list any other relevant legislation. [8]

- [1] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [3] World Health Organization (WHO). 28 November to 22 December 2016. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [4] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.
- [5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[6] Government of Namibia. Government Gazette of the Republic of Namibia. 1 August 1997. "Labour Act 1992: Regulations Relating to the Health and Safety of Employees at Work".

[http://www.vertic.org/media/National%20Legislation/Namibia/NA_Reg_Health_Safety_1997.pdf]. Accessed 4 December 2020.

[7] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 December 2020..

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 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 Namibia has conducted an assessment to determine whether ongoing dual use research is occurring, including dual use research on especially dangerous pathogens or toxins. Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Ministry of Higher Education, Innovation and Training, nor the Ministry of Defence shares relevant information via public websites. [1,2,3,4,5,6] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that work with dangerous pathogens is rare in Namibia, and "there is no strategic national laboratory plan for biosafety and biosecurity in place", and does not mention assessments of dual use research in the country. [7] There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [8] The VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database does not list any relevant legislation. [9] The National Commission on Research Science and Technology does not share via a publicly available website any relevant information. [10]

[1] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[4] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[6] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[7] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 December 2020.

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 December 2020.

[9] National Commission on Research Science and Technology. [<https://ncrst.na/>]. Accessed 4 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 evidence of a national policy requiring oversight of dual use research. Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Ministry of Higher Education, Innovation and Training, nor the Ministry of Defence shares relevant information via public websites. [1,2,3,4,5] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that work with dangerous pathogens is rare in Namibia, and "there is no strategic national laboratory plan for biosafety and biosecurity in place", and does not mention regulations of dual use research in the country. [6] None of the Namibian laws listed on the VERTIC Biological Weapons Convention Legislation Database deal with dual use research. [7] There is no evidence of media reports or academic studies with additional relevant information. There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [8] There are no relevant laws listed on the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [9] The National Commission on Research Science and Technology does not share via a publicly available website any relevant information. [10]

[1] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[4] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[6] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[7] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 December 2020.

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 December 2020.

[9] National Commission on Research Science and Technology. [<https://ncrst.na/>]. Accessed 4 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 evidence of a Namibian agency specifically responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, or other dual-use research. Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Ministry of Higher Education, Innovation and Training, nor the Ministry of Defence shares relevant information via public websites. [1,2,3,4,5] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that work with dangerous pathogens is rare in Namibia, and "there is no strategic national laboratory plan for biosafety and biosecurity in place", and does not mention regulations of dual use research in the country. [6] None of the Namibian laws listed on the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database deal with dual-use research. [7] There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [8]

[1] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[4] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[6] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[7] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 December 2020.

[8] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 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 of a national legislation, regulation, policy, or other guidance, requiring the screening of synthesised DNA before it is sold. Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Ministry of Higher Education, Innovation and Training, nor the Ministry of Works and Transport shares relevant information via public websites. [1,2,3,4,5] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that work with dangerous pathogens is rare in Namibia, and "there is no strategic national laboratory plan for biosafety and biosecurity in place", and does not indicate that Namibian

laboratories have the capacity to synthesize DNA or that there are regulations concerning its sale. [6] No relevant law is listed for Namibia in the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database, the FAOLEX database of the Food and Agriculture Organisation of the United Nations, or in the Government of Namibia's online list of acts and policies. [7,8,9] There is no evidence of media reports or academic studies with additional relevant information. Namibia is not party to the Biological Weapons Convention, and therefore has not submitted Confidence Building Measures reports. [10]

- [1] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [3] Ministry of Works and Transport. [<http://www.mwt.gov.na/>]. Accessed 4 December 2020.
- [4] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.
- [5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.
- [6] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [7] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "N". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed 4 December 2020.
- [8] Food and Agriculture Organisation of the United Nations (FAO). "FAOLEX: Namibia". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=NAM>]. Accessed 4 December 2020.
- [9] Government of Namibia. "Acts and Policies". [<http://www.gov.na/acts-and-policies>]. Accessed 4 December 2020.
- [10] United Nations. "Confidence Building Measures: Browse States Parties ". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 4 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: 0

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 evidence to confirm that Namibia's national laboratory system has the capacity to conduct diagnostic tests for at least 5 of the 10 core tests defined by the World Health Organization (WHO) but the tests are not specified. The Joint External Evaluation report (JEE) for Namibia, published in 2017, gives Namibian laboratories a high mark for their testing abilities, scoring a "4" for "laboratory testing for detection of priority diseases", which according to the JEE's scoring system indicates that the country is capable of testing for at least 5 of the core tests. However, the JEE does not make it completely clear which of the tests Namibia is capable of. It notes that, of the WHO-defined core tests, Namibia can conduct microscopy tests for tuberculosis, rapid tests for malaria, and HIV tests. Polio is referred for testing outside the country. According to the JEE, Namibian laboratories are also capable of testing for Ebola, yellow fever, measles, rubella, and syphilis. However, the JEE does not mention which of these Namibia may have defined as a core test. Further, the JEE does not mention whether Namibian laboratories have the ability to test for influenza or typhoid. [1] Neither the Ministry of Health and Social Services nor the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia) shares relevant information via a public website. [3,4]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-REP-2017.36-eng.pdf>]. Accessed 4 December 2020.

[2] World Health Organization (WHO). 2016. "Joint External Evaluation Tool".

[http://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf;jsessionid=50BBB2BCF60C2D1CF128972282826CCD?sequence=1]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[4] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 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 Namibia 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 report (JEE), published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". But the JEE notes that the NHEPRP "has yet to be fully implemented, and lacks a comprehensive One Health approach". [1] Further, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet. [2] Thus, it is not possible to ascertain whether the NHEPRP contains provisions for testing. There are no provisions related to testing in the MoHSS Strategic Plan 2017/2018-2020/21, the 2012 National Public Health Laboratory Strategic Plan, the Ministry of Agriculture, Water, and Forestry Annual Report 2016/2017, the Namibia Institute of Pathology (NIP) Annual Report 2017/2018 (the most recent), or the 2011 National Disaster Risk Management Plan. [3,4,5,6,7] There is no relevant information shared via a public website by the MoHSS, the MAWF, its Directorate of Veterinary Services, the NIP (a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, or the Office of the Prime Minister (including its Department of Disaster Management). [8,9,10,11,12] In December 2020, the MoHSS announced the launch of a National Action Plan for Health Security, but no information about the contents of the plan were shared publicly. [13] Publicly available documents describing Namibia's response to the COVID-19 pandemic do not contain plans for testing. [14,15]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21". [<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. "National Public Health Laboratory Strategic Plan: (Establishing a Strong Public Health Laboratory System)". [https://mhss.gov.na/documents/119527/364677/NPHL_STRATEGIC+PLAN_FINAL.pdf/1c437c48-db44-42db-9d17-c4d96b8be7a9]. Accessed 4 December 2020.

[5] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 11 December 2020.

[6] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 11 December 2020.

[7] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 December 2020.

[8] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[9] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[10] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[11] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 4 December 2020.

[12] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 4 December 2020.

[13] Ministry of Health and Social Services. 8 December 2020. "Key Notes Address by Dr Kalumbi Shangula, MP, Minister of

Health and Social Services at the Launch of National Action Plan for Health Security (NAPHS) and National Human Resource for Health (HRH) Strategic Plan."

[14] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.

[15] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 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 Namibia has a national reference facility let alone one that is accredited. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that Namibia does not have a national public health reference laboratory. [1] The JEE notes that the Central Veterinary Laboratory has a high level of accreditation, and the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia) has attained accreditation at ISO 15189, but neither of these entities currently serve as a reference laboratory. Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the NIP, nor the Central Veterinary Laboratory shares relevant information via a public website. [2,3,4,5]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 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: 0

There is no evidence to confirm that there is a national laboratory that serves as a reference facility for Namibia, let alone one that is subject to external quality assurance (EQA) review. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that Namibia does not have a national public health reference laboratory. [1] The 2012 National Public Health Laboratory Strategic Plan mentions that many Namibian laboratories have submitted to voluntary EQA review, but does not provide information contradicting the JEE assertion that there is not a reference facility. [2] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the NIP, nor the Central Veterinary Laboratory shares relevant information via a public website. [3,4,5,6]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [2] Ministry of Health and Social Services. "National Public Health Laboratory Strategic Plan: (Establishing a Strong Public Health Laboratory System)". [https://mhss.gov.na/documents/119527/364677/NPHL_STRATEGIC+PLAN_FINAL.pdf/1c437c48-db44-42db-9d17-c4d96b8be7a9]. Accessed 4 December 2020.
- [3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [4] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [5] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.
- [6] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 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

There is evidence that Namibia has a nationwide specimen transport system. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that the transport network of the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia) "is able to transport specimens, and is complimented by a courier and backup system for good turnaround time". Further, the JEE states that "the veterinary laboratory system also has a good transport system for transporting samples from lower levels to national facilities". Additionally, the JEE gives Namibia's specimen referral and transport system a score of 4, indicating that it is capable of transporting specimens "to national laboratories from at least 80% of intermediate level/districts within the country for advanced diagnostics". [1] There is no information on transport shared via public websites by the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the NIP, or the Central Veterinary Laboratory. [2,3,4,5] The 2012 National Public Health Laboratory Strategic Plan does not discuss specimen transfer. [6]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.
- [3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.
- [5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.
- [6] Ministry of Health and Social Services. "National Public Health Laboratory Strategic Plan: (Establishing a Strong Public Health Laboratory System)". [https://mhss.gov.na/documents/119527/364677/NPHL_STRATEGIC+PLAN_FINAL.pdf/1c437c48-db44-42db-9d17-c4d96b8be7a9]. Accessed 4 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 evidence that Namibia has 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. The Joint External Evaluation report (JEE), published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". But the JEE notes that the NHEPRP "has yet to be fully implemented, and lacks a comprehensive One Health approach". [1] Further, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet. [2] Thus, it is not possible to ascertain whether the NHEPRP contains provisions for laboratory licensing. There are no provisions related to laboratory licensing in the MoHSS Strategic Plan 2017/2018-2020/21, the 2012 National Public Health Laboratory Strategic Plan, the Ministry of Agriculture, Water, and Forestry (MAWF) Annual Report 2016/2017, the Namibia Institute of Pathology (NIP) Annual Report 2017/2018 (the most recent), or the 2011 National Disaster Risk Management Plan. [3,4,5,6,7] There is no relevant information shared via a public website by the the MoHSS, the MAWF, its Directorate of Veterinary Services, the NIP (a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, or the Office of the Prime Minister (including its Department of Disaster Management). [8,9,10,11,12] In December 2020, the MoHSS announced the launch of a National Action Plan for Health Security, but no information about the contents of the plan were shared publicly. [13] Publicly available documents describing Namibia's response to the COVID-19 pandemic do not contain plans for testing or laboratory licensing. [14,15]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. "National Public Health Laboratory Strategic Plan: (Establishing a Strong Public Health Laboratory System)".

[https://mhss.gov.na/documents/119527/364677/NPHL_STRATEGIC+PLAN_FINAL.pdf/1c437c48-db44-42db-9d17-c4d96b8be7a9]. Accessed 4 December 2020.

[5] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 11 December 2020.

[6] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 11 December 2020.

[7] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 December 2020.

[8] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[9] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[10] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[11] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 4 December 2020.

[12] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management/>]. Accessed 4 December 2020.

[13] Ministry of Health and Social Services. 8 December 2020. "Key Notes Address by Dr Kalumbi Shangula, MP, Minister of Health and Social Services at the Launch of National Action Plan for Health Security (NAPHS) and National Human Resource for Health (HRH) Strategic Plan."

[14] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.

[15] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 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 not enough public evidence to confirm that Namibia is conducting ongoing event-based surveillance and analysis for infectious disease. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that that event-based surveillance is weak in the country, with the exception of animal health; a recommendation for the country is to strengthen event-based surveillance. [1] There is no information on event-based surveillance shared via a public website by the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, or the Office of the Prime Minister (including its Department of Disaster Management). [2,3,4,5,6,7] Neither Namibia's 2011 National Disaster Risk Management Plan nor a September 2016 assessment of the national disaster risk management system mentions event-based surveillance. [8,9] Similarly, the Organisation for Animal Health's (OIE) Performance of Veterinary Services (PVS) evaluation report for Namibia, published in August 2008, does not mention event-based surveillance. [10]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services/>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[6] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 4 December 2020.

[7] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management/>]. Accessed 4 December 2020.

[8] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 December 2020.

[9] Government of Namibia. September 2016. "Capacity Assessment Report of the National Disaster Risk Management System in Namibia". [<https://www.cadri.net/sites/default/files/Namibia-DRM-Capacity-Assessment-Report.pdf>]. Accessed 4 December 2020.

[10] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 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 insufficient publicly available evidence that Namibia reported a potential public health emergency of international concern (PHEIC) to the WHO within the last two years. In January 2018 the WHO separately reported that Namibia had an outbreak of Hepatitis E in the final months of 2017. By January 2018, health officials had identified 237 probably cases and 21 confirmed. The majority of the cases were in Windhoek district, Khomas region. [1] Over the course of the year, the outbreak spread; media report that by August 2018 there were 3,000 suspected cases and 24 deaths. [2] These details are confirmed by an August 21 press release from the Ministry of Health and Social Services (MoHSS). [3] In statements to the media in February 2019, the MoHSS stated that by January of that year, the outbreak had resulted in more than 4,400 cases and 40 deaths, and that the ministry had coordinated with national and regional teams charged with controlling the outbreak. [4] A release by the WHO in August 2019 indicated that the outbreak was ongoing at that time. [5] The WHO confirms that the COVID-19 pandemic has reached Namibia, confirming 15,298 cases and 154 deaths as of December 2020. [6] The source of this COVID-19 data is not described, but Namibia has also reported similar numbers of cases on the website of the Ministry of Health and Human Services. [7] However, the first COVID-19 cases were reported in Namibia in March 2020, after COVID-19 had officially been declared a PHEIC. [8]

[1] World Health Organization (WHO). 15 January 2018. "Hepatitis E -- Namibia". [<https://www.who.int/csr/don/15-january-2018-hepatitis-e-namibia/en/>]. Accessed 4 December 2020.

[2] Nkala, Oscar. 27 August 2018. "Hepatitis E death toll rises to 24 in Namibia". Outbreak News Today. [<http://outbreaknewstoday.com/hepatitis-e-death-toll-rises-24-namibia-52443/>]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. 21 August 2018. "Press Statement on Hepatitis E Virus Cases Update". [<http://www.mhss.gov.na/documents/119527/573553/Press+Release+-+Hepatitis+E.pdf/e3b5efde-34d4-4cab-9f55-30e60eac5113>]. Accessed 4 December 2020.

[4] Reliefweb. "Hepatitis E Outbreak Exposes Health's Emergency Unpreparedness". [<https://reliefweb.int/report/namibia/hepatitis-e-outbreak-exposes-health-s-emergency-unpreparedness>]. Accessed 4 December 2020.

[5] World Health Organization (WHO) Regional Office for Africa. August 2019. "Outbreak of Hepatitis E Virus (HEV) in Namibia Situation Report (SITREP No. 64)". [<https://www.afro.who.int/publications/outbreak-hepatitis-e-virus-hev-namibia-situation-report-sitrep-no-64>]. Accessed 4 December 2020.

[6] World Health Organization (WHO). "WHO Coronavirus Disease (COVID-19) Dashboard". [https://covid19.who.int/?gclid=CjwKCAjw0On8BRAGeIwAincsHDsiu3F_evEv5sAS03F77Qlpy_CkbtUzGKG8PN0UCpleR_MqmUXPghoCVpsQAvD_BwE]. Accessed 4 December 2020.

[7] Ministry of Health and Human Services. 5 December 2020. "Update by Dr. Kalumbi Shangula, Minister of Health and Social Services on COVID-19 in Namibia". [<https://mhss.gov.na/documents/119527/828815/COVID-19+Daily+Update+05.12.2020+final.pdf/33c94812-769b-4e6f-8a4e-31fa7ab3803a>]. Accessed 4 December 2020.

[8] Reuters. 14 March 2020. "Namibia reports first two cases of coronavirus, imposes travel ban".
[<https://www.reuters.com/article/us-health-coronavirus-namibia/namibia-reports-first-two-cases-of-coronavirus-imposes-travel-ban-idUSKBN2110CX>]. Accessed 23 April 2021.

