

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

CATEGORY 1: PREVENTING THE EMERGENCE OR RELEASE OF PATHOGENS WITH POTENTIAL FOR INTERNATIONAL CONCERN	4
1.1 Antimicrobial resistance (AMR)	4
1.2 Zoonotic disease	7
1.3 Biosecurity	13
1.4 Biosafety	22
1.5 Dual-use research and culture of responsible science	24
1.6 Immunization	28
CATEGORY 2: EARLY DETECTION AND REPORTING FOR EPIDEMICS OF POTENTIAL INTERNATIONAL CONCERN	28
2.1 Laboratory systems strength and quality	28
2.2 Laboratory supply chains	32
2.3 Real-time surveillance and reporting	34
2.4 Surveillance data accessibility and transparency	36
2.5 Case-based investigation	43
2.6 Epidemiology workforce	47
CATEGORY 3: RAPID RESPONSE TO AND MITIGATION OF THE SPREAD OF AN EPIDEMIC	48
3.1 Emergency preparedness and response planning	48
3.2 Exercising response plans	52
3.3 Emergency response operation	55
3.4 Linking public health and security authorities	56
3.5 Risk communications	57
3.6 Access to communications infrastructure	60

3.7 Trade and travel restrictions	61
-----------------------------------	----

CATEGORY 4: SUFFICIENT AND ROBUST HEALTH SECTOR TO TREAT THE SICK AND PROTECT HEALTH WORKERS 63

4.1 Health capacity in clinics, hospitals, and community care centers	63
---	----

4.2 Supply chain for health system and healthcare workers	66
---	----

4.3 Medical countermeasures and personnel deployment	72
--	----

4.4 Healthcare access	74
-----------------------	----

4.5 Communications with healthcare workers during a public health emergency	76
---	----

4.6 Infection control practices and availability of equipment	78
---	----

4.7 Capacity to test and approve new medical countermeasures	79
--	----

CATEGORY 5: COMMITMENTS TO IMPROVING NATIONAL CAPACITY, FINANCING PLANS TO ADDRESS GAPS, AND ADHERING TO GLOBAL NORMS 82

5.1 International Health Regulations (IHR) reporting compliance and disaster risk reduction	82
---	----

5.2 Cross-border agreements on public health and animal health emergency response	83
---	----

5.3 International commitments	84
-------------------------------	----

5.4 Joint External Evaluation (JEE) and Performance of Veterinary Services Pathway (PVS)	86
--	----

5.5 Financing	87
---------------	----

5.6 Commitment to sharing of genetic and biological data and specimens	91
--	----

CATEGORY 6: OVERALL RISK ENVIRONMENT AND VULNERABILITY TO BIOLOGICAL THREATS 93

6.1 Political and security risk	93
---------------------------------	----

6.2 Socio-economic resilience	96
-------------------------------	----

6.3 Infrastructure adequacy	99
-----------------------------	----

6.4 Environmental risks	99
-------------------------	----

6.5 Public health vulnerabilities	100
-----------------------------------	-----

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 insufficient public evidence to determine that Tuvalu has a national antimicrobial resistance (AMR) plan for the surveillance, detection and reporting of priority antimicrobial resistant (AMR) pathogens. The World Health Organisation (WHO) Global Database for Antimicrobial Resistance Country Self Assessments reports that Tuvalu has a national AMR action plan "under development". [1] Tuvalu's Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence or mention of an AMR plan can be found through this social media account either. [2] The World Health Organisation (WHO)'s library of national action plans does not contain a plan for Tuvalu. [3] The WHO Country Cooperation Strategy for Tuvalu 2013-2017 mentions the existence of a "National Medicines Policy and Pharmaceutical Strategic Plan", but there is no evidence that this plan is shared via a publicly available website. [4] There is no evidence of a national laboratory or public health institute in Tuvalu.

[1] World Health Organisation (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments. [<http://amrcountryprogress.org/>]. Accessed 10 November 2020.

[2] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

[3] World Health Organisation (WHO). "Library of National Action Plans". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 10 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017". [http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 10 November 2020.

1.1.1b

Is there a national laboratory/laboratory system which tests for priority AMR pathogens?

All 7 + 1 priority pathogens = 2, Yes, but not all 7+1 pathogens = 1, No = 0

Current Year Score: 0

There is no public evidence that Tuvalu has a national laboratory or laboratory system which tests for priority antimicrobial resistant (AMR) pathogens. Tuvalu's only hospital, the Princess Margaret Hospital, does not have an online presence, and there is no evidence of media reports relating to work it may be doing on AMR. [1] There is no evidence of a national

laboratory or public health institute in Tuvalu. Neither Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and Environment has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence or mention of an AMR plan can be found through this social media account either. [2] The World Health Organisation (WHO)'s library of national action plans does not contain a plan for Tuvalu. [3]

[1] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022". [<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 10 November 2020.

[2] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

[3] World Health Organisation (WHO). "Library of National Action Plans". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 10 November 2020.

1.1.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that a Tuvaluan governmental agency conducts detection or surveillance activities for antimicrobial resistant (AMR) organisms or antimicrobial residues. No identifiable government bodies have an online presence, including the Ministry of Health and the Ministry of Natural Resources, Energy Environment, which might be considered the most likely to conduct such detection or surveillance. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence or mention of an AMR plan can be found through this social media account either. [1] The World Health Organisation (WHO) Global Database for Antimicrobial Resistance (AMR) Country Self Assessments reports that Tuvalu has a national AMR action plan "under development". [2] There is no mention of such activities in Tuvalu's 2008 Environmental Protection Act. [3] There is no evidence of relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

[2] World Health Organisation (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments". [<http://amrcountryprogress.org/>]. Accessed 10 November 2020.

[3] Government of Tuvalu. 2008. "Environmental Protection Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2008/2008-0002/EnvironmentalProtectionAct_1.pdf]. Accessed 10 November 2020.

1.1.2 Antimicrobial control

1.1.2a

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

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

Current Year Score: 0

There is insufficient evidence that Tuvalu has national legislation in place that specifically requires prescriptions for antibiotic use for humans. The Tuvalu Pharmaceutical Country Profile, a 2012 document published by the Ministry of Health in collaboration with the World Health Organisation, states that "antibiotics or injectable medicines are never sold over-the-counter without a prescription". [1] The 2016 Pharmacy and Therapeutic Products Act provides detailed information on prescription regulations and their execution. The law does not contain any mention of antibiotics or other specific medicines, instead referring to the Tuvalu Medicines Schedule for a list of substances subject to prescription, however this list could not be accessed. [2] There is no evidence that the Tuvalu Medicines Schedule is shared via a publicly available website; neither the Ministry of Health nor most other Tuvaluan government entities have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] There is no evidence of a national laboratory or public health institute in Tuvalu.