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

The Namibian government operates an electronic reporting surveillance system at both the subnational and national level. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that Namibia's electronic surveillance system has "interconnectivity ... between [the] national and regional level", and further that both animal and health surveillance are conducted through a health management information system (though the two sectors are not currently linked) [1]. The Ministry of Health and Social Services (MoHSS) does not share information about its electronic reporting surveillance system via a public website, but a 2016 report on a survey of HIV in the country, conducted by the MoHSS, indicates that the district health information system (DHIS) is in use in Namibia. [2] The Namibian Livestock Identification and Traceability System (NamLITS) is the country's electronic animal disease surveillance system; the 2016/17 Annual report of the Ministry of Agriculture, Water and Forestry (MAWF) reports that NamLITS now covers the whole country (this is the most recent available annual report). [3,4] No other relevant information is shared via a public website by the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), or the Central Veterinary Laboratory. [5,6,7]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Health and Social Services. November 2016. "Surveillance Report of the 2016 National HIV Sentinel Survey". [<http://www.mhss.gov.na/documents/119527/364677/National+HIV+Sentinel+Survey+Report+2016.pdf/Of747cd1-84f6-4360-9586-2ce9131d3ef5>]. Accessed 17 October 2018.

[3] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 4 December 2020.

[4] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 4 December 2020.

[5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[7] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 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 Namibia's electronic reporting surveillance system collects real-time laboratory data. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that Namibia's electronic surveillance system has "interconnectivity ... between [the] national and regional level", and further that both animal and health surveillance are conducted through a health management information system (though the two sectors are not currently linked). It also states that "there is a strong real-time surveillance system". Despite this evidence, the JEE also gives Namibia a score of just 2 on indicator D.2.2, which in the JEE toolkit corresponds to "Country is developing an interoperable, interconnected, electronic real-time reporting system, for either public health or veterinary surveillance systems". Scores below a 4 indicate that the data cannot be shared in real-time (though the scoring rubric does not comment on whether the data can be collected in real time). Elsewhere, the JEE states that web-based laboratory results are shared in a timely manner in the country. [1,2] The public portion of the website of the Namibian Livestock Identification and Traceability System (NamLITS), which is the country's electronic animal disease surveillance system, does not mention laboratory reporting. [3] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), nor the Central Veterinary Laboratory shares details about the country's electronic reporting surveillance systems that would confirm that they collect real time laboratory data. [4,5,6,7]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] World Health Organization (WHO). 2016. "Joining External Evaluation Tool". [http://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf;jsessionid=50BBB2BCF60C2D1CF128972282826CCD?sequence=1]. Accessed 4 December 2020.

[3] NamLITS Online. [<http://www.namlits.com/scripts/cgiip.exe/WService=LITBR/NCA/litwHome.p>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[7] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 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 enough evidence to show that electronic health records are used in Namibia. Although it appears that electronic health records are in use at some hospitals, it is difficult to say with certainty just how common they are, and available information is outdated. Local media reported in 2011 that the Ministry of Health and Social Services (MoHSS; at the time, simply the Ministry of Health) was launching a system called the Integrated Health Care Information Management System (IHCIMS). The launch was to lead major hospitals in Windhoek to become paperless. [1] However, a 2012 report jointly released by the United States Agency for International Development (USAID) and the MoHSS states that "infrastructure for

both local and wide area information and communication technology (ICT) is either inadequate or totally absent, and a lack of required hardware and software at multiple levels essentially make inaccessible key current systems", including IHCIMS. [2] There is no mention of IHCIMS on the website of the MoHSS. [3] The MoHSS Strategic Plan 2017/2018-2020/21 lists a goal of achieving use of electronic health systems in 100 percent of hospitals by 2019/20, but lists its baseline percentage for 2017/18 as just 10 percent, suggesting that use of electronic records is not yet widespread. [4] (There is no information about whether Namibia met its 2019/20 target.) Neither the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), nor the Central Veterinary Laboratory shares details. [5] There is no evidence of media reports or academic studies with additional relevant information.

[1] Smit, Nico. 9 August 2011. "Ministry Launches E-Health System". The Namibian.

[<https://www.namibian.com.na/index.php?id=83762&page=archive-read>]. Accessed 4 December 2020.

[2] United States Agency for International Development and the Ministry of Health and Social Services. "Assessment of National Health Information Systems". [<https://docplayer.net/14063903-Assessment-of-national-health-information-systems.html>]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 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

There is insufficient evidence to confirm that Namibia's national public health system has access to electronic health records of individuals in the country. In turn, there is not enough publicly available evidence to confirm that electronic health records are commonly in use in Namibia. It appears that electronic health records are in use at some hospitals, though it is difficult to say with certainty just how common they are. Available information is outdated. Local media reported in 2011 that the Ministry of Health and Social Services (MoHSS; at the time, simply the Ministry of Health) was launching a system called the Integrated Health Care Information Management System (IHCIMS). The launch was to lead major hospitals in Windhoek to become paperless. [1] However, a 2012 report jointly released by the United States Agency for International Development (USAID) and the MoHSS states that "infrastructure for both local and wide area information and communication technology (ICT) is either inadequate or totally absent, and a lack of required hardware and software at multiple levels essentially make inaccessible key current systems", including IHCIMS. [2] There is no mention of IHCIMS on the website of the MoHSS. [3] The MoHSS Strategic Plan 2017/2018-2020/21 lists a goal of achieving use of electronic health systems in 100 percent of hospitals by 2019/20, but lists its baseline percentage for 2017/18 as just 10 percent, suggesting that use of electronic records is not yet widespread. [4] (There is no information about whether Namibia met its 2019/20 target.) Neither the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), nor the Central Veterinary Laboratory shares details about the country's electronic reporting surveillance systems that would confirm that they collect real time laboratory data. [5] There is no evidence of media reports or academic studies with additional relevant information.

[1] Smit, Nico. 9 August 2011. "Ministry Launches E-Health System". The Namibian.

[<https://www.namibian.com.na/index.php?id=83762&page=archive-read>]. Accessed 4 December 2020.

[2] United States Agency for International Development and the Ministry of Health and Social Services. "Assessment of National Health Information Systems". [<https://docplayer.net/14063903-Assessment-of-national-health-information->

systems.html]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 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 insufficient evidence to confirm that patient health data used by Namibia's national public health system is comparable or adheres to consistent standards. It appears that electronic health records are in use at some hospitals, though it is difficult to say with certainty just how common they are. Available information is outdated. Local media reported in 2011 that the Ministry of Health and Social Services (MoHSS; at the time, simply the Ministry of Health) was launching a system called the Integrated Health Care Information Management System (IHCIMS). The launch was to lead major hospitals in Windhoek to become paperless. [1] However, a 2012 report jointly released by the United States Agency for International Development (USAID) and the MoHSS states that "infrastructure for both local and wide area information and communication technology (ICT) is either inadequate or totally absent, and a lack of required hardware and software at multiple levels essentially make inaccessible key current systems", including IHCIMS. [2] There is no mention of IHCIMS on the website of the MoHSS. [3] The MoHSS Strategic Plan 2017/2018-2020/21 lists a goal of achieving use of electronic health systems in 100 percent of hospitals by 2019/20, but lists its baseline percentage for 2017/18 as just 10 percent, suggesting that use of electronic records is not yet widespread. [4] Further, no information is provided on the quality or comparability of the data housed in this system. Neither the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), nor the Central Veterinary Laboratory shares details about the country's electronic reporting surveillance systems that would confirm that they collect real time laboratory data. [5] There is no evidence of media reports or academic studies with additional relevant information.

[1] Smit, Nico. 9 August 2011. "Ministry Launches E-Health System". The Namibian.

[<https://www.namibian.com.na/index.php?id=83762&page=archive-read>]. Accessed 4 December 2020.

[2] United States Agency for International Development and the Ministry of Health and Social Services. "Assessment of National Health Information Systems". [<https://docplayer.net/14063903-Assessment-of-national-health-information-systems.html>]. Accessed 4 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 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 insufficient evidence to confirm the existence of mechanisms to share data between the relevant ministries responsible for animal, human and wildlife surveillance. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that "the human health and animal health sectors have strong surveillance systems", but they are not integrated; "each sector currently works independently". [1] While the JEE adds that plans are in place to integrate the systems, there is no evidence that this has taken place since the JEE was published. There is no mention of surveillance data sharing on the publicly available websites of the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), or the Ministry of Environment and Tourism. [2,3,4,5,6] The Organisation for Animal Health's (OIE) Performance of Veterinary Services (PVS) evaluation report for Namibia, published in August 2008, does not mention data sharing; no other reports on the websites of the OIE or the World Health Organisation (WHO) provide relevant information. [7,8,9] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[6] Ministry of Environment and Tourism. [<http://www.met.gov.na/>]. Accessed 4 December 2020.

[7] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.

[8] World Organisation for Animal Health (OIE). [<http://www.oie.int/>]. Accessed 4 December 2020.

[9] World Health Organization (WHO). "Namibia". [<http://www.who.int/countries/nam/en/>]. Accessed 4 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 Namibia makes de-identified health surveillance data on disease outbreaks publicly available on government websites, aside from data about the COVID-19 pandemic. The Ministry of Health and Social Service (MoHSS) releases data on the COVID-19 pandemic multiple times a week through a COVID-19 Datahub website (hosted with the Namibia Statistics Agency), and through its main website, either as "COVID-19 SITREP" releases, or as updates from the minister. [1,2,3,4] Aside from these updates, neither the MoHSS, the Ministry of Agriculture, Water and Forestry (MAWF), its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), nor the Central Veterinary Laboratory shares relevant information via a public website. [1,5,6,7] The MoHSS and MAWF have shared data on outbreaks in the past—see, for example, the press release on the Hepatitis E outbreak of 2017-18. [8] However, such reporting does not appear to occur through a systematic and regularly updated outlet for outbreak data.

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. 25 November 2020. "Namibia COVID-19 Situation Report No. 252". [<https://mhss.gov.na/documents/119527/825690/NAMIBIA+COVID-19+SITREP+NO.252.pdf/9e116573-2f97-4ab6-a811-6cf50460587f>]. Accessed 11 December 2020.

[3] Ministry of Health and Social Services. 5 December 2020. "Update by Dr. Kalumbi Shangula, Minister of Health and Social Services on COVID-19 in Namibia". [<https://mhss.gov.na/documents/119527/828815/COVID-19+Daily+Update+05.12.2020+final.pdf/33c94812-769b-4e6f-8a4e-31fa7ab3803a>]. Accessed 11 December 2020.

[4] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 December 2020.

[5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[7] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[8] Ministry of Health and Social Services. 21 August 2018. "Press Statement on Hepatitis E Virus Cases Update". [<http://www.mhss.gov.na/documents/119527/573553/Press+Release+-+Hepatitis+E.pdf/e3b5efde-34d4-4cab-9f55-30e60eac5113>]. Accessed 11 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: 0

Namibia makes de-identified COVID-19 surveillance data available via reports on government websites, but the reports are not daily. The Ministry of Health and Social Service (MoHSS) releases data on the COVID-19 pandemic multiple times a week through a COVID-19 Datahub website (hosted with the Namibia Statistics Agency), and through its main website, either as "COVID-19 SITREP" releases, or as updates from the minister. [1,2,3,4] The releases contain information such as the number of new cases identified, deaths in the last 24 hours, total deaths, total number cases, total number of recoveries, and total number of tests administered, and the number of people in quarantine. [2,3,4] At the time of research, the releases on the MoHSS website were updated about five times a week in recent weeks, and it was more than 24 hours since the datahub had been updated, according to a date stamp on the website. [2,3,4] No information is provided on the source of infection. The Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia) does not share relevant information via a public website. [5]

- [1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.
- [2] Ministry of Health and Social Services. 25 November 2020. "Namibia COVID-19 Situation Report No. 252". [<https://mhss.gov.na/documents/119527/825690/NAMIBIA+COVID-19+SITREP+NO.252.pdf/9e116573-2f97-4ab6-a811-6cf50460587f>]. Accessed 11 December 2020.
- [3] Ministry of Health and Social Services. 5 December 2020. "Update by Dr. Kalumbi Shangula, Minister of Health and Social Services on COVID-19 in Namibia". [<https://mhss.gov.na/documents/119527/828815/COVID-19+Daily+Update+05.12.2020+final.pdf/33c94812-769b-4e6f-8a4e-31fa7ab3803a>]. Accessed 11 December 2020.
- [4] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 December 2020.
- [5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 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: 0

There is no evidence that Namibia has laws or guidelines that safeguard the confidentiality of health information for individuals, such as that generated through health surveillance activities. The Ministry of Health and Social Services does not share relevant information via a public website. [1] The Joint External Evaluation report (JEE) for Namibia, published in 2017, does not discuss the confidentiality of health data. [2,3] The Namibian Constitution protects privacy, but makes exceptions for the "protection of health", so it is unclear whether this protection would extend to health data. [4] There is no mention of health data confidentiality in the Communications Act, 2009, and a 2015 report from Privacy International states that the Act "includes little or no safeguards to protect the right to privacy and the confidentiality of users' data and information". [5,6] No other relevant laws are listed for Namibia in the FAOLEX database of the Food and Agriculture Organisation of the United Nations, or in the Government of Namibia's online list of acts and policies. [7,8]

- [1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.
- [2] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.
- [3] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.
- [4] Government of Namibia. "Constitution of the Republic of Namibia". [https://www.gov.na/documents/10181/14134/Namibia_Constitution.pdf/37b70b76-c15c-45d4-9095-b25d8b8aa0fb]. Accessed 4 December 2020.
- [5] United States Agency for International Development and the Ministry of Health and Social Services. "Assessment of National Health Information Systems". [<https://docplayer.net/14063903-Assessment-of-national-health-information-systems.html>]. Accessed 4 December 2020.
- [6] Privacy International. June 2015. "The Right to Privacy in Namibia". [<https://privacyinternational.org/advocacy-briefing/734/right-privacy-namibia>]. Accessed 4 December 2020.
- [7] Food and Agriculture Organisation of the United Nations (FAO). "FAOLEX: Namibia". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=NAM>]. Accessed 4 December 2020.

[8] Government of Namibia. "Acts and Policies". [<http://www.gov.na/acts-and-policies>]. Accessed 4 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: 0

There is no evidence that Namibia has laws or guidelines that safeguard the confidentiality of health information for individuals, such as that generated through health surveillance activities, let alone any that specifically mention cyber attacks. The Ministry of Health and Social Services does not share relevant information via a public website. [1] The Joint External Evaluation report (JEE) for Namibia, published in 2017, does not discuss the confidentiality of health data. [2,3] The Namibian Constitution protects privacy, but makes exceptions for the "protection of health", so it is unclear whether this protection would extend to health data. [4] There is no mention of health data confidentiality in the Communications Act, 2009, and a 2015 report from Privacy International states that the Act "includes little or no safeguards to protect the right to privacy and the confidentiality of users' data and information". [5,6] No other relevant laws are listed for Namibia in the FAOLEX database of the Food and Agriculture Organisation of the United Nations, or in the Government of Namibia's online list of acts and policies. [7,8]

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[2] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 4 December 2020.

[3] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[4] Government of Namibia. "Constitution of the Republic of Namibia". [https://www.gov.na/documents/10181/14134/Namibia_Constitution.pdf/37b70b76-c15c-45d4-9095-b25d8b8aa0fb]. Accessed 4 December 2020.

[5] United States Agency for International Development and the Ministry of Health and Social Services. "Assessment of National Health Information Systems". [<https://docplayer.net/14063903-Assessment-of-national-health-information-systems.html>]. Accessed 4 December 2020.

[6] Privacy International. June 2015. "The Right to Privacy in Namibia". [<https://privacyinternational.org/advocacy-briefing/734/right-privacy-namibia>]. Accessed 4 December 2020.

[7] Food and Agriculture Organisation of the United Nations (FAO). "FAOLEX: Namibia". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=NAM>]. Accessed 4 December 2020.

[8] Government of Namibia. "Acts and Policies". [<http://www.gov.na/acts-and-policies>]. Accessed 4 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 = 2, Yes, commitments have been made to share data only for one disease = 1, No = 0

Current Year Score: 0

There is no public evidence that the government of Namibia has made a specific commitment to share surveillance data during a public health emergency with other countries in the region, whether for a single disease or multiple diseases. There is no mention of surveillance data sharing on the publicly available websites of the Ministry of Health and Social Services (MoHSS), the Ministry of Agriculture, Water and Forestry (MAWF), its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), or the Central Veterinary Laboratory. [1,2,3,4] Through its membership in the African Public Health Laboratories Network (APHLN), the government of Namibia presumably shares health surveillance data (since surveillance assistance is a function of APHLN). [5] However, APHLN does not share via a public website information on surveillance during emergencies. There is no mention in news media of such surveillance data sharing. There is no mention of surveillance data sharing during public health emergencies in Namibia's 2011 National Disaster Risk Management Plan, the 2016 Capacity Assessment Report of the National Disaster Risk Management System in Namibia, the 2010-2015 Country Cooperation Strategy for Namibia published by the World Health Organisation (WHO), the MoHSS Strategic Plan for 2017/2018-2021/2022, or the MAWF Annual Report 2016/2017 (the most recent). [6,7,8,9,10] There is no evidence that Namibia collaborates with the Southern Africa Centre for Infectious Disease Surveillance. [11]

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[3] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[4] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020

[5] African Public Health Laboratories Network. [<https://aslm.org/what-we-do/>]. Accessed 4 December 2020.

[6] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 December 2020.

[7] Government of Namibia. September 2016. "Capacity Assessment Report of the National Disaster Risk Management System in Namibia". [<https://www.cadri.net/sites/default/files/Namibia-DRM-Capacity-Assessment-Report.pdf>]. Accessed 4 December 2020.

[8] World Health Organisation. 2010. "Country Cooperation Strategy 2010-2015: Namibia".

[<http://apps.who.int/iris/handle/10665/136066>]. Accessed 4 December 2020.

[9] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.

[10] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 4 December 2020.

[11] Souther Africa Centre for Infectious Disease Surveillance. [<http://www.sacids.org/>]. Accessed 4 December 2020.

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

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

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

Current Year Score: 0

There is no evidence that Namibia 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-- whether for ongoing or future public health emergencies. There is no relevant information shared via the public websites of the Ministry of Health and Social Services (MoHSS) or the (NIP), a state-owned enterprise that runs laboratories for human health in Namibia. [1,2] Neither the National Disaster Risk Management Plan of 2011 nor public health planning documents, such as the MoHSS Strategic Plan 2017/2018-2020/21, mention contact tracing. [3,4] Regulations issued in response to the COVID-19 pandemic, under the Public Health and Environment Act of 2015, describe the importance of contact tracing and describes some elements of the contact tracing process, for example stating that "an authorised person must establish the names of persons who were or might have been in contact with the confirmed case in line with the contact tracing protocols and standard operating procedures". [5] However, this description of contact tracing does not amount to support at the sub-national level. Namibia's COVID-19 "Datahub" website does not mention contact tracing or describe related support or procedures. [6]

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 4 December 2020.

[2] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[3] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. "National Public Health Laboratory Strategic Plan: (Establishing a Strong Public Health Laboratory System)".

[https://mhss.gov.na/documents/119527/364677/NPHL_STRATEGIC+PLAN_FINAL.pdf/1c437c48-db44-42db-9d17-c4d96b8be7a9]. Accessed 4 December 2020.

[5] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.

[6] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 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 evidence that Namibia 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. The Joint External Evaluation report (JEE), published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". But the JEE notes that the NHEPRP "has yet to be fully implemented, and lacks a comprehensive One Health approach". [1] Further, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet. [2] Thus, it is not possible to ascertain whether the NHEPRP contains provisions for supporting the self-isolation of suspected cases. There are no provisions related to support for those

self-isolating in the MoHSS Strategic Plan 2017/2018-2020/21, the 2012 National Public Health Laboratory Strategic Plan, the Ministry of Agriculture, Water, and Forestry (MAWF) Annual Report 2016/2017, the Namibia Institute of Pathology (NIP) Annual Report 2017/2018 (the most recent), or the 2011 National Disaster Risk Management Plan. [3,4,5,6,7] There is no relevant information shared via a public website by the the MoHSS, the MAWF, its Directorate of Veterinary Services, the NIP (a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, or the Office of the Prime Minister (including its Department of Disaster Management). [8,9,10,11,12] In December 2020, the MoHSS announced the launch of a National Action Plan for Health Security, but no information about the contents of the plan were shared publicly. [13] Publicly available documents describing Namibia's response to the COVID-19 pandemic do not contain wrap-around plans for supporting those self-isolating. [14,15] However, regulations issued in response to the COVID-19 pandemic, under the Public Health and Environment Act of 2015, do stipulate that, for "Namibian citizens who are unable to pay for the cost of quarantine as required by these regulations may request for assistance from the State, in the form and manner determined in the directives". These benefits appear to be limited to the COVID-19 response, and it is unclear what guarantees they include. [14] The government also issued measures to stimulate the economy in response to the COVID-19 pandemic, which included emergency loans to households, but there is no evidence these measures were specifically tied to self-isolation, and were in any case limited to the response to the ongoing pandemic. [16]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. "National Public Health Laboratory Strategic Plan: (Establishing a Strong Public Health Laboratory System)".

[https://mhss.gov.na/documents/119527/364677/NPHL_STRATEGIC+PLAN_FINAL.pdf/1c437c48-db44-42db-9d17-c4d96b8be7a9]. Accessed 4 December 2020.

[5] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 11 December 2020.

[6] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 11 December 2020.

[7] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 December 2020.

[8] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[9] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[10] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[11] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 4 December 2020.

[12] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 4 December 2020.

[13] Ministry of Health and Social Services. 8 December 2020. "Key Notes Address by Dr Kalumbi Shangula, MP, Minister of Health and Social Services at the Launch of National Action Plan for Health Security (NAPHS) and National Human Resource for Health (HRH) Strategic Plan."

[14] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.

[15] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia".

[<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 December 2020.

[16] Deloitte. 1 April 2020. "COVID-19 Pandemic: Announcement of Economic Stimulus and Relief Package by the Minister of Finance". [<https://www2.deloitte.com/na/en/pages/tax/articles/COVID-19-Announcement-of-economic-stimulus-and-relief-package-by-the-Minister-of-Finance-Tax-Alert.html>]. Accessed 11 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

Namibia 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. Namibia makes de-identified COVID-19 surveillance data available on government websites, but the reports include little information on contact tracing, and are also not released daily. The Ministry of Health and Social Service (MoHSS) releases data on the COVID-19 pandemic multiple times a week through a COVID-19 Datahub website (hosted with the Namibia Statistics Agency), and through its main website, either as "COVID-19 SITREP" releases, or as updates from the minister. [1,2,3,4] The releases contain information such as the number of new cases identified, deaths in the last 24 hours, total deaths, total number cases, total number of recoveries, and total number of tests administered, and the number of people in quarantine. They also contain a datapoint called "identified contacts", but aside from a number of "identified contacts", there is no explanation of what this number represents. [2,3,4] At the time of research, the releases on the MoHSS website were updated about five times a week in recent weeks, and it was more than 24 hours since the Datahub had been updated, according to a date stamp on the website. [2,3,4] Aside from the "identified contacts" number, no information is provided on the source of infection (such as the percentage of new cases from identified contacts). The Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia) does not share relevant information via a public website. [5]

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. 25 November 2020. "Namibia COVID-19 Situation Report No. 252". [<https://mhss.gov.na/documents/119527/825690/NAMIBIA+COVID-19+SITREP+NO.252.pdf/9e116573-2f97-4ab6-a811-6cf50460587f>]. Accessed 11 December 2020.

[3] Ministry of Health and Social Services. 5 December 2020. "Update by Dr. Kalumbi Shangula, Minister of Health and Social Services on COVID-19 in Namibia". [<https://mhss.gov.na/documents/119527/828815/COVID-19+Daily+Update+05.12.2020+final.pdf/33c94812-769b-4e6f-8a4e-31fa7ab3803a>]. Accessed 11 December 2020.

[4] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 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 evidence that Namibia 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--whether for an ongoing or future public health emergency. The Joint External Evaluation report (JEE), published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". But the JEE notes that the NHEPRP "has yet to be fully implemented, and lacks a comprehensive One Health approach". [1] Further, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet. [2] Thus, it is not possible to ascertain whether the NHEPRP contains provisions or agreements between the public health system and border authorities. There is no other evidence in the JEE of relevant agreements between the public health system and border authorities. [1] There are no provisions related to coordination with border control authorities in the MoHSS Strategic Plan 2017/2018-2020/21, the 2012 National Public Health Laboratory Strategic Plan, the Ministry of Agriculture, Water, and Forestry (MAWF) Annual Report 2016/2017, the Namibia Institute of Pathology (NIP) Annual Report 2017/2018 (the most recent), or the 2011 National Disaster Risk Management Plan. [3,4,5,6,7] There is no relevant information shared via a public website by the the MoHSS, the MAWF, its Directorate of Veterinary Services, the NIP (a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory, the Office of the Prime Minister (including its Department of Disaster Management), or the Ministry of International Relations and Cooperation (the Namibian equivalent of a foreign affairs ministry) . [8,9,10,11,12,13] In December 2020, the MoHSS announced the launch of a National Action Plan for Health Security, but no information about the contents of the plan were shared publicly. [14] Publicly available documents describing Namibia's response to the COVID-19 pandemic do not indicate new agreements between the public health system and border authorities. [15,16]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. "National Public Health Laboratory Strategic Plan: (Establishing a Strong Public Health Laboratory System)".

[https://mhss.gov.na/documents/119527/364677/NPHL_STRATEGIC+PLAN_FINAL.pdf/1c437c48-db44-42db-9d17-c4d96b8be7a9]. Accessed 4 December 2020.

[5] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 11 December 2020.

[6] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 11 December 2020.

[7] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 December 2020.

[8] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 4 December 2020.

[9] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 4 December 2020.

[10] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 4 December 2020.

[11] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 4 December 2020.

[12] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk>].

management]. Accessed 4 December 2020.

[13] Ministry of International Relations and Cooperation. [<http://www.mirco.gov.na/>]. Accessed 4 December 2020.

[14] Ministry of Health and Social Services. 8 December 2020. "Key Notes Address by Dr Kalumbi Shangula, MP, Minister of Health and Social Services at the Launch of National Action Plan for Health Security (NAPHS) and National Human Resource for Health (HRH) Strategic Plan."

[15] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.

[16] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 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

An applied epidemiology training programme is available in Namibia. Since 2012, Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) has helped run Namibia Field Epidemiology and Laboratory Training Program (NamFELTP), with support from the US Centres for Disease Control and Prevention (CDC) and in collaboration with the Ministry of Health and Social Services (MoHSS). [1] The MoHSS does not share additional information about NamFELTP via a public website. [2] Neither the MoHSS nor APHENET mentions other epidemiology training programmes in Namibia. [2,3] The Joint External Evaluation report (JEE) for Namibia, published in 2017, also states that a field epidemiology training programme is available in Namibia, but does not name the programme. [4]

[1] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Namibia Field Epidemiology and Laboratory Training Program". [<https://www.tephinet.org/training-programs/namibia-field-epidemiology-and-laboratory-training-program>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] AFENET. [<http://www.afenet.net/>]. Accessed 11 December 2020.

[4] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

2.6.1b

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

Yes = 1 , No = 0

Current Year Score: 1

There is publicly available evidence that at least one field epidemiology training programme in Namibia is explicitly inclusive of animal health professionals. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that a field epidemiology training program (FETP) is available in Namibia, and that two veterinary officers have joined it. [1] The JEE does not name the FETP. [1] However, since 2012, Training Programmes in Epidemiology and Public Health Interventions Network (TEPHINET) has helped run Namibia Field Epidemiology and Laboratory Training Program (NamFELTP), with support from the US Centres for Disease Control and Prevention (CDC) and in collaboration with the Ministry of Health and Social Services (MoHSS). [2] TEPHINET is a professional network of FETPs working in more than 100 countries. The organization's mission is to standardize training programs, improve learning, mentor, and facilitate the exchange of knowledge. [3] TEPHINET's description of NamFELTP makes it clear that animal health professionals are involved: the programme trains "a team-mix of medical doctors, nurses, veterinarians, laboratory scientists and environmental practitioners" to "strengthen public health capacity", improve national capacity to respond to health concerns and health emergencies, and "strengthen national surveillance and analytical capacity". [2] Further, a 2013 document hosted on the website of APHENET, to which NamFELTP has presented its results, describes "Veterinary Services" as a "key partner". [4] Presumably, this refers to the Directorate of Veterinary Services in the Ministry of Agriculture, Water and Forestry (MAWF), though no additional information is shared by the MAWF, the Directorate, or the MoHSS via a public website. [5,6]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Namibia Field Epidemiology and Laboratory Training Program". [<https://www.tephinet.org/training-programs/namibia-field-epidemiology-and-laboratory-training-program>]. Accessed 11 December 2020.

[3] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "About". [<https://www.tephinet.org/about>]. Accessed 11 December 2020.

[3] Muroua, Clementine. "Progress on the Implementation of Field Epidemiology and Laboratory Training Program in Namibia, 2013". [<http://www.afenet.net/images/profiles/Namibia-FETP.pdf>]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[5] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 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: 0

There is no public evidence that Namibia has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential. Namibia has a national public health emergency response plan. However, because it is not shared via a public website, it is not possible to review the plan and determine whether it addresses planning for multiple communicable diseases with pandemic potential. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". But the JEE notes that the NHEPRP "has yet to be fully implemented, and lacks a comprehensive One Health approach". [1] Further, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet. [2] According to the JEE, the National Health Emergency Management Committee (NHEMC) is the body responsible for coordinating and planning in line with the NHEPRP, but the NHEMC does not have a publicly available website. [1] There is no evidence of a more general disaster response plan that includes a section on public health. Nothing relevant is shared via a public website by the MoHSS, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), the Ministry of Environment and Tourism, or the Directorate Disaster Risk Management in the Office of the Prime Minister. [2,3,4,5,6,7,8] The National Disaster Risk Management Plan of 2011 mentions the existence of risks for several diseases, stating in an annex that "H1N1; Cholera, Meningococcal Infection, Haemorrhagic fevers, Malaria have affected 2-3 regions and the national and regional levels have capacity to deal with the epidemics without external assistance." However, the document does not include a response plan for pandemics. [9] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[6] Ministry of Environment and Tourism. [<http://www.met.gov.na/>]. Accessed 11 December 2020.

[7] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[8] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 4 December 2020.

[9] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 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 public evidence that Namibia has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, let alone such a plan that has been updated in the last three years. . Namibia has a national public health emergency response plan. However, because it is not shared via a public website, it is not possible to review the plan and determine whether it addresses planning for multiple communicable diseases with pandemic potential, or whether it has been updated. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". But the JEE notes that the NHEPRP "has yet to be fully implemented, and lacks a comprehensive One Health approach". [1] Further, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet. [2] According to the JEE, the National Health Emergency Management Committee (NHEMC) is the body responsible for coordinating and planning in line with the NHEPRP, but the NHEMC does not have a publicly available website. [1] There is no evidence of a more general disaster response plan that includes a section on public health. Nothing relevant is shared via a public website by the MoHSS, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), the Ministry of Environment and Tourism, or the Directorate Disaster Risk Management in the Office of the Prime Minister. [2,3,4,5,6,7,8] The National Disaster Risk Management Plan of 2011 mentions the existence of risks for several diseases, stating in an annex that "H1N1; Cholera, Meningococcal Infection, Haemorrhagic fevers, Malaria have affected 2-3 regions and the national and regional levels have capacity to deal with the epidemics without external assistance." However, the document does not include a response plan for pandemics. [9] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[6] Ministry of Environment and Tourism. [<http://www.met.gov.na/>]. Accessed 11 December 2020.

[7] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[8] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 4 December 2020.

[9] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 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 public evidence that Namibia has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, let alone such a plan that includes considerations for paediatric and other vulnerable populations. Namibia has a national public health emergency response plan. However, because it is not shared via a public website, it is not possible to review the plan and determine whether it addresses planning for multiple communicable diseases with pandemic potential, or whether it contains considerations for vulnerable populations. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". But the JEE notes that the NHEPRP "has yet to be fully implemented, and lacks a comprehensive One Health approach". [1] Further, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet. [2] According to the JEE, the National Health Emergency Management Committee (NHEMC) is the body responsible for coordinating and planning in line with the NHEPRP, but the NHEMC does not have a publicly available website. [1] There is no evidence of a more general disaster response plan that includes a section on public health. Nothing relevant is shared via a public website by the MoHSS, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), the Ministry of Environment and Tourism, or the Directorate Disaster Risk Management in the Office of the Prime Minister. [2,3,4,5,6,7,8] The National Disaster Risk Management Plan of 2011 mentions the existence of risks for several diseases, stating in an annex that "H1N1; Cholera, Meningococcal Infection, Haemorrhagic fevers, Malaria have affected 2-3 regions and the national and regional levels have capacity to deal with the epidemics without external assistance." However, the document does not include a response plan for pandemics. [9] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia".