[1] Ministry of Health. June 2012. "Tuvalu Pharmaceutical Country Profile".

[https://www.who.int/medicines/areas/coordination/Tuvalu_PSCP_NarrativeFeb18.pdf?ua=1]. Accessed 13 November 2020.

[2] Government of Tuvalu. Act No. 006 of 2016. "Pharmacy and Therapeutic Products Act". [https://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2016/2016-0006/PharmacyandTherapeuticProductsAct2016_1.pdf]. Accessed 13 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 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 no public evidence that Tuvalu has national legislation or regulation in place that specifically requires prescriptions for antibiotic use for animals. The 2016 Pharmacy and Therapeutic Products Act provides detailed information on prescription regulations and their execution, but the law does not contain any provisions for animal health. [1] The Livestock Diseases Act of 2008 does not contain any provisions regulating the dispensing of medicines. [2] There are no other relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [3] However, the Tuvalu Pharmaceutical Country Profile, a 2012 document, states that "antibiotics or injectable medicines are never sold over-the-counter without a prescription", it does not contain any information specific to animal health. [4] Neither Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and the Environment has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [5] There is no evidence of other relevant media reports or academic studies.

[1] Government of Tuvalu. Act No. 006 of 2016. "Pharmacy and Therapeutic Products Act". [https://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2016/2016-0006/PharmacyandTherapeuticProductsAct2016_1.pdf].

Accessed 13 November 2020.

[2] Government of Tuvalu. 2008. "Livestock Diseases Act". [<http://www.tuvalu->

legislation.tv/cms/images/LEGISLATION/PRINCIPAL/1985/1985-0001/LivestockDiseasesAct_1.pdf]. Accessed 13 November 2020.

[3] Office of the Attorney General. "Tuvalu Legislation". [https://tuvalu-legislation.tv/cms/]. Accessed 13 November 2020.

[4] Ministry of Health. June 2012. "Tuvalu Pharmaceutical Country Profile".

[https://www.who.int/medicines/areas/coordination/Tuvalu_PSCP_NarrativeFeb18.pdf?ua=1]. Accessed 13 November 2020.

[5] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 08 December 2020.

1.2 ZONOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tuvalu has a national law, plan, or equivalent strategy document, on zoonotic disease. Neither Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and the Environment has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions zoonoses. [2,3,4] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 08 December 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 13 November 2020.

[3] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 13 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 13 November 2020.

1.2.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Tuvalu has national plans, guidelines, law or equivalent strategy document which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. Neither

Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and the Environment has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence or mention of zoonotic diseases can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions zoonoses. [2,3,4] There is no mention of zoonotic diseases or measures for identifying the risks in their transmission from animal to humans in the Livestock Diseases Act of 2008. [5] Tuvalu has not committed to a joint external evaluation (JEE). [6] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 13 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 13 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 13 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 13 November 2020.

[5] Government of Tuvalu. 2008. "Livestock Diseases Act". [[http://www.tuvalu-](http://www.tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/1985/1985-0001/LivestockDiseasesAct_1.pdf)

[legislation.tv/cms/images/LEGISLATION/PRINCIPAL/1985/1985-0001/LivestockDiseasesAct_1.pdf](http://www.tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/1985/1985-0001/LivestockDiseasesAct_1.pdf)]. Accessed 13 November 2020.

[6] World Health Organisation (WHO). "WHO Western Pacific Region: JEE mission reports".

[<https://www.who.int/ihr/procedures/mission-reports-western-pacific/en/>]. Accessed 13 November 2020.

1.2.1c

Is there national legislation, plans, or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tuvalu has national plans, guidelines, or laws that account for the surveillance and control of multiple zoonotic pathogens of public health concern. Neither Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and the Environment has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence or mention of zoonotic diseases can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions zoonoses. [2,3,4] Tuvalu is also a core member of the Pacific Public Health Surveillance Network, but no further evidence can be found on the surveillance and control of multiple zoonotic pathogens of public health concern. [5] Tuvalu has also not committed to a joint external evaluation (JEE). [6] There is no evidence of other relevant media reports or academic studies.

- [1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 13 November 2020.
- [2] Ministry of Health. "Strategic Health Plan 2009-2018". [http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 13 November 2020.
- [3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017". [http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 13 November 2020.
- [4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022". [<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 13 November 2020.
- [5] Pacific Public Health Surveillance Network. "PPHSN Core Members". [<https://www.pphsn.net/Structure/CoreMembers.htm>]. Accessed 13 November 2020.
- [6] World Health Organisation (WHO). "WHO Western Pacific Region: JEE mission reports". [<https://www.who.int/ihr/procedures/mission-reports-western-pacific/en/>]. Accessed 13 November 2020.

1.2.1d

Is there a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that there is a Tuvaluan department, agency, or similar unit dedicated zoonotic disease that functions across ministries. Neither Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and the Environment has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence or mention of zoonotic diseases can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions zoonoses. [2,3,4] Tuvalu has not committed to a joint external evaluation (JEE). [5] There is no evidence of other relevant media reports or academic studies.

- [1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 13 November 2020.
- [2] Ministry of Health. "Strategic Health Plan 2009-2018". [http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 13 November 2020.
- [3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017". [http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 13 November 2020.
- [4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022". [<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 13 November 2020.
- [5] World Health Organisation (WHO). "WHO Western Pacific Region: JEE mission reports". [<https://www.who.int/ihr/procedures/mission-reports-western-pacific/en/>]. Accessed 13 November 2020.

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tuvalu has a national mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency. Neither Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and the Environment has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence of such a national mechanism can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions livestock. [2,3,4] There is no mention of such a mechanism in the 2008 Livestock Diseases Act. [5] Tuvalu is also a core member of the Pacific Public Health Surveillance Network, but no further evidence can be found on the presence of such a national mechanism. [6] Tuvalu has also not committed to a Joint External Evaluation (JEE). [7] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 17 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[5] Government of Tuvalu. 2008. "Livestock Diseases Act". [http://www.tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/1985/1985-0001/LivestockDiseasesAct_1.pdf]. Accessed 17 November 2020.