[<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[6] Ministry of Environment and Tourism. [<http://www.met.gov.na/>]. Accessed 11 December 2020.

[7] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[8] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 4 December 2020.

[9] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 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 not enough publicly available evidence to determine whether Namibia's emergency preparedness plans include mechanisms for working with the private sector to assist with outbreak emergency preparedness and response. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". [1] But because the NHEPRP is not shared via a public website, it is not possible to review the plan and determine whether it includes considerations for the involvement of the private sector. The JEE is also silent on this topic. [1] The NHEPRP is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet. [2] Nothing relevant is shared via a public website by the MoHSS, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), the Ministry of Environment and Tourism, or the Directorate Disaster Risk Management in the Office of the Prime Minister. [2,3,4,5,6,7,8] The National Disaster Risk Management Plan of 2011 mentions the existence of risks for several diseases, and states that plan is intended to involve the private sector. However, the document does not include a response plan for pandemics. [9] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-REP-2017.36-eng.pdf>]. Accessed 4 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[6] Ministry of Environment and Tourism. [<http://www.met.gov.na/>]. Accessed 11 December 2020.

[7] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[8] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 4 December 2020.

[9] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 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: 1

There is evidence that Namibia has a policy, plan, or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic, though only in response to one disease, COVID-19. Regulations issued in response to the COVID-19 pandemic, under the Public Health and Environment Act of 2015, require mask wearing, prohibit gatherings of more than 50 people (with exceptions, such as for school), and place other responsibilities on business owners and the heads of institutions to take measures to prevent the spread of COVID-19. [10,11] However, there is not enough publicly shared information to show that these NPIs were adopted as part of a broader plan for epidemics. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". [3] But because the NHEPRP is not shared via a public website, it is not possible to review the plan and determine whether it includes plans for NPIs. The NHEPRP is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet. [2] Nothing relevant is shared via a public website by the MoHSS, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), the Ministry of Environment and Tourism, or the Directorate Disaster Risk Management in the Office of the Prime Minister. [4,5,6,7,8,9,10] The National Disaster Risk Management Plan of 2011 mentions the existence of risks for several diseases, and states that plan is intended to involve the private sector. However, the document does not include plans for NPIs. [11]

[1] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. "Lock Down Guidelines". [<https://mhss.gov.na/lockguidelines>]. Accessed 11 December 2020.

[3] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[4] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[7] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[8] Ministry of Environment and Tourism. [<http://www.met.gov.na/>]. Accessed 11 December 2020.

[9] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[10] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 4 December 2020.

[11] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 4 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: 1

There is evidence that, in the past year, Namibia has activated an emergency response plan for an infectious disease outbreak, but no evidence that the country has completed a national-level biological threat-focused exercise. On 17 March 2020, Namibia declared a state of emergency in the country in response to the COVID-19 pandemic, and on 28 March 2020 issued regulations pursuant to the state of emergency. [1,2] The regulations activate aspects of the Disaster Risk Management Act of 2012 (namely, designating the responsibilities of the Director of Disaster Risk Management), and make reference to a variety of other Namibian legislation, but otherwise do not specifically refer to the 2011 National Disaster Risk Management Plan, or other disaster or pandemic response documents. [3,4] (The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". But the NHEPRP is not available online and is not referred to in the March 2020 declaration.) (5) There is no additional relevant information shared via the public websites of the Ministry of Health and Social Services; the Directorate Disaster Risk Management in the Office of the Prime Minister; the World Health Organization (WHO) list of all biological exercises (aside from consultations carried out to prepare for COVID-19); the WHO Namibia country profile; or the WHO Regional Office for Africa website; or the WHO International Health Regulations Strategic Partnership Portal. [6,7,8,9,10] There is no evidence of an after action review in the past year for Namibia listed by the WHO. [12] There is no evidence of relevant media reports or academic studies.

[1] Government of Namibia. 7 March 2020. "Declaration of State of Emergency: National Disaster (Covid-19): Provlamation 7 of 2020". [<https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/110032/136716/F21735729/NAM110032.pdf>]. Accessed 18 December 2020.

[2] Government Gazette of Namibia. 28 March 2020. "State of Emergency - COVID-19 Regulations: Namibian Constitution". [<http://extwprlegs1.fao.org/docs/pdf/nam194401.pdf>]. Accessed 18 Decfember 2020.

[3] Government Gazette of Namibia. 3 September 2020. "Promulgation of Disaster Risk Management Act, 2012 (Act No. 10 of 2012), of the Parliament". [<http://extwprlegs1.fao.org/docs/pdf/nam137202.pdf>]. Accessed 18 December 2020.

[4] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.

[5] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[6] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[7] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk->

management]. Accessed 18 December 2020.

[8] World Health Organization. "Simulation Exercises". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 18 December 2020.

[9] World Health Organization (WHO). "Namibia". [<https://www.afro.who.int/countries/namibia>]. Accessed 11 December 2020.

[10] World Health Organization (WHO). "Regional Office for Africa". [<https://www.afro.who.int/>]. Accessed 11 December 2020.

[11] World Health Organization. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Namibia". [<https://extranet.who.int/sph/country-status/namibia#aar>]. Accessed 18 December 2020.

[12] World Health Organization. "After Action Review". [<https://extranet.who.int/sph/after-action-review>]. Accessed 18 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 Namibia has, in the past year, identified a list of gaps and best practices in response either to an infectious disease or a biological-threat focused exercise, nor that the country has developed a plan to improve response capabilities. There is no evidence of an after action review in the past year for Namibia listed by the World Health Organization (WHO). [1] There is no additional relevant information shared via the public websites of the Ministry of Health and Social Services; the Directorate Disaster Risk Management in the Office of the Prime Minister; the WHO list of all biological exercises (aside from consultations carried out to prepare for COVID-19); the WHO Namibia country profile; the WHO Regional Office for Africa website; or the WHO International Health Regulations Strategic Partnership Portal. [2,3,4,5,6,7]

[1] World Health Organization. "After Action Review". [<https://extranet.who.int/sph/after-action-review>]. Accessed 18 December 2020.

[2] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[3] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 18 December 2020.

[4] World Health Organization. "Simulation Exercises". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 18 December 2020.

[5] World Health Organization (WHO). "Namibia". [<https://www.afro.who.int/countries/namibia>]. Accessed 11 December 2020.

[6] World Health Organization (WHO). "Regional Office for Africa". [<https://www.afro.who.int/>]. Accessed 11 December 2020.

[7] World Health Organization. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Namibia". [<https://extranet.who.int/sph/country-status/namibia#aar>]. Accessed 18 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 Namibia has, in the past year, undergone a national-level biological threat-focused exercise, let alone such an exercise that has included private sector representatives. There is no relevant information shared via the World Health Organization (WHO) list of after action reviews; or via the public websites of the Ministry of Health and Social Services; the Directorate Disaster Risk Management in the Office of the Prime Minister; the WHO list of all biological exercises (aside from consultations carried out to prepare for COVID-19); the WHO Namibia country profile; the WHO Regional Office for Africa website; or the WHO International Health Regulations Strategic Partnership Portal. [1,2,3,4,5,6,7]

[1] World Health Organization. "After Action Review". [<https://extranet.who.int/sph/after-action-review>]. Accessed 18 December 2020.

[2] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[3] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 18 December 2020.

[4] World Health Organization. "Simulation Exercises". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 18 December 2020.

[5] World Health Organization (WHO). "Namibia". [<https://www.afro.who.int/countries/namibia>]. Accessed 11 December 2020.

[6] World Health Organization (WHO). "Regional Office for Africa". [<https://www.afro.who.int/>]. Accessed 11 December 2020.

[7] World Health Organization. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Namibia". [<https://extranet.who.int/sph/country-status/namibia#aar>]. Accessed 18 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: 0

There is no public evidence that Namibia has a permanent national emergency operations centre (EOC). The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that Namibia does not have a permanent EOC, but rather an EOC director within the prime minister's office who is capable of providing coordination in the case of an emergency. [1] There is no evidence that the EOC director has a publicly available website. The 2011 Disaster Risk Management Plan describes the "activation" of both the national EOC and regional EOCs in the case of emergencies, but does not provide any more information on their functionality or existence in non-emergency situations; in any case, the information in the JEE is more recent. [1,2,3] There is no information on the EOC shared via a public website by the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary

Laboratory (which does not have a public website), or the Office of the Prime Minister (including its Directorate of Disaster Management). [4,5,6,7,8,9]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.
- [2] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.
- [3] Government of Namibia. September 2016. "Capacity Assessment Report of the National Disaster Risk Management System in Namibia". [<https://www.cadri.net/sites/default/files/Namibia-DRM-Capacity-Assessment-Report.pdf>]. Accessed 11 December 2020.
- [4] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.
- [5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.
- [6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.
- [7] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.
- [8] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.
- [9] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 4 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: 0

There is no public evidence that Namibia has a permanent national emergency operations centre (EOC), let alone one that conducts a drill on e a year or is required to conduct a drill at least once a year. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that Namibia does not have a permanent EOC, but rather an EOC director within the prime minister's office who is capable of providing coordination in the case of an emergency. [1] There is no evidence that the EOC director has a publicly available website. The 2011 Disaster Risk Management Plan describes the "activation" of both the national EOC and regional EOCs in the case of emergencies, but does not provide any more information on their functionality or existence in non-emergency situations; in any case, the information in the JEE is more recent. [1,2,3] There is no information on the EOC shared via a public website by the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a public website), or the Office of the Prime Minister (including its Directorate of Disaster Management). [4,5,6,7,8,9]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.
- [2] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.
- [3] Government of Namibia. September 2016. "Capacity Assessment Report of the National Disaster Risk Management System in Namibia". [<https://www.cadri.net/sites/default/files/Namibia-DRM-Capacity-Assessment-Report.pdf>]. Accessed 11 December 2020.

- [4] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.
- [5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.
- [6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.
- [7] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.
- [8] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.
- [9] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 4 December 2020.

3.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Namibia has a permanent national emergency operations centre (EOC), let alone one that has conducted a coordinated emergency response or exercise in the last year, activated within 120 minutes of the identification of the public health emergency/scenario. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that Namibia does not have a permanent EOC, but rather an EOC director within the prime minister's office who is capable of providing coordination in the case of an emergency. [1] There is no evidence that the EOC director has a publicly available website. The 2011 Disaster Risk Management Plan describes the "activation" of both the national EOC and regional EOCs in the case of emergencies, but does not provide any more information on their functionality or existence in non-emergency situations; in any case, the information in the JEE is more recent. [1,2,3] On 17 March 2020, Namibia declared a state of emergency in the country in response to the COVID-19 pandemic, and on 28 March 2020 issued regulations pursuant to the state of emergency. [4,5] The regulations activate aspects of the Disaster Risk Management Act of 2012 (namely, designating the responsibilities of the Director of Disaster Risk Management), but do not mention the establishment of a EOC. There is also no evidence that this state of emergency was declared within 120 minutes of the identification of the public health emergency scenario. There is no other relevant information shared via a public website by the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a public website), or the Office of the Prime Minister (including its Directorate of Disaster Management). [6,7,8,9,10,11]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-REP-2017.36-eng.pdf>]. Accessed 11 December 2020.
- [2] Government of Namibia. September 2016. "Capacity Assessment Report of the National Disaster Risk Management System in Namibia". [<https://www.cadri.net/sites/default/files/Namibia-DRM-Capacity-Assessment-Report.pdf>]. Accessed 17 October 2018.
- [3] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.
- [4] Government of Namibia. 7 March 2020. "Declaration of State of Emergency: National Disaster (Covid-19): Provlamation 7 of 2020". [<https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/110032/136716/F21735729/NAM110032.pdf>]. Accessed 18 December 2020.
- [5] Government Gazette of Namibia. 28 March 2020. "State of Emergency - COVID-19 Regulations: Namibian Constitution". [<http://extwprlegs1.fao.org/docs/pdf/nam194401.pdf>]. Accessed 18 Decfember 2020.

- [6] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 14 October 2018.
- [7] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 14 October 2018.
- [8] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 14 October 2018.
- [9] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 14 October 2018.
- [10] Office of the Prime Minister. [<http://www.opm.gov.na/home>]. Accessed 17 October 2018.
- [11] Directorate Disaster Risk Management, Office of the Prime Minister. [<http://www.opm.gov.na/directorate-disaster-risk-management>]. Accessed 20 October 2018.

3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

3.4.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 0

There is no evidence that Namibia's public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event, nor are there publicly available standard operating procedures, guidelines, or agreements between those entities regarding such events. The Joint External Evaluation report (JEE) for Namibia, published in 2017, repeatedly notes the lack of exercises to test Namibia's public health emergency readiness in general (though it does not specifically mention deliberate biological events). While the JEE notes that several ministries have established MOUs with security agencies, the report does not comment on the nature of these MOUs. Further, it notes a general lack of integration and shared exercises between security agencies and public health bodies. [1] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a public website), the Office of the Prime Minister (including its Directorate of Disaster Management), nor the Ministry of Defence shares relevant information via public websites. [2,3,4,5,6,7,8] The 2011 Disaster Risk Management Plan does not describe coordination with security agencies, or share other relevant information. [9,10] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[5] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

- [6] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.
- [7] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/departement-of-disaster-risk-management>]. Accessed 11 December 2020.
- [8] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 11 December 2020.
- [9] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.
- [10] Government of Namibia. September 2016. "Capacity Assessment Report of the National Disaster Risk Management System in Namibia". [<https://www.cadri.net/sites/default/files/Namibia-DRM-Capacity-Assessment-Report.pdf>]. Accessed 17 October 2018.

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 public evidence that Namibia has in place a risk communication plan that is specifically intended for use during a public health emergency, let alone such a plan that outlines how messages will reach populations and sectors with different communications needs (such as different languages, location within the country, media reach). The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that "there are few guidelines, protocols or SOPs in place to direct, standardize or evaluate" risk communication activities. That being said, the JEE does give Namibia credit for, in general, communicating about risk in "relevant national and local languages", though like other risk communications, this mostly occurs in an ad hoc way. [1] The 2011 Disaster Risk Management Plan does not detail a risk communication plan, let alone a plan specifically intended for use during a public health emergency. [2] The Disaster Risk Management Act, 2012 does not include such a plan, aside from mandating strategic communication for risk management, without any greater detail on how this should be done. [3] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a public website), nor the Office of the Prime Minister (including its Directorate of Disaster Management) shares relevant information via public websites. [4,5,6,7,8,9]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-REP-2017.36-eng.pdf>]. Accessed 11 December 2020.
- [2] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.
- [3] Government of Namibia. Government Gazette of the Republic of Namibia. 3 September 2012. "Disaster Risk Management Act, 2012". [<http://www.lac.org.na/laws/2012/5029.pdf>]. Accessed 11 December 2020.
- [4] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.
- [5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.
- [6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[7] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[8] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[9] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 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 no public evidence that Namibia has in place a risk communication plan that is specifically intended for use during a public health emergency. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that "there are few guidelines, protocols or SOPs in place to direct, standardize or evaluate" risk communication activities. The JEE also states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". However, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet, so it is not possible to verify whether it includes a section on risk communication. [1,2] The 2011 Disaster Risk Management Plan does not detail a risk communication plan, let alone a plan specifically intended for use during a public health emergency. [3] The Disaster Risk Management Act, 2012 does not include such a plan, aside from mandating strategic communication for risk management, without any greater detail on how this should be done. [4] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a public website), nor the Office of the Prime Minister (including its Directorate of Disaster Management) shares relevant information via public websites. [2,5,6,7,8,9]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.

[3] Government of Namibia. Government Gazette of the Republic of Namibia. 3 September 2012. "Disaster Risk Management Act, 2012". [<http://www.lac.org.na/laws/2012/5029.pdf>]. Accessed 11 December 2020.