[6] Pacific Public Health Surveillance Network. "PPHSN Core Members".

[<https://www.pphsn.net/Structure/CoreMembers.htm>]. Accessed 17 November 2020.

[7] World Health Organisation (WHO). "WHO Western Pacific Region: JEE mission reports".

[<https://www.who.int/ihr/procedures/mission-reports-western-pacific/en/>]. Accessed 17 November 2020.

1.2.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tuvalu has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals. Neither Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and the Environment has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence of such laws can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4] There is no mention of such protections in the 2008 Livestock Diseases Act, nor is there evidence of other relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [5,6] Tuvalu is also a core member of the Pacific Public Health Surveillance Network, but no further evidence can be found on the presence of such regulations. [7] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 17 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[5] Government of Tuvalu. 2008. "Livestock Diseases Act". [http://www.tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/1985/1985-0001/LivestockDiseasesAct_1.pdf]. Accessed 17 November 2020.

[6] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 17 November 2020.

[7] Pacific Public Health Surveillance Network. "PPHSN Core Members".

[<https://www.pphsn.net/Structure/CoreMembers.htm>]. Accessed 17 November 2020.

1.2.2c

Does the country conduct surveillance of zoonotic disease in wildlife (e.g., wild animals, insects, other disease vectors)?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tuvalu conducts surveillance of zoonotic disease in wildlife. Neither Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and the Environment has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence of such surveillance can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions zoonoses. [2,3,4] There is no evidence of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [5] Tuvalu is also a core member of the Pacific Public Health Surveillance Network, but no further evidence can be found on the surveillance of zoonotic

diseases. [6] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 17 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 17 November 2020.

[5] Office of the Attorney General. "Tuvalu Legislation". [https://tuvalu-legislation.tv/cms/]. Accessed 17 November 2020.

[6] Pacific Public Health Surveillance Network. "PPHSN Core Members".

[https://www.pphsn.net/Structure/CoreMembers.htm]. Accessed 17 November 2020.

1.2.3 International reporting of animal disease outbreaks

1.2.3a

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

Yes = 1 , No = 0

Current Year Score: 0

2019

OIE WAHIS database

1.2.4 Animal health workforce

1.2.4a

Number of veterinarians per 100,000 people

Input number

Current Year Score: -

No data available

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: -

No data available

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a national law, plan, or equivalent strategy document, on zoonotic diseases in general, and thus no evidence of provisions for coordinating such a plan with the private sector. Neither Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and the Environment has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence of zoonotic diseases can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions zoonoses. [2,3,4] There is no evidence of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [5] There is no evidence of a national laboratory or public health institute in Tuvalu. Also, there is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 17 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[5] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 17 November 2020.

1.3 BIOSECURITY

1.3.1 Whole-of- government biosecurity systems

1.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tuvalu publicly shares an up-to-date record of facilities in which especially dangerous pathogens and toxins are stored or processed. Indeed, there is no evidence that Tuvalu has facilities in which especially dangerous pathogens and toxins are stored or processed. Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence or mention of such facilities can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions dangerous pathogens. [2,3,4] However, there is a Biosecurity Act of 2017, listed on the Office of the Attorney General's online index of Tuvaluan laws, but it does not mention anything regarding the facilities in which dangerous pathogens and toxins are stored and processed. [5,6] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [7] Tuvalu has no reports or laws in the VERTIC database. [8]

[1] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 17 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 17 November 2020.

[5] Office of the Attorney General. "Tuvalu Legislation". [https://tuvalu-legislation.tv/cms/]. Accessed 17 November 2020.

[6] Government of Tuvalu. 2017. "Biosecurity Act". [http://tuvalu.tradeportal.org/media/tuvalu-biosecurity-act-2017_3_1.pdf]. Accessed 17 November 2020.

[7] United Nations Office at Geneva. "Browse States Parties". [https://bwc-ecbm.unog.ch/browse]. Accessed 17 November 2020.

[8] VERTIC. "BWC Legislation Database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/]. Accessed 17 November 2020.

1.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tuvalu has legislation or any regulations 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. Indeed, there is no evidence that Tuvalu has facilities in which especially dangerous pathogens and toxins are stored or processed. Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions biosecurity. [2,3,4] However, there is a Biosecurity Act of 2017, listed on the Office of the Attorney General's online index of Tuvaluan laws, but it does not mention anything regarding the facilities in which dangerous pathogens and toxins are stored and processed. [5,6] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [7] Tuvalu also has no relevant laws in the VERTIC database. [8]

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 17 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[5] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 17 November 2020.

[6] Government of Tuvalu. 2017. "Biosecurity Act". [http://tuvalu.tradeportal.org/media/tuvalu-biosecurity-act-2017_3_1.pdf]. Accessed 17 November 2020.

[7] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[8] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.3.1c

Is there an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tuvalu has in place legislation or regulations related to biosecurity, or that it has designated any agency responsible for biosecurity. However, there is a Biosecurity Act of 2017, listed on the Office of the Attorney General's online index of Tuvaluan laws, but it does not mention anything about an agency responsible for enforcement. [1,2]. Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found

on open source. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions biosecurity. [3,4,5] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [6] Tuvalu also has no relevant laws in the VERTIC database. [7]

[1] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 17 November 2020.

[2] Government of Tuvalu. 2017. "Biosecurity Act". [http://tuvalu.tradeportal.org/media/tuvalu-biosecurity-act-2017_3_1.pdf]. Accessed 17 November 2020.

[3] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[5] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[6] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[7] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.3.1d

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that shows that Tuvalu has taken action to consolidate inventories of especially dangerous pathogens and toxins into a minimum number of facilities, nor that the country has such inventories. However, there is a Biosecurity Act of 2017, listed on the Office of the Attorney General's online index of Tuvaluan laws, but it does not mention anything about pathogens and toxins. [1,2]. Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions dangerous pathogens. [3,4,5] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [6] Tuvalu also has no relevant laws in the VERTIC database. [7]

[1] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 17 November 2020.

[2] Government of Tuvalu. 2017. "Biosecurity Act". [<http://tuvalu.tradeportal.org/media/tuvalu-biosecurity-act->

2017_3_1.pdf]. Accessed 17 November 2020.

[3] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[5] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[6] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[7] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.3.1e

Is there public evidence of in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence of in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola. Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture, a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions dangerous pathogens and toxins. [2,3,4] However, there is a Biosecurity Act of 2017, listed on the Office of the Attorney General's online index of Tuvaluan laws, but it does not mention anything regarding the capacity to conduct PCR-based diagnostic testing. [5,6] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 17 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[5] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 17 November 2020.

[6] Government of Tuvalu. 2017. "Biosecurity Act". [http://tuvalu.tradeportal.org/media/tuvalu-biosecurity-act-2017_3_1.pdf]. Accessed 17 November 2020.

1.3.2 Biosecurity training and practices

1.3.2a

Does the country require biosecurity training, using a standardized, required approach, such as through a common curriculum or a 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 Tuvalu requires biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. However, in the Biosecurity Act of 2017 listed on the Office of the Attorney General's online index of Tuvaluan laws, there is mention of adequate training in biosecurity control measures required for a person performing the duties of a biosecurity officer. [1,2] Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions biosecurity training. [3,4,5,6] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [7] Tuvalu also has no relevant laws in the VERTIC database. [8]

[1] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 17 November 2020.

[2] Government of Tuvalu. 2017. "Biosecurity Act". [http://tuvalu.tradeportal.org/media/tuvalu-biosecurity-act-2017_3_1.pdf]. Accessed 17 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

[4] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[5] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf?jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

[2017_eng.pdf?jsessionid=211558E56DCAC542A0C297A149697282?sequence=1](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf?jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)]. Accessed 17 November 2020.

[6] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[7] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[8] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc->

legislation-database/t/]. Accessed 17 November 2020.

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

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

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

Current Year Score: 0

There is no public evidence that regulations or licensing conditions specify that security and other personnel in Tuvalu 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. However, in the Biosecurity Act of 2017 listed on the Office of the Attorney General's online index of Tuvaluan laws, there is mention of a biosecurity officer in charge of all the biosecurity risks, but there is no evidence if they are subject to the mentioned checks. [1,2] Also, there is no public evidence that Tuvalu has facilities that are equipped to house such materials. Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) mentions biosecurity training. [3,4,5,6] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [7] Tuvalu also has no relevant laws in the VERTIC database. [8]

[1] Office of the Attorney General. "Tuvalu Legislation". [https://tuvalu-legislation.tv/cms/]. Accessed 17 November 2020.

[2] Government of Tuvalu. 2017. "Biosecurity Act". [http://tuvalu.tradeportal.org/media/tuvalu-biosecurity-act-2017_3_1.pdf]. Accessed 17 November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 08 December 2020.

[4] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[5] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[6] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 17 November 2020.

[7] United Nations Office at Geneva. "Browse States Parties". [https://bwc-ecbm.unog.ch/browse]. Accessed 17 November 2020.

[8] VERTIC. "BWC Legislation Database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-

legislation-database/t/]. Accessed 17 November 2020.

1.3.4 Transportation security

1.3.4a

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

Yes = 1, No = 0

Current Year Score: 0

Tuvalu does not have publicly available information on national regulations on the safe and secure transport of infectious substances. However, in the Biosecurity Act of 2017 listed on the Office of the Attorney General's online index of Tuvaluan laws, there is mention of biosecurity import and export procedures but no mention of transport of infectious substances (specifically including Categories A and B). [1,2] Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [3,4,5,6] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [7] Tuvalu also has no relevant laws in the VERTIC database. [8]

[1] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 17 November 2020.

[2] Government of Tuvalu. 2017. "Biosecurity Act". [http://tuvalu.tradeportal.org/media/tuvalu-biosecurity-act-2017_3_1.pdf]. Accessed 17 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

[4] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[5] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[6] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[7] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[8] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.3.5 Cross-border transfer and end-user screening

1.3.5a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of Tuvaluan 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. However, in the Biosecurity Act of 2017 listed on the Office of the Attorney General's online index of Tuvaluan laws, there are mentions of biosecurity export and import procedures but no clear evidence of both oversight of cross-border transfer and end-user screening of dangerous pathogens. [1,2] Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [3,4,5,6] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [7] Tuvalu also has no relevant laws in the VERTIC database. [8]

[1] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 17 November 2020.

[2] Government of Tuvalu. 2017. "Biosecurity Act". [http://tuvalu.tradeportal.org/media/tuvalu-biosecurity-act-2017_3_1.pdf]. Accessed 17 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

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[7] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[8] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of national biosafety legislation and/or regulations in Tuvalu. There is no evidence of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [1] Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [2] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [3,4,5] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [6] Tuvalu also has no relevant laws in the VERTIC database. [7]

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[2] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 17 November 2020.

[3] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[5] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[6] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[7] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of national biosafety legislation and/or regulations in Tuvalu, or thus, of any agency responsible for enforcing such laws. There is no evidence of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [1] Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [2] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [3,4,5] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [6] Tuvalu also has no relevant laws in the VERTIC database. [7]

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[3] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

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[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[6] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[7] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 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 Tuvalu 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, there is no public evidence that Tuvalu has facilities that are equipped to house such materials. There is no evidence of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [1] Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. Tuvalu government had a national portal which listed all

its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4,5] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [6] Tuvalu also has no relevant laws in the VERTIC database. [7]

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[2] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

[3] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 17 November 2020.

[5] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 17 November 2020.

[6] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[7] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.5 DUAL-USE RESEARCH AND CULTURE OF RESPONSIBLE SCIENCE

1.5.1 Oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research

1.5.1a

Is there publicly available evidence that the country has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Tuvalu has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential, or other dual-use research. There is no evidence of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [1] Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture, a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. Neither the

Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4,5] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [6] Tuvalu also has no relevant laws in the VERTIC database. [7]

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[2] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

[3] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

[2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)]. Accessed 17 November 2020.

[5] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

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[6] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[7] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a national policy requiring oversight of dual-use research, such as research with especially dangerous pathogens, toxins, or pathogens with pandemic potential. There is no evidence of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [1] Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture, a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4,5] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [6] Tuvalu also has no relevant laws in the VERTIC database. [7]

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[7] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a Tuvaluan agency specifically responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, or other dual-use research. There is no mention of such an agency or of relevant laws on the Office of the Attorney General's online index of Tuvaluan laws. [1] Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture, a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4,5] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [6] Tuvalu also has no relevant laws in the VERTIC database. [7]

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[6] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November

2020.