[4] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[7] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[8] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[9] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 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 public evidence that Namibia has in place a risk communication plan that is specifically intended for use during a public health emergency, let alone such a plan that 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 report (JEE) for Namibia, published in 2017, states that "there are few guidelines, protocols or SOPs in place to direct, standardize or evaluate" risk communication activities. The JEE also states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". However, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet, so it is not possible to verify whether it includes a section on risk communication. [1,2] The 2011 Disaster Risk Management Plan does not detail a risk communication plan, let alone a plan specifically intended for use during a public health emergency. [3] The Disaster Risk Management Act, 2012 does not include such a plan, aside from mandating strategic communication for risk management, without any greater detail on how this should be done. [4] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a public website), nor the Office of the Prime Minister (including its Directorate of Disaster Management) shares relevant information via public websites. [2,5,6,7,8,9]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.

[3] Government of Namibia. Government Gazette of the Republic of Namibia. 3 September 2012. "Disaster Risk Management Act, 2012". [<http://www.lac.org.na/laws/2012/5029.pdf>]. Accessed 11 December 2020.

[4] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[7] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[8] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[9] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 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

In the past year, the Namibian public health system has actively shared messages via online media platforms to inform the public about ongoing public health concerns and dispel misinformation. Since the onset of the COVID-19 pandemic in spring 2020, the Ministry of Health and Social Services (MoHSS) has been sharing information about the pandemic on its (unverified) Twitter feed. In addition to case count updates and information about how to limit exposure risk to COVID-19, the MoHSS Twitter account has retweeted information from UN agencies cautioning against the sharing of misinformation. [1,2,3] Aside from the information about the COVID-19 pandemic, the MoHSS Twitter account also shares information on non-emergency public health issues, such as HIV treatment. [3] The MoHSS also has a verified Facebook account that shares similar information. [4] The MoHSS has also created a website specifically to share information about the COVID-19 pandemic, and also shares information about the pandemic on its main site. [5,6,7,8] There is no additional relevant information shared via the public websites of the MoHSS or the Directorate Disaster Risk Management. [8,9,10]

[1] Twitter. "@MHSS_Namibia". [<https://twitter.com/mhssnamibia?lang=en>]. Accessed 18 December 2020.

[2] Twitter. @MHSS_Namibia status update. 16 December 2020.

[<https://twitter.com/MhssNamibia/status/1339151615991947266>]. Accessed 18 December 2020.

[3] Twitter. @MHSS_Namibia status update. 26 November 2020.

[<https://twitter.com/MhssNamibia/status/1331997456305778688>]. Accessed 18 December 2020.

[3] Twitter. @MHSS_Namibia status update. 1 December 2020.

[<https://twitter.com/MhssNamibia/status/1333870176362778625>]. Accessed 18 December 2020.

[4] Facebook. "@MoHSSNamibia". [<https://www.facebook.com/MoHSSNamibia/>]. Accessed 18 December 2020.

[5] Ministry of Health and Social Services. 25 November 2020. "Namibia COVID-19 Situation Report No. 252".

[<https://mhss.gov.na/documents/119527/825690/NAMIBIA+COVID-19+SITREP+NO.252.pdf/9e116573-2f97-4ab6-a811-6cf50460587f>]. Accessed 11 December 2020.

[6] Ministry of Health and Social Services. 5 December 2020. "Update by Dr. Kalumbi Shangula, Minister of Health and Social Services on COVID-19 in Namibia". [<https://mhss.gov.na/documents/119527/828815/COVID-19+Daily+Update+05.12.2020+final.pdf/33c94812-769b-4e6f-8a4e-31fa7ab3803a>]. Accessed 11 December 2020.

[7] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 December 2020.

[8] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[9] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[10] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 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 (president or ministers) have shared misinformation or disinformation on infectious diseases in the past two years. Verified Twitter accounts associated the Office of the Prime Minister and the Presidency do not show any evidence suggesting such misinformation sharing. [1,2,3] There is no evidence of such sharing of

misinformation in major news outlets. [4,5]

[1] Twitter. "@NamibiaOPM". [<https://twitter.com/NamibiaOPM>]. Accessed 18 December 2020.

[2] Twitter. "@NamPresidency". [<https://twitter.com/nampresidency?lang=en>]. Accessed 18 December 2020.

[3] Twitter. "@hagegeingob".

[https://twitter.com/hagegeingob?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor]. Accessed 18 December 2020.

[4] BBC News. "Namibia". [<https://www.bbc.com/news/topics/clm1wxp5pret/namibia>]. Accessed 18 December 2020.

[5] The Namibian. [<https://www.namibian.com.na/>]. Accessed 18 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: 51

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: 113.17

2019

International Telecommunication Union (ITU)

3.6.3 Female access to a mobile phone

3.6.3a

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

Input number

Current Year Score: 0

2019

Gallup; Economist Impact calculation

3.6.4 Female access to the Internet

3.6.4a

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

Input number

Current Year Score: 0

2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

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

Yes = 0 , No = 1

Current Year Score: 1

There is no evidence that, in the past year, Namibia has issued a restriction, without international/bilateral support, on the export/import of medical goods (e.g. medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak. There is no relevant information shared via a public website by the the Ministry of Health and Social Services; the Ministry of Agriculture, Water and Forestry; its Directorate of Veterinary Services; or the Ministry of International Relations and Cooperation (the Namibian equivalent of a foreign affairs ministry). [1,2,3,4] Publicly available documents describing Namibia's response to the COVID-19 pandemic do not indicate the existence of such restrictions. [5,6] There is no evidence of such restrictions in media reports, though the International Trade Centre (ITC) reported that Namibian authorities had to be consulted before exporting certain items from the country, such as face masks and hand sanitizer, from the country. The ITC did not describe this restriction as a ban. [7]

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[4] Ministry of International Relations and Cooperation. [<http://www.mirco.gov.na/>]. Accessed 11 December 2020.

[5] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.

[6] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 December 2020.

[7] International Trade Centre. "COVID-19 Temporary Trade Measures". [<https://www.macmap.org/covid19>]. Accessed 18 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 Namibia has, in the past year, issued a restriction, without international/bilateral support, on the export/import of non-medical goods due to an infectious disease outbreak. The Disease Outbreak News of the World Health Organisation (WHO) does not list any such restrictions, or disease outbreaks that prompted them [1]. The World Organisation for Animal Health's Weekly Disease Information portal does not list any events in Namibia in the last year that prompted international movement restrictions of goods [2]. Neither the Ministry of Health and Social Services nor the Ministry of Agriculture, Water and Forestry share relevant information via public websites [3,4]. No mention of restrictions on the movement of goods could be found in a search of news media outlets. Namibia restricted the movement of live cattle across the border with Angola because of an outbreak of foot and mouth disease in fall 2020, but there is no evidence that this affected the movement of goods. [5]

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

[<http://www.who.int/csr/don/archive/country/nam/en/>]. Accessed 19 December 2020.

[2] World Organisation for Animal Health (OIE). "WAHIS Interface: Weekly Disease Information."

[http://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 19 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 19 December 2020.

[4] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 19 December 2020.

[5] Reuters. 7 October 2020 "Namibia Restricts Cross-Border Cattle Movement over Foot and Mouth".

[<https://www.reuters.com/article/us-namibia-footandmouthdisease/namibia-restricts-cross-border-cattle-movement-over-foot-and-mouth-idUSKBN26S1OK/>]. Accessed 19 December 2020.

3.7.2 Travel restrictions

3.7.2a

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

Yes = 0, No = 1

Current Year Score: 0

There is evidence that Namibia has, in the past year, implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. As part of its measures to respond to the COVID-19 pandemic, Namibia issued a blanket ban on international arrivals, except for Namibian citizens, permanent residents, and some classes of workers deemed critical (such as humanitarian workers). [1] The ban was initiated by regulations issued in response to the COVID-19 pandemic, under the Public Health and Environment Act of 2015. [2,3] The ban was modified in September 2020, when arrivals began to be permitted at Hosea Kutako International Airport, though travelers must quarantine after arrival. [4,5]

[1] Ministry of Health and Social Services. "Lock Down Guidelines". [<https://mhss.gov.na/lockguidelines>]. Accessed 19 December 2020.

[2] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.

[3] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 December 2020.

[4] Ministry of Health and Social Services. "International Travel Requirements and Approval Guidance during COVID-19 State of Emergency". [<https://mhss.gov.na/documents/119527/775250/MoHSS+Travel+Approval+30062020+.pdf/d88dea3b-1cda-4bc6-9078-8b47da239385>]. Accessed 11 December 2020.

[5] Reuters. 17 September 2020. "Namibia to Allow International Travel, Lift COVID State of Emergency". [<https://www.reuters.com/article/healthcoronavirus-namibia/namibia-to-allow-international-travel-lift-covid-state-of-emergency-idINL4N2GE3MJ>]. Accessed 11 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: 41.82

2018

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 195.4

2018

WHO; national sources

4.1.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Namibia has a public 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. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that the National Planning Commission (NPC), in the office of the President, has an overall human resource plan for 2007-2013 which guides the country, while the Ministry of Health and Social Services has a "Five Year Human Resource Strategy" for health. However, the JEE states that these provide "no specific guidance on the training, employment, career development or tasks for public health staff". [1] The NPC human resource plan named in the JEE does not appear to be shared via a public website, but a differently titled NPC document, the National Human Resources Plan 2010-2025, is available. This plan does not contain any discussion of the public health workforce. [2] The Five Year Human Resource Strategy mentioned in the JEE does not appear to be shared via a public website. Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), nor the Ministry of Labour, Industrialization and Employment Creation shares additional relevant information via public websites. [3,4,5,6,7,8]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] National Planning Commission. October 2012. "National Human Resources Plan 2010-2015". [http://www.npc.gov.na/?wpfb_dl=203]. Accessed 11 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[5] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[6] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[7] Ministry of Labour, Industrialization and Employment Creation. [<https://mol.gov.na/>]. Accessed 11 December 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 270

2009

WHO/World Bank; national sources

4.1.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Namibia has the capacity to isolate patients with highly communicable diseases in a patient isolation facility located within the country. News media reports make reference to patient isolation at Windhoek Central Hospital, one of two state hospitals (along with Katutura) in the capital. The news reports, from August 2017, say that the hospital isolated individuals suspected of being infected with Congo fever (also known as Crimean-Congo haemorrhagic fever), which is often contracted through tick bites but which can also be transmitted between infected humans. [1] The hospital does not have a working public website to confirm this information. Mediclinic, a private hospital in Windhoek, also states that it has isolation facilities, but does not give any information about their condition or capacity, or what diseases they are suitable for isolating. [2] Regulations issued in response to the COVID-19 pandemic, under the Public Health and Environment Act of 2015 require that "every regional council must identify and set aside hospitals and health facilities in its region that meet the minimum standards of care and treatment of COVID-19 for designation by the chief health officer as isolation facilities as set out in the Ministry's guidelines and the applicable WHO guidelines". [3] However, while news reports suggest that some isolation wards have been built at Namibian hospitals in response to the COVID-19 pandemic, there is in general insufficient information showing to what degree these regulations have been enacted, or what the features of these isolation wards are. [4] There is little other publicly available documentation that points to the country's isolation capabilities. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that Namibia has no isolation facilities at national ports of entry, but does not discuss the availability of isolation facilities elsewhere. [5] There is no information on isolation capabilities shared via a public website by the Ministry of Health and Social Services (MoHSS), the Ministry of Agriculture, Water and Forestry (MAWF), its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), or the Central Veterinary Laboratory (which does not have a website). [6,7,8,9] Neither the MoHSS Strategic Plan 2017/2018-2021/2022, the Organisation for Animal Health's (OIE) Performance of Veterinary Services (PVS) evaluation report for Namibia, the MAWF Annual Report 2016/2017, nor the NIP Annual Report 2017/2018 (the most recent) mentions isolation capabilities. [10,11,12,13] The Public and Environmental Health Act, 2015 empowers the MoHSS to create isolation facilities but does not describe whether they currently exist. [14] There is no evidence of media reports or academic studies with additional relevant information.

[1] Nomhle, Kangootui. 11 August 2017. "Three in Isolation after Congo Fever Death". The Namibian.

[<https://www.namibian.com.na/167974/archive-read/Three-in-isolation-after-Congo-fever-death>]. Accessed 11 December 2020.

[2] Mediclinic Windhoek. [<http://www.mediclinic.co.za/Hospitals/HospitalDetails/id/30>]. Accessed 11 December 2020.

[3] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.

[4] Shoki Kandjimi. 2 July 2020. "Virus Isolation Unit at Rundu Completed". [<https://neweralive.na/posts/virus-isolation-unit-at-rundu-completed>]. Accessed 11 December 2020.

[5] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia".

[<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[6] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[7] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[8] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[9] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[10] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.

[11] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary

Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 14 October 2018.

[12] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 11 December 2020.

[13] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 11 December 2020.

[14] Government of Namibia. Government Gazette of the Republic of Namibia. 18 May 2015. "Public and Environmental Health Act, 2015". [<http://www.mhss.gov.na/documents/119527/359999/Public+and+Environment+Health+Act%2C+2015.pdf/201362ea-d4cc-4042-91a1-0af54044ac9c>]. Accessed 11 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 some evidence to show that Namibia has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years; or that Namibia has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years. News media reports make reference to patient isolation at Windhoek Central Hospital, one of two state hospitals (along with Katutura) in the capital. The news reports, from August 2017, say that the hospital isolated individuals suspected of being infected with Congo fever (also known as Crimean-Congo haemorrhagic fever), which is often contracted through tick bites but which can also be transmitted between infected humans. [1] The hospital does not have a working public website to confirm this information. Mediclinic, a private hospital in Windhoek, also states that it has isolation facilities, but does not give any information about their condition or capacity, or what diseases they are suitable for isolating. [2] Regulations issued in response to the COVID-19 pandemic, under the Public Health and Environment Act of 2015 require that "every regional council must identify and set aside hospitals and health facilities in its region that meet the minimum standards of care and treatment of COVID-19 for designation by the chief health officer as isolation facilities as set out in the Ministry's guidelines and the applicable WHO guidelines". [3] News reports suggest that some isolation wards have been built at Namibian hospitals in response to the COVID-19 pandemic although there is in general insufficient information showing to what degree these regulations have been enacted. [4] There is little other publicly available documentation that points to the country's isolation capabilities. The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that Namibia has no isolation facilities at national ports of entry, but does not discuss the availability of isolation facilities elsewhere. [5] There is no information on isolation capabilities shared via a public website by the Ministry of Health and Social Services (MoHSS), the Ministry of Agriculture, Water and Forestry (MAWF), its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), or the Central Veterinary Laboratory (which does not have a website). [6,7,8,9] Neither the MoHSS Strategic Plan 2017/2018-2021/2022, the Organisation for Animal Health's (OIE) Performance of Veterinary Services (PVS) evaluation report for Namibia, the MAWF Annual Report 2016/2017, nor the NIP Annual Report 2017/2018 (the most recent) mentions isolation capabilities. [10,11,12,13] The Public and Environmental Health Act, 2015 empowers the MoHSS to create isolation facilities but does not describe whether they currently exist. [14] There is no evidence of media reports or academic studies with additional relevant information.

[1] Nomhle, Kangootui. 11 August 2017. "Three in Isolation after Congo Fever Death". The Namibian.

[<https://www.namibian.com.na/167974/archive-read/Three-in-isolation-after-Congo-fever-death>]. Accessed 11 December

2020.

- [2] Mediclinic Windhoek. [<http://www.mediclinic.co.za/Hospitals/HospitalDetails/id/30>]. Accessed 11 December 2020.
- [3] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.
- [4] Shoki Kandjimi. 2 July 2020. "Virus Isolation Unit at Rundu Completed". [<https://neweralive.na/posts/virus-isolation-unit-at-rundu-completed>]. Accessed 11 December 2020.
- [5] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.
- [6] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.
- [7] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.
- [8] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.
- [9] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.
- [10] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21". [<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.
- [11] World Organisation for Animal Health (OIE). August 2008. "Tool for the Evaluation of Performance of Veterinary Services". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/Namibia_OIE-PVS_28012009.pdf]. Accessed 14 October 2018.
- [12] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 11 December 2020.
- [13] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 11 December 2020.
- [14] Government of Namibia. Government Gazette of the Republic of Namibia. 18 May 2015. "Public and Environmental Health Act, 2015". [<http://www.mhss.gov.na/documents/119527/359999/Public+and+Environment+Health+Act%2C+2015.pdf/201362ea-d4cc-4042-91a1-0af54044ac9c>]. Accessed 11 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: 1

Namibia has national procurement protocols in place which can be utilised by the Ministry of Health and Social Services (MOHSS) and the Ministry of Agriculture, Water and Forestry (MAWF) but no evidence it can be used for the acquisition of laboratory and medical supplies.