[7] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.5.2 Screening guidance for providers of genetic material

1.5.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of national legislation, regulation, policy, or other guidance, requiring the screening of synthesised DNA before it is sold. There is no evidence of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [1] Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [2] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [3,4,5] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies. Tuvalu is not party to the Biological Weapons Convention and therefore does not have Confidence Building Measure reports with information on this. [6] Tuvalu also has no relevant laws in the VERTIC database. [7]

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[3] Ministry of Health. "Strategic Health Plan 2009-2018".

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[6] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 17 November 2020.

[7] VERTIC. "BWC Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 17 November 2020.

1.6 IMMUNIZATION

1.6.1 Vaccination rates

1.6.1a

Immunization rate (measles/MCV2)

Immunization rate (measles/MCV2), 95% or greater = 2, 80-94.9% = 1, Less than 80%, or no data = 0

Current Year Score: 1

2019

World Health Organization

1.6.1b

Are official foot-and-mouth disease (FMD) vaccination figures for livestock publicly available through the OIE database?

Yes = 1, No = 0

Current Year Score: 0

2020

OIE WAHIS database

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

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

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

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

Current Year Score: 0

There is no evidence that Tuvalu has a national laboratory system, let alone a system with the capacity to conduct diagnostic tests for at least 5 of the 10 core tests defined by the World Health Organisation (WHO). Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture, a Ministry of Defence, or similar bodies.

Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [1] There is a laboratory at the Princess Margaret Hospital (PMH), the country's only hospital, located on the main island of Funafuti. The Ministry of Health's Health Reform Strategy 2016-2019 describes this as "a modern facilitated laboratory" but does not provide additional information on its capabilities. The Strategy indicates that overseas referrals and diagnostics are common. [2] The Ministry of Health's Global AIDS Monitoring Report for Tuvalu mentions that the PMH laboratory has the capacity to conduct HIV "Determine and Serodia diagnostic tests". [3] A 2015 document published by the Laboratory Network (LabNet) of the Pacific Public Health Surveillance Network (PPHSN), which describes the laboratory capabilities of Pacific island countries, only identifies HIV, influenza, syphilis, and tuberculosis as tests that can be performed in-country by Tuvalu. According to the document, polymerase chain reaction tests for influenza are not conducted in the country and are instead referred to. [4] Other than this evidence, it is very difficult to assess which tests the PMH laboratory may be able to conduct. There is no evidence that Tuvalu has a national public health institute. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [5,6,7] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

[2] Ministry of Health. "Health Reform Strategy 2016-2019".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 18 November 2020.

[3] Ministry of Health. 2017. "Global AIDS Monitoring Report for Tuvalu".

[http://www.unaids.org/sites/default/files/country/documents/TUV_2017_countryreport.pdf]. Accessed 18 November 2020.

[4] Pacific Public Health Surveillance Network (PPHSN). "PPHSN LabNet Catalogue—2015 Edition".

[http://www.pphsn.net/Services/LabNet/PPHSN_LabNet_catalogL1L2L3_July2015-.pdf]. Accessed 18 November 2020.

[5] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[6] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[7] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 18 November 2020.

2.1.1b

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

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

Current Year Score: 0

There is no public evidence that Tuvalu 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. Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its

Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture, a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [1] There is a laboratory at the Princess Margaret Hospital (PMH), the country's only hospital. The Ministry of Health's Health Reform Strategy 2016-2019 describes this as "a modern facilitated laboratory" but does not provide additional information on its capabilities of coordinating testing at a national level during a public health emergency. [2] There is a worst-case scenario plan named 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic, and it only mentions to "test as many people as possible" with no detailed plan on testing. Also, there is no mention of a strategy on how to deal with unknown pathogens, or scaling capacity and defining goals for testing. [3] There is no evidence that Tuvalu has a national public health institute. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [4,5,6] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

[2] Ministry of Health. "Health Reform Strategy 2016-2019".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 18 November 2020.

[3] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 18 November 2020.

[4] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[5] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[6] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 18 November 2020.

2.1.2 Laboratory quality systems

2.1.2a

Is there a national laboratory that serves as a reference facility which is accredited (e.g., International Organization for Standardization [ISO] 15189:2003, U.S. Clinical Laboratory Improvement Amendments [CLIA])?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tuvalu has a national laboratory that serves as a reference facility, let alone one that is accredited. There is a laboratory at the Princess Margaret Hospital (PMH), the country's only hospital, located on the main island of Funafuti. The Ministry of Health's Health Reform Strategy 2016-2019 describes this as "a modern facilitated laboratory" but does not provide additional information on its capabilities or accreditation status. The Strategy indicates that overseas referrals and diagnostics are common. [1] Tuvalu's Ministry of Health does not have an online presence, and there is no evidence that Tuvalu has a national public health institute or a Ministry of Agriculture. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on

the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [2] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [3,4,5] There is no evidence of other relevant media reports or academic studies.

[1] Ministry of Health. "Health Reform Strategy 2016-2019".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 18 November 2020.

[2] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 18 November 2020.

[3] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[5] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 18 November 2020.

2.1.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tuvalu has a national laboratory that serves as a reference facility, let alone one that is subject to external quality assurance (EQA) review. There is a laboratory at the Princess Margaret Hospital (PMH), the country's only hospital, located on the main island of Funafuti. The Ministry of Health's Health Reform Strategy 2016-2019 describes this as "a modern facilitated laboratory" but does not provide additional information on its capabilities or EQA status. The Strategy indicates that overseas referrals and diagnostics are common. [1] Tuvalu's Ministry of Health does not have an online presence, and there is no evidence that Tuvalu has a national public health institute or a Ministry of Agriculture. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [2] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [3,4,5] There is no evidence of other relevant media reports or academic studies.

[1] Ministry of Health. "Health Reform Strategy 2016-2019".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 18 November 2020.

[2] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 18 November 2020.

[3] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[5] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 18 November 2020.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tuvalu has a specimen transport system, either nationally or as part of its participation in the Pacific Animal Health Laboratory Network (PAHLNet) or the Laboratory Network (LabNet) of the Pacific Public Health Surveillance Network (PPHSN). [1,2,3] There is no information about such a system shared via a public website by the government of Tuvalu. Neither the Ministry of Health nor The Ministry of Natural Resources, Energy, and the Environment. Tuvalu does not have a Ministry of Agriculture. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [4] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. PAHLNet provides guidance on the best referral routes and practices for specimens from Tuvalu to regional laboratories but does not provide information indicating that there is a single courier system in use. [5,6] The PPHSN provides similar guidelines for transportation practices but also does not provide information indicating that there is a single courier system in use. [7,8] There is no evidence of relevant studies or media reports.

[1] Pacific Community (SPC). "SPC Members". [<http://www.spc.int/our-members/>]. Accessed 18 November 2020.

[2] Pacific Community (SPC) Land Resources Division. "Pacific Animal Health Laboratory Network (PAHLNet)".

[<https://lrd.spc.int/information-and-networks/pahlNet>]. Accessed 18 November 2020.

[3] Pacific Public Health Surveillance Network (PPHSN). "LabNet". [<https://www.pphsn.net/Services/LabNet/intro.htm>]. Accessed 18 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 18 November 2020.

[5] Pacific Community (SPC) Land Resources Division. "PAHLNet Shipping Mechanism Fact Sheet". [<https://lrd.spc.int/our-work/animal-health-and-production/103/the-pahlNet-shipping-mechanism-factsheet>]. Accessed 18 November 2020.

[6] Pacific Community (SPC) Land Resources Division. "PAHLNet: Documents". [<https://lrd.spc.int/ahp-network/pahlNet/pahlNet-resources>]. Accessed 18 November 2020.

[7] Pacific Public Health Surveillance Network (PPHSN). "PPHSN LabNet reference Laboratories". [<https://www.pphsn.net/Services/LabNet/Ref-Laboratories-maps.pdf>]. Accessed 18 November 2020.

[8] Pacific Public Health Surveillance Network (PPHSN). "Referral of biological samples in the Pacific PPHSN LABNET Reference laboratory". [<https://www.pphsn.net/Services/LabNet/WD-4-Referral-of-biological-samples-in-the-Pacific-PPHSN-LABNET-Reference-laboratory.pdf>]. Accessed 18 November 2020.

2.2.2 Laboratory cooperation and coordination

2.2.2a

Is there a plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak?

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

Current Year Score: 0

There is no evidence that Tuvalu has a national laboratory system, let alone a plan in place to rapidly authorize or license laboratories to supplement its capacity to scale-up testing during an outbreak. Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture, a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [1] There is a laboratory at the Princess Margaret Hospital (PMH), the country's only hospital. The Ministry of Health's Health Reform Strategy 2016-2019 describes this as "a modern facilitated laboratory" but does not provide any information on a plan to rapidly license laboratories to supplement existing laboratory testing capacity during a public health emergency situation.[2] There is a worst-case scenario plan named 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic, but it does not provide any plan for national public health laboratory system to scale-up testing during an outbreak. [3] Tuvalu Government also has Emergencies and Threatened Emergencies (Special Powers) Act of 2008, but it does not contain any relevant information. [4] There is no evidence that Tuvalu has a national public health institute. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [5,6,7] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 08 December 2020.

[2] Ministry of Health. "Health Reform Strategy 2016-2019".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 18 November 2020.

[3] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 18 November 2020.

[4] Government of Tuvalu. 2008. "Emergencies and Threatened Emergencies (Special Powers) Act".

[<http://extwprlegs1.fao.org/docs/pdf/tuv79285.pdf>]. Accessed 18 November 2020.

[5] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[6] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[7] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 18 November 2020.

2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a

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

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

Current Year Score: 0

There is no public evidence that Tuvalu is conducting ongoing event-based surveillance and analysis for infectious disease. Neither Tuvalu's Ministry of Health, its Ministry of Natural Resources, Energy and the Environment, nor its Ministry of Education, Sports and Culture has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture, a Ministry of Defence, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [1] The Tuvalu Government's National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 contains a flow chart showing the bodies activated to respond to disasters, which does not include an emergency operations centre, also there is no mention of event-based surveillance. [2] There is no relevant information in the National Disaster Management Act of 2008. [3] Tuvalu Government also has Emergencies and Threatened Emergencies (Special Powers) Act of 2008, but it does not contain any information on event-based surveillance. [4] However, there is a recommendation made in one of the recent regional meeting of the Pacific Public Health Surveillance Network (PPHSN) to set up Pacific Syndromic Surveillance System, which will become SurvNet and include event-based surveillance. [5]

[1] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 18 November 2020. 2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016."

[http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 18 November 2020.

[3] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 18 November 2020.

[4] Government of Tuvalu. 2008. "Emergencies and Threatened Emergencies (Special Powers) Act".

[http://extwprlegs1.fao.org/docs/pdf/tuv79285.pdf]. Accessed 18 November 2020.

[5] Pacific Community. 2019. "Tackling infectious diseases and antimicrobial resistance through One Health".

[https://www.spc.int/updates/blog/2019/07/tackling-infectious-diseases-and-antimicrobial-resistance-through-one-health]. Accessed 18 November 2020.

2.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Tuvalu reported a potential public health emergency of international concern (PHEIC) to the World Health Organisation (WHO) within the last two years. The WHO Disease Outbreak News site reports no recent outbreaks of reportable diseases. [1] A recent regional report on the WHO Western Pacific regional office webpage on "Covid-19 situation" reports zero cases of Covid-19 as of November 11, 2020, in Tuvalu. [2] Tuvalu's Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with a latest post in which the country announced a State of Public Emergency for the whole of Tuvalu on 20 March 2020 for the management and minimization of the impact of Coronavirus (Covid-19). [3] There is no evidence of other relevant media reports or academic studies.

[1] World Health Organisation (WHO). "Disease Outbreak News: Tuvalu".

[<https://www.who.int/csr/don/archive/country/tuv/en/>]. Accessed 18 November 2020.

[2] World Health Organisation (WHO), Western Pacific Region. "Covid-19 situation report for the Western Pacific Region".

[<https://www.who.int/westernpacific/internal-publications-detail/covid-19-situation-report-for-the-western-pacific-region-28-4-november-2020---10-november-2020>]. Accessed 18 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 18 November 2020.

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

Does the government operate an electronic reporting surveillance system at both the national and the sub-national level?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tuvalu operates an electronic reporting surveillance system at both the national and sub-national level. Tuvalu's Ministry of Health does not have an online presence, and there is no evidence that Tuvalu has a national public health institute. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [2,3,4] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 18 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 18 November 2020.

2.3.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tuvalu operates an electronic reporting surveillance system at both the national and sub-national level, let alone one that collects ongoing or real-time laboratory data. Tuvalu's Ministry of Health does not have an online presence, and there is no evidence that Tuvalu has a national public health institute. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [2,3,4] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 18 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 18 November 2020.