The Public Procurement Act, 2015 is the guiding legislation in this matter and applies across ministries. [1] The Ministry of

Finance's Procurement Policy Unit has released, pursuant to the Public Procurement Act, 2015 regulations, titled General Conditions for Contract for Request for Quotation which provide additional guidance. While the General Conditions do not mention laboratory or medical supplies in particular, or specific ministries, they provide guidance for the procurement of goods and services; laboratory and medical supplies, by definition, fall under the former category. [2] A webpage titled "General Conditions of Contract" on the site of the Namibia Institute of Pathology (NIP), a state-owned enterprise that runs laboratories for human health in Namibia, shows recent bids and procurement, which include laboratory and medical supplies, including for personal protective equipment. [3] The MAWF Procurement Plan for 2019-20 includes the direct procurement of laboratory supplies. [4] Although the Procurement Plan does not make reference to the specific legislation and mechanisms under which it is issued, other procurement and bidding documents hosted on the MAWF website make reference to the 2015 act. [5] The MOHSS has its own procurement portal, but the plan—and other MOHSS procurement documents—are not available to the public. [6,7] In any case, under the Public Procurement Act, 2015, the MOHSS is subject to the same legal framework for procurement as all other ministries. [1] The Ministry of Finance's Procurement Policy Unit has a website with information about procurement policy in Namibia, including a portal where standard procurement documents can be downloaded. [8] The Joint External Evaluation (JEE), published in 2017, does not contain additional relevant information. [9] There is no relevant information shared via the public websites of the MOHSS, the MAWF, its Directorate of Veterinary Services, or the NIP. [10,11,12,13]

[1] Government of Namibia. Government Gazette of the Republic of Namibia. 31 December 2015. "Public Procurement Act, 2015".

[<http://www.mhss.gov.na/documents/119527/120636/Public+Procurement+Act%2C+2015+%28Act++15+of+2015%29.pdf/7b0b158c-578e-4646-b9c7-85315d009cbf>]. Accessed 11 December 2020.

[2] Ministry of Finance Procurement Policy Unit. "General Conditions for Contract for Request for Quotation".

[<https://www.nust.na/sites/default/files/documents/General%20Conditions%20for%20Works%20Request%20for%20Sealed%20Quotation%202017.pdf>]. Accessed 11 December 2020.

[3] Namibia Institute of Pathology (NIP). "General Conditions of Contract". [https://nip.com.na/?page_id=166#prettyPhoto]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. September 2017. "MAWF Procurement Plan".

[https://mawf.gov.na/pt/policies-and-regulations?p_p_id=110_INSTANCE_V4F832GRVuW3&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column-2&p_p_col_count=1&_110_INSTANCE_V4F832GRVuW3_struts_action=%2Fdocument_library_display%2Fview_file_entry&_110_INSTANCE_V4F832GRVuW3_redirect=https%3A%2F%2Fmawf.gov.na%2Fpt%2Fpolicies-and-regulations%3Fp_p_id%3D110_INSTANCE_V4F832GRVuW3%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-2%26p_p_col_count%3D1&_110_INSTANCE_V4F832GRVuW3_fileEntryId=886128]. Accessed 12 January 2021.

[5] Ministry of Agriculture, Water and Forestry. September 2020. "Request for Sealed Quotations for Goods".

[<https://mawf.gov.na/documents/37726/84627/Fencing+Materials+for+SSDDCA+.pdf+full.pdf/12305da9-0f56-49cc-9180-2f831e7302b0?version=1.0>]. Accessed 12 January 2021.

[6] Ministry of Health and Social Services. "Procurement Portal" (not accessible to public).

[https://mhss.gov.na/procurement?p_p_id=58&p_p_lifecycle=1&p_p_state=maximized&p_p_mode=view&_58_struts_action=%2Flogin%2Fforgot_password]. Accessed 12 January 2021.

[7] Ministry of Health and Social Services. "Annual Procurement Plan" (not accessible to public).

[https://mhss.gov.na/es/annual-procurement-plan?p_p_id=58&p_p_lifecycle=0&p_p_state=maximized&p_p_mode=view&_58_struts_action=%2Flogin%2Fopen_id]. Accessed 12 January 2021.

[8] Ministry of Finance. "Procurement Policy Unit". [<https://mof.gov.na/PPU>]. Accessed 11 December 2020.

[9] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia".

[<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[10] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[11] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[12] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[13] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 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: 0

There is no evidence that Namibia maintains a stockpile of medical supplies (including medical equipment, personal protective equipment, or medical countermeasures) for national use during a public health emergency. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there is no emergency medical stockpile". Further "there are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of [medical countermeasures] during an emergency". The JEE does not mention the stockpiling of medical supplies). [1] Neither the Ministry of Health and Social Services; the Ministry of Agriculture, Water and Forestry (MAWF), its Directorate of Veterinary Services; the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia); the Central Veterinary Laboratory (which does not have a website); the Directorate Disaster Risk Management in the Office of the Prime Minister; nor the ministry of Defence shares relevant information via a public website. [2,3,4,5,6,7] There is no mention of stockpiles of medical supplies in the 2011 Disaster Risk Management Plan. [9] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia".

[<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[5] Namibia Institute of Pathology (NIP). [<http://nip.com.na/>]. Accessed 11 December 2020.

[6] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[7] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/departement-of-disaster-risk-management>]. Accessed 11 December 2020.

[8] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 13 January 2021.

[9] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 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 evidence that Namibia maintains a stockpile of laboratory supplies for national use during a public health emergency. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there is no emergency medical stockpile". Further "there are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of [medical countermeasures] during an emergency". (The JEE does not mention the stockpiling of laboratory supplies). [1] Neither the Ministry of Health and Social Services; the Ministry of Agriculture, Water and Forestry (MAWF), its Directorate of Veterinary Services; the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia); the Central Veterinary Laboratory (which does not have a website); the Directorate Disaster Risk Management in the Office of the Prime Minister; nor the Ministry of Defence shares relevant information via a public website. [2,3,4,5,6,7,8] There is no mention of stockpiles of laboratory supplies in the 2011 Disaster Risk Management Plan. [9] There is no evidence of media reports or academic studies with additional relevant information.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[5] Namibia Institute of Pathology (NIP). [<http://nip.com.na/>]. Accessed 11 December 2020.

[6] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[7] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 December 2020.

[8] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 13 January 2021.

[9] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 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 no evidence that Namibia conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency, nor that there exists such a stockpile. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there is no emergency medical stockpile". Further "there are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of [medical countermeasures] during an emergency". The JEE does not mention the stockpiling of medical supplies). [1] Neither the Ministry of Health and Social Services; the Ministry of Agriculture, Water and Forestry (MAWF), its Directorate of Veterinary

Services; the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia); the Central Veterinary Laboratory (which does not have a website); the Directorate Disaster Risk Management in the Office of the Prime Minister; nor the ministry of Defence shares relevant information via a public website. [2,3,4,5,6,7] There is no mention of stockpiles of medical supplies in the 2011 Disaster Risk Management Plan. [9] There is no evidence of media reports or academic studies with additional relevant information.

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.
- [2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.
- [3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.
- [4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.
- [5] Namibia Institute of Pathology (NIP). [<http://nip.com.na/>]. Accessed 11 December 2020.
- [6] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.
- [7] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 December 2020.
- [8] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 13 January 2021.
- [9] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 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: 0

There is no evidence that Namibia has a plan or agreement to leverage domestic manufacturing capacity to produce medical supplies (including medical equipment, personal protective equipment [PPE], or medical countermeasures) for national use during a public health emergency, or to procure such supplies. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there is no emergency medical stockpile". Further "there are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of [medical countermeasures] during an emergency". (The JEE does not specifically mention medical supplies.) [1] There is no public evidence of agreements with manufacturers or distributors. Neither the Ministry of Health and Social Services; the Ministry of Agriculture, Water and Forestry (MAWF), its Directorate of Veterinary Services; the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia); the Central Veterinary Laboratory (which does not have a website); the Directorate of Disaster Risk Management in the Office of the Prime Minister; nor the Ministry of Defence shares relevant information via a public website. [2,3,4,5,6,7,8] There is no mention of relevant plans or agreements in the 2011 Disaster Risk Management Plan. [9] There is no evidence of media reports or academic studies with additional relevant information. There is no evidence that Namibia has generated a relevant plan in response to the COVID-19 pandemic, though the World Health

Organization has coordinate the donation of medical supplies such as personal protective equipment. [10]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.
- [2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.
- [3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.
- [4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.
- [5] Namibia Institute of Pathology (NIP). [<http://nip.com.na/>]. Accessed 11 December 2020.
- [6] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.
- [7] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 December 2020.
- [8] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 13 January 2021.
- [9] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.
- [10] Reliefweb. 23 April 2020. "WHO supports supplies for front line health workers". [<https://reliefweb.int/report/namibia/who-supports-supplies-front-line-health-workers>]. Accessed 11 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 that Namibia has a plan or agreement to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency, or to procure such supplies. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there is no emergency medical stockpile". Further "there are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of [medical countermeasures] during an emergency". (The JEE does not specifically mention laboratory supplies.) [1] Neither the Ministry of Health and Social Services; the Ministry of Agriculture, Water and Forestry (MAWF), its Directorate of Veterinary Services; the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia); the Central Veterinary Laboratory (which does not have a website); the Directorate Disaster Risk Management in the Office of the Prime Minister; nor the Ministry of Defence shares relevant information via a public website. [2,3,4,5,6,7,8] There is no mention of relevant plans or agreements in the 2011 Disaster Risk Management Plan. [9] There is no evidence of media reports or academic studies with additional relevant information. There is no evidence that Namibia has generated a relevant plan in response to the COVID-19 pandemic, though the World Health Organization has provided laboratory supplies such as reagents. [10]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.
- [2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

- [3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.
- [4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.
- [5] Namibia Institute of Pathology (NIP). [<http://nip.com.na/>]. Accessed 11 December 2020.
- [6] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.
- [7] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 December 2020.
- [8] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 13 January 2021.
- [9] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.
- [10] Reliefweb. 23 April 2020. "WHO supports supplies for front line health workers". [<https://reliefweb.int/report/namibia/who-supports-supplies-front-line-health-workers>]. Accessed 11 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 a plan, programme, or guidelines in place for dispensing medical countermeasures (MCMs) for national use during a public health emergency. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of MCM during an emergency". Further, the country is "not prepared for outbreaks" and "does not meet any of the capacity indicators" for medical countermeasure deployment. [1] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), the Ministry of Defence, nor the Directorate Disaster Risk Management in the Office of the Prime Minister shares relevant information via a public website. [2,3,4,5,6,7,8] There is no mention of plans for dispensing of MCMs in the 2011 National Disaster Risk Management Plan. [9] There is no evidence of media reports or academic studies with additional relevant information.

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.
- [2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.
- [3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.
- [4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.
- [5] Namibia Institute of Pathology (NIP). [<http://nip.com.na/>]. Accessed 11 December 2020.
- [6] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.
- [7] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[8] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 December 2020.

[9] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 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 public plan in place to receive health personnel from other countries to respond to a public health emergency. According to the Joint External Evaluation report (JEE) for Namibia, published in 2017, "there are no legal or regulatory processes and logistical plans for rapid cross-border deployment and receipt of public health and medical personnel during emergencies". [1] There is no mention of such a mechanism or plan in the 2011 National Disaster Management Plan. [2] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), the Ministry of Defence, nor the Directorate Disaster Risk Management in the Office of the Prime Minister shares relevant information via a public website. [3,4,5,6,7,8,9] There is no evidence of media reports or academic studies with additional relevant information. There is no evidence that Namibia has published a relevant plan in response to the COVID-19 pandemic.

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[5] Namibia Institute of Pathology (NIP). [<http://nip.com.na/>]. Accessed 11 December 2020.

[6] Ministry of Defence. [<http://www.mod.gov.na/>]. Accessed 4 December 2020.

[7] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[8] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 December 2020.

[9] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 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: 0

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 88.2

2013

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: 69.25

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a

Are workers guaranteed paid sick leave?

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

Current Year Score: 2

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of legislation, policies, or public statements regarding prioritised health care services to healthcare workers, let alone those who become sick as a result of responding to a public health emergency. There is no mention of such policies in the Ministry of Health and Social Services (MoHSS) Strategic Plan for 2017/2018-2021/2022, or in the 2011 National Disaster Risk Management Plan. [1,2] The MoHSS does not share relevant information via a public website. [3] No other relevant laws are listed for Namibia in the FAOLEX database of the Food and Agriculture Organisation of the United Nations, or in the Government of Namibia's online list of acts and policies. [4,5] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". [6] However, this plan is not made available via a public website by the MoHSS or another Namibian government website, or indeed any place on the internet, making it impossible to verify whether it contains any provisions for healthcare workers. [3] Neither the MoHSS, the Ministry of Agriculture, Water and Forestry, nor the Directorate Disaster Risk Management in the Office of the Prime Minister shares relevant information via a public website. [3,7,8,9] There is no evidence of media reports or academic studies with additional relevant information. There is no evidence of a relevant policy issued in response to the COVID-19 pandemic.

[1] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 4 December 2020.

[2] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[4] Food and Agriculture Organisation of the United Nations (FAO). "FAOLEX: Namibia". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=NAM>]. Accessed 4 December 2020.

[5] Government of Namibia. "Acts and Policies". [<http://www.gov.na/acts-and-policies>]. Accessed 11 December 2020.

[6] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia".

[<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[7] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[8] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[9] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 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 no evidence that there is a system in place for public health officials and healthcare workers to communicate during a public health emergency in Namibia. The Joint External Evaluation report (JEE) for Namibia, published in 2017, does not

mention any such system. The JEE states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". [1] However, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet, so it is not possible to verify whether it contains any relevant provisions. [2] The 2011 Disaster Risk Management Plan does not detail communications plan, let alone a plan specifically intended for use during a public health emergency. [3] The Disaster Risk Management Act, 2012 does not include such a plan, aside from mandating strategic communication for risk management, without any greater detail on how this should be done. [4] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a public website), nor the Office of the Prime Minister (including its Directorate of Disaster Management) shares relevant information via a public website. [2,5,6,7,8,9]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[3] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.

[4] Government of Namibia. Government Gazette of the Republic of Namibia. 3 September 2012. "Disaster Risk Management Act, 2012". [<http://www.lac.org.na/laws/2012/5029.pdf>]. Accessed 11 December 2020.

[5] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[7] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[8] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[9] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 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 that there is a system in place for public health officials and healthcare workers to communicate during an emergency in Namibia, let alone such a system that encompasses both the public and private sector. The Joint External Evaluation report (JEE) for Namibia, published in 2017, does not mention any such system. The JEE states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". [1] However, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet, so it is not possible to verify whether it contains any relevant provisions. [2] The 2011 Disaster Risk Management Plan does not detail communications plan, let alone a plan specifically intended for use during a public health emergency. [3] The Disaster Risk Management Act, 2012 does not include such a plan, aside from mandating strategic communication for risk management, without any greater detail on how this should be done. [4] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not

have a public website), nor the Office of the Prime Minister (including its Directorate of Disaster Management) shares relevant information via a public website. [2,5,6,7,8,9]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1]. Accessed 11 December 2020.
- [2] Ministry of Health and Social Services. [http://www.mhss.gov.na/]. Accessed 11 December 2020.
- [3] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.
- [4] Government of Namibia. Government Gazette of the Republic of Namibia. 3 September 2012. "Disaster Risk Management Act, 2012". [http://www.lac.org.na/laws/2012/5029.pdf]. Accessed 11 December 2020.
- [5] Ministry of Agriculture, Water and Forestry. [http://www.mawf.gov.na/]. Accessed 11 December 2020.
- [6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [http://www.mawf.gov.na/directorate-veterinary-services]. Accessed 11 December 2020.
- [7] Namibia Institute of Pathology (NIP) Limited. [http://nip.com.na/]. Accessed 11 December 2020.
- [8] Office of the Prime Minister. [https://opm.gov.na/home]. Accessed 11 December 2020.
- [9] Directorate Disaster Risk Management, Office of the Prime Minister. [https://opm.gov.na/department-of-disaster-risk-management]. Accessed 11 December 2020.