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

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

Current Year Score: 0

There is no public evidence that electronic health records are commonly in use in Tuvalu. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4] The country's only hospital, the Princess Margaret Hospital on the main island of Funafuti, does not have an online presence. [5] A WHO report on the 'Agenda on Harnessing E-Health for

Improved Health Service Delivery in the Western Pacific' identifies Tuvalu as having no national e-health strategy. [6]

[1] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 18 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 18 November 2020.

[5] Ministry of Health. "Health Reform Strategy 2016-2019".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 18 November 2020.

[6] World Health Organisation (WHO). "Regional Action Agenda on Harnessing E-Health for Improved Health Service Delivery in the Western Pacific". [https://www.who.int/docs/default-source/wpro---documents/regional-committee/session-69/working-documents/wpr-rc69-8-harnessing-e-health-annex.pdf?sfvrsn=5709233f_4]. Accessed 18 November 2020.

2.4.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence to confirm that Tuvalu's national public health system has access to electronic health records of individuals in their country. Indeed, there is no public evidence that electronic health records are commonly in use. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4] The country's only hospital, the Princess Margaret Hospital on the main island of Funafuti, does not have an online presence. [5] A WHO report on the 'Agenda on Harnessing E-Health for Improved Health Service Delivery in the Western Pacific' identifies Tuvalu as having no national e-health strategy. [6]

[1] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 18 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 18 November

2020.

[5] Ministry of Health. "Health Reform Strategy 2016-2019".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 18 November 2020.

[6] World Health Organisation (WHO). "Regional Action Agenda on Harnessing E-Health for Improved Health Service Delivery in the Western Pacific". [https://www.who.int/docs/default-source/wpro---documents/regional-committee/session-69/working-documents/wpr-rc69-8-harnessing-e-health-annex.pdf?sfvrsn=5709233f_4]. Accessed 18 November 2020.

2.4.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence to confirm that patient health data used by Tuvalu's national public health system is comparable or adheres to consistent standards. In general, there is no public evidence that electronic health records are commonly in use in Tuvalu. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4] The country's only hospital, the Princess Margaret Hospital on the main island of Funafuti, does not have an online presence. [5] A WHO report on the 'Agenda on Harnessing E-Health for Improved Health Service Delivery in the Western Pacific' identifies Tuvalu as having no national e-health strategy. [6]

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 18 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 18 November 2020.

[5] Ministry of Health. "Health Reform Strategy 2016-2019".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 18 November 2020.

[6] World Health Organisation (WHO). "Regional Action Agenda on Harnessing E-Health for Improved Health Service Delivery in the Western Pacific". [https://www.who.int/docs/default-source/wpro---documents/regional-committee/session-69/working-documents/wpr-rc69-8-harnessing-e-health-annex.pdf?sfvrsn=5709233f_4]. Accessed 18 November 2020.

2.4.2 Data integration between human, animal, and environmental health sectors

2.4.2a

Is there evidence of established mechanisms at the relevant ministries responsible for animal, human, and wildlife surveillance to share data (e.g., through mosquito surveillance, brucellosis surveillance)?

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence to confirm the existence of mechanisms to share data between the relevant ministries responsible for animal, human and wildlife surveillance. There is no information about such mechanisms shared via a public website by the government of Tuvalu. Neither Tuvalu's Ministry of Health nor its Ministry of Natural Resources, Energy and the Environment, has an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [2,3,4] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 18 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 18 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 18 November 2020.

2.4.3 Transparency of surveillance data

2.4.3a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tuvalu makes de-identified health surveillance data on disease outbreaks publicly available on government websites. Tuvalu's Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [1] There is no evidence that Tuvalu has a national public health institute or a

national laboratory system. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4] The only laboratory in the country is in the country's only hospital, the Princess Margaret Hospital on the main island of Funafuti. Neither the hospital nor its laboratory has an online presence. [5] There is the presence of surveillance reports by WHO Regional Office for the Western Pacific (WPRO) on "Covid-19 situation" reporting zero cases of Covid-19 as of November 11, 2020, in Tuvalu. [6]

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 18 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 18 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

[2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)]. Accessed 18 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 18 November 2020.

[5] Ministry of Health. "Health Reform Strategy 2016-

2019". [https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 18 November 2020.

[6] World Health Organisation (WHO), Western Pacific Region. "Covid-19 situation report for the Western Pacific Region".

[<https://www.who.int/westernpacific/internal-publications-detail/covid-19-situation-report-for-the-western-pacific-region-28-4-november-2020---10-november-2020>]. Accessed 18 November 2020.

2.4.3b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tuvalu makes de-identified COVID-19 surveillance data available via daily reports, or other formats, on government websites. Tuvalu's Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence on COVID-19 surveillance data can be found through this social media account either. [1] There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4] The only laboratory in the country is in the country's only hospital, the Princess Margaret Hospital on the main island of Funafuti. Neither the hospital nor its laboratory has an online presence. [5] There is the presence of surveillance reports by WHO Regional Office for the Western Pacific (WPRO) on "Covid-19 situation" reporting zero cases of Covid-19 as of November 11, 2020, in Tuvalu. [6]

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 19 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 19 November

2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 19 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 19 November 2020.

[5] Ministry of Health. "Health Reform Strategy 2016-

2019". [https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 19 November 2020.

[6] World Health Organisation (WHO), Western Pacific Region. "Covid-19 situation report for the Western Pacific Region".

[<https://www.who.int/westernpacific/internal-publications-detail/covid-19-situation-report-for-the-western-pacific-region-28-4-november-2020---10-november-2020>]. Accessed 19 November 2020.

2.4.4 Ethical considerations during surveillance

2.4.4a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tuvalu has laws or guidelines that safeguard the confidentiality of health information for individuals, such as that generated through health surveillance activities. Indeed, there is no evidence that Tuvalu makes health surveillance data publicly available on government websites. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant information can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4] There is no evidence of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [5] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 19 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 19 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 19 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 19 November 2020.

[5] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 19 November 2020.

2.4.4b

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tuvalu 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. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant information can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4] There is no evidence of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [5] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 19 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 19 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 19 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 19 November 2020.

[5] Office of the Attorney General. "Tuvalu Legislation". [https://tuvalu-legislation.tv/cms/]. Accessed 19 November 2020.