4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

4.6.1 Healthcare associated infection (HCAI) prevention and control programs

4.6.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Namibia's public health system monitors for and tracks the number of health care associated infections (HCAIs) that take place in healthcare facilities. The Joint External Evaluation report (JEE) for Namibia, published in 2017, does not discuss HCAIs. [1] There is no mention of HCAIs in the 2011 Disaster Risk Management Plan; the Ministry of Health and Social Services (MoHSS) Strategic Plan for 2017/2018-2021/2022; or the 2017/18 Annual Report (the most recent) of the Namibia Institute of Pathology (NIP), a state-owned enterprise that runs laboratories for human health in Namibia. [2,3,4] Neither the MoHSS, the NIP, the Central Veterinary Laboratory (which does not have a website), the Ministry of Higher Education, Technology, and Innovation, nor the Ministry of Labour shares additional relevant information via public websites. [5,6,7,8] There is no evidence of media reports or academic studies with additional relevant information. News reports indicate that during the COVID-19 pandemic, the government has raised concerns about the rate of infection of healthcare workers, but there is no other evidence that the government is specifically tracking their infection rates. [9,10]

- [1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1]. Accessed 11 December 2020.
- [2] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.

- [3] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21". [http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a]. Accessed 4 December 2020.
- [4] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 4 December 2020.
- [5] Ministry of Health and Social Services. [http://www.mhss.gov.na/]. Accessed 11 December 2020.
- [6] Namibia Institute of Pathology (NIP) Limited. [http://nip.com.na/]. Accessed 11 December 2020.
- [7] Ministry of Labour, Industrialization and Employment Creation. [https://mol.gov.na/]. Accessed 11 December 2020.
- [8] Ministry of Higher Education, Technology, and Innovation. [http://www.mheti.gov.na/]. Accessed 24 April 2021.
- [9] Mwangi, N. 15 August 2020. "Namibia healthcare workers at high risk of COVID-19 infections as cases surge". [https://africa.cgtn.com/2020/08/15/namibia-healthcare-workers-at-high-risk-of-covid-19-infections-as-cases-surge/]. Accessed 24 April 2021.
- [10] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [https://namibia-covid-19-data-hub-nsaonline.hub.arcgis.com/]. Accessed 11 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: 0

There is some evidence that Namibia has a national requirement for ethical review before beginning a clinical trials. However, it is difficult to assess the precise requirements based on publicly available information. An undated Harvard University T.F. Chan School of Public Health webpage also makes reference to the existence of a Biomedical Research Ethical Committee in Namibia, and notes the existence of Namibia's Research Management Policy, a 2003 document, along with Ministry of Health and Social Services (MoHSS) guidelines on clinical trials. [1] Such documents, including the Research Management Policy, are not available in full on public website of the Namibian government (or elsewhere) so it is not possible to confirm their contents. However, other sources also point to the existence of ethical controls for clinical trials. For example, the Ministry of Health and Human Services' Hospital Standards and Criteria, a 2018 document, states that if a hospital wishes to initiate a clinical trial, "a committee or other mechanism must be established to monitor and control all such activities"; and those individuals responsible for oversight should be "familiar" with the Declaration of Helsinki and the International Ethical Guidelines for Biomedical Research Involving Human Subjects. [2] However, no evidence of relevant committees—national or otherwise—can be found on Namibian government websites. Several laws that might be expected to govern clinical trials make no mention of them or of their ethical review. These include the Allied Health Professions Act, 2004; Medical and Dental Act, 2004; the Pharmacy Act, 2004; and the Medicines and Related Substances Control Act, 2003. [4,5,6,7] Other policy documents also do not provide relevant information. These include 2012 National Public Health Laboratory Policy, published by the MoHSS; the MoHSS Strategic Plan for 2017/2018-2021/2022; the 2017/18 Annual Report of the Namibia Institute of Pathology (NIP), a state-owned enterprise that runs laboratories for human health in Namibia; and the 2010 Ethical Guidelines for Health Professionals, published by the Health Professions Councils of Namibia. [8,9,10,11] Neither the MoHSS, the NIP, the Ministry of Higher Education, Innovation and Training, the Health Professions Councils of

Namibia, nor the Namibia Medicines Regulatory Council shares relevant information via a public website. [12,13,14,15]

- [1] T.H Chan School of Public Health. "Country: Namibia". [https://www.hsph.harvard.edu/region-map/research_project/namibia/]. Accessed 11 December 2020.
- [2] Ministry of Health and Human Services (MoHSS). March 2018. "Hospital Standards and Criteria". [<http://www.mhss.gov.na/documents/119527/659098/MoHSS+Namibia+Hospital+Standards+and+Criteria+DRAFT.pdf/13271616-e30e-4a0d-b3d9-54d17c283eeb>]. Accessed 11 December 2020.
- [3] Government of Namibia. Government Gazette of the Republic of Namibia. 27 July 2004. "Allied Health Professions Act, 2004". [<https://www.lac.org.na/laws/annoSTAT/Allied%20Health%20Professions%20Act%207%20of%202004.pdf>]. Accessed 11 December 2020.
- [5] Government of Namibia. Government Gazette of the Republic of Namibia. 30 July 2004. "Medical and Dental Act, 2004". [<https://www.lac.org.na/laws/annoREG/Medical%20and%20Dental%20Act%2010%20of%202004%20-%20Regulations%202017-278.pdf>]. Accessed 11 December 2020.
- [6] Government of Namibia. Government Gazette of the Republic of Namibia. 29 July 2004. "Pharmacy Act, 2004". [<https://www.lac.org.na/laws/annoSTAT/Pharmacy%20Act%209%20of%202004.pdf>]. Accessed 11 December 2020.
- [7] Government of Namibia. Government Gazette of the Republic of Namibia. 28 August 2003. "Medicines and Related Substance Control Act, 2003". [<http://extwprlegs1.fao.org/docs/pdf/nam91928.pdf>]. Accessed 11 December 2020.
- [8] Ministry of Health and Social Services. October 2012. "National Public Health Laboratory Policy". [<http://www.mhss.gov.na/documents/119527/433663/National+Public+Laboratory+policy.pdf/43d34239-4502-484d-8331-41424f5cb9fa>]. Accessed 11 December 2020.
- [9] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21". [<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 11 December 2020.
- [10] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/18". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 11 December 2020.
- [11] Health Professions Councils of Namibia. 2010. "Ethical Guidelines for Health Professionals". [<http://www.namibiadent.com/EGFHP.pdf>]. Accessed 11 December 2020.
- [12] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.
- [13] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.
- [14] Health Professional Council of Namibia. [www.hpcna.com]. Accessed 11 December 2020.
- [15] Namibia Medicines Regulatory Council. [<http://www.nmrc.com.na/>]. Accessed 11 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, whether to treat ongoing pandemics or for other purposes. There is no mention of expedited clinical trials in the 2011 Disaster Risk Management Plan; the Ministry of Health and Social Services (MoHSS) Strategic Plan for 2017/2018-2021/2022; or the 2016/17 Annual Report of the Namibia Institute of Pathology (NIP), a state-owned enterprise that runs laboratories for human health in Namibia. [1,2,3] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), the Ministry of Higher Education, Innovation and Training, nor the Namibia Medicines Regulatory Council shares additional relevant

information via public websites. [4,5,6,7,8] There is no evidence of media reports or academic studies with additional relevant information. There is no evidence that Namibia has released new guidelines for MCM clinical trials in response to the COVID-19 pandemic. [9]

- [1] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.
- [2] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21". [http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a]. Accessed 11 December 2020.
- [3] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/118". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 11 December 2020.
- [4] Ministry of Health and Social Services. [http://www.mhss.gov.na/]. Accessed 11 December 2020.
- [5] Ministry of Agriculture, Water and Forestry. [http://www.mawf.gov.na/]. Accessed 11 December 2020.
- [6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [http://www.mawf.gov.na/directorate-veterinary-services]. Accessed 11 December 2020.
- [7] Namibia Institute of Pathology (NIP) Limited. [http://nip.com.na/]. Accessed 11 December 2020.
- [8] Namibia Medicines Regulatory Council. [http://www.nmrc.com.na/]. Accessed 11 December 2020.
- [9] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [https://www.lac.org.na/laws/2020/7342.pdf]. Accessed 11 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

Namibia has a government agency responsible for approving new medical countermeasures for humans. This agency is the Namibia Medicines Regulatory Council (NMRC). [1] The NMRC is empowered to regulate the registration of new medical products under the Medicines and Related Substances Control Act, 2003. Although the Act makes references to "medicines", "medical devices", "pharmaceutical products" and "scheduled substances", the law does not specifically mention medical countermeasures. [2]

- [1] Namibia Medicines Regulatory Council. [http://www.nmrc.com.na/]. Accessed 11 December 2020.
- [2] Government of Namibia. Government Gazette of the Republic of Namibia. 28 August 2003. "Medicines and Related Substance Control Act, 2003". [http://extwprlegs1.fao.org/docs/pdf/nam91928.pdf]. Accessed 11 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 for human use during public health emergencies. There is no mention of expedited approvals in the 2011 Disaster Risk Management Plan; the Ministry of Health

and Social Services (MoHSS) Strategic Plan for 2017/2018-2021/2022; or in the 2017/18 Annual Report of the Namibia Institute of Pathology (NIP), a state-owned enterprise that runs laboratories for human health in Namibia. [1,2,3] Neither the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), the Central Veterinary Laboratory (which does not have a website), the Ministry of Higher Education, Innovation and Training, nor the Namibia Medicines Regulatory Council shares additional relevant information via public websites. [4,5,6,7,8] There is no evidence of media reports or academic studies with additional relevant information. There is no evidence that Namibia has released new guidelines for medical countermeasure approval in response to the COVID-19 pandemic. [9]

- [1] Government of Namibia. 2011. "National Disaster Risk Management Plan." [https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.
- [2] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21". [http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a]. Accessed 11 December 2020.
- [3] Namibia Institute of Pathology (NIP) Limited. "Annual Report 2017/118". [http://nip.com.na/?page_id=152#prettyPhoto]. Accessed 11 December 2020.
- [4] Ministry of Health and Social Services. [http://www.mhss.gov.na/]. Accessed 11 December 2020.
- [5] Ministry of Agriculture, Water and Forestry. [http://www.mawf.gov.na/]. Accessed 11 December 2020.
- [6] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [http://www.mawf.gov.na/directorate-veterinary-services]. Accessed 11 December 2020.
- [7] Namibia Institute of Pathology (NIP) Limited. [http://nip.com.na/]. Accessed 11 December 2020.
- [8] Namibia Medicines Regulatory Council. [http://www.nmrc.com.na/]. Accessed 11 December 2020.
- [9] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015". [https://www.lac.org.na/laws/2020/7342.pdf]. Accessed 11 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: 1

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

Are epidemics and pandemics integrated into the national risk reduction strategy or is there a standalone national disaster risk reduction strategy for epidemics and pandemics?

Yes = 1, No = 0

Current Year Score: 0

Pandemics are not integrated into Namibia's national risk reduction strategy, and there is no standalone national disaster risk reduction strategy for pandemics in the country. The 2011 Disaster Risk Management Plan only mentions epidemics and pandemics briefly, as a secondary problem arising from other natural disasters such as droughts, fires, and floods. Pandemic risks are not fully integrated into the document. [1] The Joint External Evaluation report (JEE) for Namibia, published in 2017, states that responses to national public health emergencies are prepared for "according to the 2013 revised National Health Emergency Preparedness and Response Plan (NHEPRP)". But the JEE notes that the NHEPRP "has yet to be fully implemented, and lacks a comprehensive One Health approach". [2] Further, this plan is not made available via a public website by the Ministry of Health and Social Services (MoHSS) or another Namibian government website, or indeed any place on the internet, so it is not possible to assess its contents. [3] No other relevant information is provided via a public website by the Ministry of Health and Social Services or the Directorate Disaster Risk Management in the Office of the Prime Minister. [3,4,5]

[1] Government of Namibia. 2011. "National Disaster Risk Management Plan."

[https://www.ifrc.org/docs/IDRL/NATIONAL_DISASTER_RISK_MANAGEMENT_PLAN_2011.pdf]. Accessed 11 December 2020.

[2] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia".

[<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[4] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[5] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 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: 1

There is evidence that Namibia has cross-border agreements as part of a regional group, with regards to public health emergencies, but there is evidence of gaps in implementation.

Namibia is a member of the African Field Epidemiology Network (AFENET) and the Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). According to Joint External Evaluation report (JEE) for Namibia, published in 2017, both AFENET and TEPHINET have as part of their mandate to coordinate the rapid cross-border transfer of personnel in public health emergencies. [1] However, the JEE also notes that "although Namibia is a member of AFENET and TEPHINET, the country has limited personnel to facilitate efficient deployment and these personnel need further evaluation by competency tier". The JEE goes on to state that "there are no legal or regulatory processes and logistical plans for rapid cross-border deployment and receipt of public health and medical personnel during emergencies". [1] Relatedly, the JEE assigns Namibia a score of only 1 for the indicators "System is in place for sending and receiving medical countermeasures during a public health emergency" and "System is in place for sending and receiving health personnel during a public health emergency". These scores indicate that "no national deployment plan has been drafted" for either category of cross-border cooperation. [1,2] Further, despite the JEE's assertion about AFENET and TEPHINET's roles during emergencies, neither of these organizations shares information via a public website that reveal the depth of commitment to cross-border activities that membership in them entails. There is also no evidence of bilateral cross-border agreements between Namibia and its terrestrial neighbours: Angola, Botswana, South Africa, and Zambia. No other relevant information is provided via a public website by the Ministry of Health and Social Services or the Directorate Disaster Risk Management in the Office of the Prime Minister. [3,4,5] News reports show that Namibia protested restrictions on essential medicine exports that South Africa put in place in response to the COVID-19 pandemic, but it is not clear that such restrictions would mark a gap in the implementation of AFENET or TEPHINET arrangements. [5,6]

Namibia has signed in 1999 the Southern African Development Community (SADC) Protocol on Health that includes several health-related issues, including public health emergencies. Some evidence of gaps in implementation of the Protocol were found. The Protocol calls for cooperation among all signatory members in the realm of health related issues, including public health emergencies, such as facilitation of mechanisms across member states and promotion of laboratory research across borders. [7]

[1] World Health Organization (WHO). 2017. "Joint External Evaluation of IHR Core Capacities of Republic of Namibia". [<https://apps.who.int/iris/bitstream/handle/10665/258553/WHO-WHE-CPI-REP-2017.36-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] World Health Organization (WHO). 2005. "Joint External Evaluation Tool - International Health Regulations (IHR) 2005". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 13 January 2021.

[3] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[4] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[5] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 December 2020.

[6] The Southern Times. "Namibia Angered by Ban on Essential Medicines". [<https://southerntimesafrica.com/site/news/namibia-angered-by-ban-on-essential-medicines>]. Accessed 11 December 2020.

[7] Southern African Development Community (SADC). 1999. "Protocol on Health in the Southern African Development Community". [https://www.sadc.int/files/7413/5292/8365/Protocol_on_Health1999.pdf]. Accessed 6 September 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 Namibia has a cross-border agreement with regards to animal health emergencies. There is no mention of such an agreement shared via public websites by the Ministry of Health and Social Services, the Ministry of Agriculture, Water and Forestry, or the Directorate of Disaster Risk Management in the Office of the Prime Minister. [1,2,3,4] No relevant information is shared via a public website by the Food and Agriculture Organisation of the United Nations (FAO), or the World Organisation for Animal Health (OIE). [5,6] There is no evidence of media reports or academic studies with additional relevant information.

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[3] Office of the Prime Minister. [<https://opm.gov.na/home>]. Accessed 11 December 2020.

[4] Directorate Disaster Risk Management, Office of the Prime Minister. [<https://opm.gov.na/department-of-disaster-risk-management>]. Accessed 11 December 2020.

[5] Food and Agriculture Organisation of the United Nations (FAO). "FAO in Namibia". [<http://www.fao.org/namibia/en/>]. Accessed 11 December 2020.

[6] World Organisation for Animal Health (OIE). [www.oie.int]. Accessed 11 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: 0

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 Namibia has allocated national funds to improve capacity to address epidemic threats within the past three years. There is no mention of such a commitment in the 2010-2015 Country Cooperation Strategy for Namibia published by the World Health Organisation (WHO), the Ministry of Health and Human Services Strategic Plan for 2017/2018-2021/2022, or the Ministry of Agriculture, Water and Forestry Annual Report 2016/2017. [1,2,3] The government's description of its response to the COVID-19 pandemic does not include any description of the amount of money it has spent on that response. [4,5] Government and external consultancy descriptions of budget priorities do not mention epidemic preparedness, except for the response to COVID-19 in 2020/21. [6,7,8,9,10]

[1] World Health Organisation. 2010. "Country Cooperation Strategy 2010-2015: Namibia".

[<http://apps.who.int/iris/handle/10665/136066>]. Accessed 18 December 2020.

[2] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 18 December 2020.

[3] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>].

Accessed 18 December 2020.

[4] Government Gazette of the Republic of Namibia. 23 September 2020. "Public Health COVID-19 General Regulations: Public and Environmental Health Act, 2015".

[<https://www.lac.org.na/laws/2020/7342.pdf>]. Accessed 11 December 2020.

[5] Ministry of Health and Social Services and Namibia Statistics Agency. "Monitoring COVID-19 in Namibia". [<https://namibia-covid-19-data-hub-nsa-online.hub.arcgis.com/>]. Accessed 11 December 2020.

[6] Deloitte. "Namibian Budget 2020/21". [<https://www2.deloitte.com/na/en/pages/tax/articles/Deloitte-Namibia-Namibian-Budget-Guide-2020.html>]. Accessed 19 December 2020.

[7] Ministry of Finance. 27 March 2019. "FY2019/20 Budget Statement Presented By Calle Schlettwein, MP Minister of Finance".

[<https://mof.gov.na/documents/35641/36583/2019++Final+Budget+Statement%2C+Republic+of+Namibia.pdf/bab274f2-8e8b-0930-54fd-0b0d01f76bc0>] Accessed 19 December 2020.

[8] Ministry of Finance. 7 March 2018. "Fy2018/19 Budget Statement Presented by Calle Schlettwein, MP Minister of Finance".

[<https://mof.gov.na/documents/35641/36583/Budget+Speech+2018.pdf/8bdc1f37-61f7-c181-ac2b-f2bceae7899f>]. Accessed 19 December 2020.

[9] Ministry of Finance. 8 March 2017. "2017/18 Budget Statement Calle Schlettwein, MP Minister of Finance".

[<https://mof.gov.na/documents/35641/36583/Budget+Statement+2017.pdf/87542747-1e3a-746e-5cdb-27b33c2dd9ba>]. Accessed 19 December 2020.

[10] Ministry of Finance. 27 May 2020. "FY2020/21 Budget Statement: 'Together Defeating COVID-19, Together Thriving Again': Presented by Ipumbu Shiimi, MP Minister of Finance".

[<https://mof.gov.na/documents/35641/36532/Budget+Statement2020-merged.pdf/c51f234c-e690-8134-e5f9-922e8b85480d>]. Accessed 19 December 2020.

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

5.5.2a

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

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

Current Year Score: 0

2021

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

5.5.2b

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

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

Current Year Score: 0

2021

OIE PVS assessments

5.5.3 Financing for emergency response

5.5.3a

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

Yes = 1 , No = 0

Current Year Score: 1

There is a publicly identified special emergency public financing mechanism and funds which Namibia can access in the face of a public health emergency. Namibia is a member of the African Public Health Emergency Fund (APHEF), which mobilises "financial resources and disburse(s) them for interventions against priority disease outbreaks and other public health emergencies in Member States". The fund is financed by contributions from member states and from external donors. APHEF covers requests and proposals for assistance from member countries during outbreaks and public health emergencies. [1] It should be noted, however, that the World Health Organization has reported that contributions to the APHEF have been very low. [2] Namibia is not among the countries eligible to borrow from the World Bank's International Development Association (IDA). [2,3] Since it is not qualified to borrow from the IDA, Namibia is not eligible to access funds from the World Bank's Pandemic Emergency Financing Facility (PEF). [4] There is no other publicly available evidence that Namibia has a dedicated national reserve fund. The Ministry of Health and Social Services does not share relevant information via a public website. [5] There is no evidence of media reports or academic studies with additional relevant information.

[1] African Health Observatory and the World Health Organisation (WHO). "Framework for the African Public Health Emergency Fund". [https://afrolib.afro.who.int/documents/2013/AHO15_35-41.pdf]. Accessed 11 December 2020.

[2] World Health Organisation (WHO). 27 July 2016. "The African Public Health Emergency Fund: The Way Forward (AFR/RC66/15)". [<https://reliefweb.int/report/world/african-public-health-emergency-fund-way-forward-afrrc6615>]. Accessed 11 December 2020.

[3] International Development Association. "Borrowing Countries". [<http://ida.worldbank.org/about/borrowing-countries>].

Accessed 11 December 2020.

[4] Pandemic Emergency Financing Facility. December 2017. "Operational Brief for Eligible Countries".

[<http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf>]. Accessed 11 December 2020.

[5] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 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 no evidence that senior Namibian leaders have, in the last three years, made a public commitment either to improve Namibia's own domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity; or support other countries to improve capacity to address epidemic threats by providing financing or support. There is no mention of such a commitment in the 2010-2015 Country Cooperation Strategy for Namibia published by the World Health Organisation (WHO), the Ministry of Health and Human Services Strategic Plan for 2017/2018-2021/2022, or the Ministry of Agriculture, Water and Forestry Annual Report 2016/2017. [1,2,3] There is no evidence in international news media or from United Nations or WHO press releases that Namibian leaders have made a request for such funding in the last three years. The public websites of the Office of the President and the Office of the Prime Minister do not contain any relevant information. [4,5] There is no relevant information shared via the Twitter accounts of the prime minister and president. [6,7,8]

[1] World Health Organisation. 2010. "Country Cooperation Strategy 2010-2015: Namibia".

[<http://apps.who.int/iris/handle/10665/136066>]. Accessed 18 December 2020.

[2] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 18 December 2020.

[3] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 18 December 2020.

[4] Office of the President. [www.op.gov.na]. Accessed 18 December 2020.

[5] Office of the Prime Minister. [<http://www.opm.gov.na/>]. Accessed 18 December 2020.

[6] Twitter. "@NamibiaOPM". [<https://twitter.com/NamibiaOPM>]. Accessed 18 December 2020.

[7] Twitter. "@NamPresidency". [<https://twitter.com/nampresidency?lang=en>]. Accessed 18 December 2020.

[8] Twitter. "@hagegeingob".

[https://twitter.com/hagegeingob?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor]. Accessed 18 December 2020.

5.5.4b

Is there evidence that the country has, in the past three years, either:

- Provided other countries with financing or technical support to improve capacity to address epidemic threats?
- Requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats?

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

Current Year Score: 1

There is evidence that Namibia has invested finances (from donors) to improve domestic capacity to address epidemic threats in the last three years, but no evidence that Namibia has requested financing or technical support for those purposes. According to Talus Analytics' Global Health Security Funding Tracker dashboard, an estimated US\$125m was disbursed to Namibia between 2018 and 2020, including US\$57m for International Health Regulations (IHR) capacity building funding. The tracker notes that Namibia has received funding from multiple donors to enhance their capacity on global security preparedness, including, for example, World Health Organization aid to stop polio transmission in affected and at-risk areas. [1] However, there is no further evidence public evidence of Namibia's investment of these funds from government sources. There is no mention of such an investment in the 2010-2015 Country Cooperation Strategy for Namibia published by the World Health Organisation (WHO), the Ministry of Health and Social Services (MoHSS) Strategic Plan for 2017/2018-2021/2022, or the Ministry of Agriculture, Water and Forestry Annual Report 2016/2017. [2,3] Neither the MoHSS nor the Ministry of International Relations and Cooperation (the Namibian equivalent of a foreign affairs ministry) shares relevant information via a public website. [4,5,6] There is no evidence in international news media or from United Nations or WHO press releases that Namibia has invested such funding in the last three years.

[1] Global Health Security Funding Tracker. [<https://tracking.ghscosting.org/#/data>]. Accessed 19 December 2020.

[2] World Health Organisation. 2010. "Country Cooperation Strategy 2010-2015: Namibia".

[<http://apps.who.int/iris/handle/10665/136066>]. Accessed 19 December 2020.

[3] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 19 December 2020.

[4] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 19 December 2020.

[5] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 19 December 2020.

[6] Ministry of International Relations and Cooperation. [<http://www.mirco.gov.na/>]. Accessed 19 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: 0

2021

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

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

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

5.6.1a

Is there a publicly available plan or policy for sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) along with the associated epidemiological data with international organizations and/or other countries that goes beyond influenza?

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available plan or policy for sharing genetic data, epidemiological data, clinical specimens, or isolated specimens (biological materials) with international organisations and/or other countries that goes beyond influenza. There is no mention of such data sharing on the publicly available websites of the Ministry of Health and Social Services (MoHSS), the Ministry of Agriculture, Water and Forestry (MAWF), its Directorate of Veterinary Services, the Namibia Institute of Pathology (NIP—a state-owned enterprise that runs laboratories for human health in Namibia), or the Central Veterinary Laboratory. [1,2,3,4] Through its membership in the African Public Health Laboratories Network (APHLN), the government of Namibia presumably shares health data. [5] However, APHLN does not share via a public website information on such data sharing. There is no mention in news media of such data sharing. There is no mention of data sharing during public health emergencies in the 2010-2015 Country Cooperation Strategy for Namibia published by the World Health Organisation (WHO), the MoHSS Strategic Plan for 2017/2018-2021/2022, or the MAWF Annual Report 2016/2017. [6,7,8] There is no evidence of such a plan in media, academic studies, or other external documentation.

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[2] Ministry of Agriculture, Water and Forestry. [<http://www.mawf.gov.na/>]. Accessed 11 December 2020.

[3] Ministry of Agriculture, Water and Forestry. "Directorate of Veterinary Services". [<http://www.mawf.gov.na/directorate-veterinary-services>]. Accessed 11 December 2020.

[4] Namibia Institute of Pathology (NIP) Limited. [<http://nip.com.na/>]. Accessed 11 December 2020.

[5] African Public Health Laboratories Network. [<http://www.aslm.org/what-we-do/aphln/>]. Accessed 11 December 2020.

[6] World Health Organisation. 2010. "Country Cooperation Strategy 2010-2015: Namibia". [<http://apps.who.int/iris/handle/10665/136066>]. Accessed 11 December 2020.

[7] Ministry of Health and Social Services. "Strategic Plan 2017/2018-2020/21".

[<http://www.mhss.gov.na/documents/119527/573553/MOHSS+Strategic+Plan+2017-2022.pdf/9d09e210-5f91-4c45-b7f6-79e3e134939a>]. Accessed 11 December 2020.

[8] Ministry of Agriculture, Water and Forestry. "Annual Report 2016/17". [<http://www.mawf.gov.na/annual-reports>]. Accessed 11 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 public evidence that Namibia has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past year. There is no reference to sharing influenza data on the Ministry of Health and Social Services website and there have not been any reports of Namibia not sharing samples in either national and international media. [1] The latest External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution, published in 2016, does not refer to Namibia not sharing samples, nor does it list Namibia as a priority country for improving the "national ability to detect, monitor and share novel influenza viruses". [2]

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[2] World Health Organisation (WHO). 2016. "External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution—High-Level Implementation Plan 2013-2016". [http://www.who.int/about/evaluation/pip_evaluation_report.pdf]. Accessed 2 November 2020.

5.6.1c

Is there public evidence that the country has not shared pandemic pathogen samples during an outbreak in the past two years?

Yes = 0 , No = 1

Current Year Score: 1

There is no public evidence that Namibia has not shared pandemic pathogen samples during an outbreak in the past two years, or evidence of such an outbreak. There is no reference to sharing pandemic pathogen data on the Ministry of Health and Social Services website, and there have not been any reports of Namibia not sharing samples in either national and international media. [1] Likewise, there is no relevant information shared via the World Health Organization (WHO) International Health Regulations Strategic Partnership Portal; in the WHO Namibia country profile; in the WHO Regional Office for Africa website; or the WHO COVID-19 dashboard for Namibia. [2,3,4,5] There is no relevant information shared via the World Health Organization (WHO) Disease Outbreak News website. [6]

[1] Ministry of Health and Social Services. [<http://www.mhss.gov.na/>]. Accessed 11 December 2020.

[2] World Health Organization (WHO). "International Health Regulations Strategic Partnership Portal". [<https://extranet.who.int/sph/>]. Accessed 11 December 2020.

[3] World Health Organization (WHO). "Namibia". [<https://www.afro.who.int/countries/namibia>]. Accessed 11 December 2020.

[4] World Health Organization (WHO). "Regional Office for Africa". [<https://www.afro.who.int/>]. Accessed 11 December 2020.

[5] World Health Organization (WHO). "WHO Coronavirus Disease (COVID-19) Dashboard". [https://covid19.who.int/?gclid=CjwKCAjw0On8BRAGeIwAincsHDsiu3F_evEv5sAS03F77Qlpy_CkbtUzGKG8PN0UCpleR_MqmUXPghoCVpsQAvD_BwE]. Accessed 11 December 2020.

[6] World Health Organization (WHO). "Disease Outbreak News: Namibia". [<https://www.who.int/csr/don/archive/country/nam/en/>]. Accessed 11 December 2020.

Category 6: Overall risk environment and vulnerability to biological threats

6.1 POLITICAL AND SECURITY RISK

6.1.1 Government effectiveness

6.1.1a

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1b

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1c

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1d

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1e

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

Input number

Current Year Score: 51

2020

Transparency International

6.1.1f

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1g

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.2 Orderly transfers of power

6.1.2a

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

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

Current Year Score: 2

2021

Economist Intelligence

6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

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

Current Year Score: 2

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

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

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

Current Year Score: 3

2021

Economist Intelligence

6.1.4b

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

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

Current Year Score: 3

2020

UN Office of Drugs and Crime (UNODC)

6.1.4c

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

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

Current Year Score: 3

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

Is this country presently subject to an armed conflict, or is there at least a moderate risk of such conflict in the future?

No armed conflict exists = 4, Yes; sporadic conflict = 3, Yes; incursional conflict = 2, Yes, low-level insurgency = 1, Yes; territorial conflict = 0

Current Year Score: 4

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

Does the government's authority extend over the full territory of the country?

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

Is there a threat that international disputes/tensions could have a negative effect?

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

Current Year Score: 3

2021

Economist Intelligence

6.2 SOCIO-ECONOMIC RESILIENCE

6.2.1 Literacy

6.2.1a

Adult literacy rate, population 15+ years, both sexes (%)

Input number

Current Year Score: 91.53

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: 0.54

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: 4.8

2015

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 Namibia is 55.8% in 2018, according to ILOSTAT, the International Labour Organization's database. [1] The World Bank reports a lower figure of 47% in 2018, but this figure is for informal employment as a percentage of non-agricultural employment, which could account for the discrepancy, if the percentage itself does not include informal agricultural employment. [2]

[1] International Labour Organization. "Country Profiles". ILOSTAT. [<https://ilostat.ilo.org/data/country-profiles/>]. Accessed 11 December 2020.

[2] World Bank. "Informal employment (% of non-agricultural employment: Namibia)—Namibia".

[<https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?locations=NA>].

[<https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?locations=NA>]. Accessed 11 December 2020.

6.2.3c

Coverage of social insurance programs (% of population)

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

Current Year Score: 0

2016, or latest available

World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions

Input number

Current Year Score: 1

2021

Economist Intelligence Democracy Index

6.2.5 Local media and reporting

6.2.5a

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

Input number

Current Year Score: 1

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.59

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: 1

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 51.04

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: -0.86

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: 0

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years)

Input number

Current Year Score: 63.37

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: 627.9

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 3.61

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 17.9

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 17.2

2016

WHO

6.5.2 Access to potable water and sanitation

6.5.2a

Percentage of homes with access to at least basic water infrastructure

Input number

Current Year Score: 82.54

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 34.5

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: 406.55

2018

WHO Global Health Expenditure database

6.5.4 Trust in medical and health advice

6.5.4a

Trust medical and health advice from the government

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

Current Year Score: 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