2.4.5 International data sharing

2.4.5a

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

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

Current Year Score: 0

There is no public evidence that the government of Tuvalu has made a specific commitment to share surveillance data for one or more diseases during a public health emergency with other countries in the region. Tuvalu presumably shares surveillance with the regional laboratory networks in which it participates, since both seek to ensure early detection of infectious diseases. These laboratories are as follows: Tuvalu participates in the Pacific Animal Health Laboratory Network (PAHLNet), organised through the Pacific Regional Influenza Pandemic Preparedness Project (PRIPPP). [1,2,3,4] LabNet comprises public health laboratories in its member countries (the same 22 Pacific nations) and has a similar three-tier

structure for laboratory referral. [5] The Pacific Public Health Surveillance Network (PPHSN) is a joint initiative of the Pacific Community (SPC) and the World Health Organisation (WHO). [6] However, neither PAHLNet nor LabNet shares via public website information on surveillance during emergencies. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu currently has a Ministry of Agriculture or a similar body. There is no evidence that Tuvalu has a national laboratory system or a national public health institute. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No required evidence can be found through this social media account either. [7] There is no mention of surveillance information sharing in the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 or the National Disaster Management Act of 2008. [8,9] There is no evidence of other relevant media reports or academic studies.

[1] Pacific Community (SPC). "SPC Members". [<http://www.spc.int/our-members/>]. Accessed 19 November 2020.

[2] Pacific Community (SPC) Land Resources Division. "Pacific Animal Health Laboratory Network (PAHLNet)". [<https://lrd.spc.int/information-and-networks/pahlNet>]. Accessed 19 November 2020.

[3] Pacific Community (SPC) Land Resources Division. "PAHLNet Shipping Mechanism Fact Sheet". [<https://lrd.spc.int/our-work/animal-health-and-production/103/the-pahlNet-shipping-mechanism-factsheet>]. Accessed 19 November 2020.

[4] Pacific Community (SPC) Land Resources Division. "PAHLNet: Documents". [<https://lrd.spc.int/ahp-network/pahlNet/pahlNet-resources>]. Accessed 19 November 2020.

[5] Pacific Public Health Surveillance Network (PPHSN). "LabNet". [<https://www.pphsn.net/Services/LabNet/intro.htm>]. Accessed 19 November 2020.

[6] World Health Organisation (WHO), Western Pacific Region. "Pacific Islands Surveillance". [<https://www.who.int/westernpacific/emergencies/surveillance/pacific-islands-surveillance>]. Accessed 19 November 2020.

[7] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 19 November 2020.

[8] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 19 November 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 public evidence that Tuvalu has a national system in place to provide support at the sub-national level to conduct contact tracing in the event of an active or future public health emergency. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social

media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [1] In WHO's report on 'Novel Coronavirus (COVID-19) Pacific Preparedness & Response', there is mention of intensive contact tracing under priority action for Pacific Island Countries and Areas (PICs) but no evidence of a national system already in place in Tuvalu. [2] There is no evidence of a system to conduct contact tracing in the 'Talaaliki Plan' of the Tuvalu Government, which provides a blueprint for action to deal with the Covid-19 pandemic. [3] No relevant information can be found in Emergencies and Threatened Emergencies (Special Powers) Act of 2008 of the Tuvalu Government. [4]. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [5,6,7] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 19 November 2020.

[2] World Health Organisation (WHO). "Novel Coronavirus (COVID-19) Pacific Preparedness & Response". [https://www.who.int/docs/default-source/wpro---documents/dps/outbreaks-and-emergencies/covid-19/covid-19-pacific-situation-report-9.pdf?sfvrsn=56597bf5_2&download=true]. Accessed 19 November 2020.

[3] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 19 November 2020.

[4] Government of Tuvalu. 2008. "Emergencies and Threatened Emergencies (Special Powers) Act". [<http://extwprlegs1.fao.org/docs/pdf/tuv79285.pdf>]. Accessed 19 November 2020.

[5] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 19 November 2020.

[6] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 19 November 2020.

[7] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 19 November 2020.

2.5.1b

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

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

Current Year Score: 0

There is no public evidence that Tuvalu provides wraparound services to enable infected people and their contacts to self-isolate as recommended, particularly economic support and medical attention. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [1] In WHO's report on 'Novel Coronavirus (COVID-19) Pacific Preparedness & Response', there is no mention of wraparound services for Tuvalu. [2] There is no relevant evidence in the 'Talaaliki Plan' of the Tuvalu Government, which provides a blueprint for action to deal with the Covid-19 pandemic. [3] In the Emergencies and Threatened Emergencies (Special Powers) Act of 2008 of the Tuvalu Government, there is mention of provision for payment of compensation and remuneration to persons affected by the emergency

regulations, but no further details are provided of a system in place. [4] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [5,6,7] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 19 November 2020.

[2] World Health Organisation (WHO). "Novel Coronavirus (COVID-19) Pacific Preparedness & Response". [https://www.who.int/docs/default-source/wpro---documents/dps/outbreaks-and-emergencies/covid-19/covid-19-pacific-situation-report-9.pdf?sfvrsn=56597bf5_2&download=true]. Accessed 19 November 2020.

[3] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 19 November 2020.

[4] Government of Tuvalu. 2008. "Emergencies and Threatened Emergencies (Special Powers) Act". [<http://extwprlegs1.fao.org/docs/pdf/tuv79285.pdf>]. Accessed 19 November 2020.

[5] Ministry of Health. "Strategic Health Plan 2009-2018". [http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 19 November 2020.

[6] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017". [http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 19 November 2020.

[7] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022". [<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 19 November 2020.

2.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tuvalu makes de-identified data on contact tracing efforts for COVID-19 available via daily reports, or other formats, on government websites. Tuvalu's Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No evidence on contact tracing efforts for COVID-19 can be found through this social media account either. [1] There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [2,3,4] There is the presence of surveillance reports by WHO Regional Office for the Western Pacific (WPRO) on "Covid-19 situation" reporting zero cases of Covid-19 as of November 11, 2020, in Tuvalu and hence there has been no contact tracing exercise done by the Government this year. [5] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 19 November 2020.

[2] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 19 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 19 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 19 November 2020.

[5] World Health Organisation (WHO), Western Pacific Region. "Covid-19 situation report for the Western Pacific Region".

[<https://www.who.int/westernpacific/internal-publications-detail/covid-19-situation-report-for-the-western-pacific-region-28-4-november-2020---10-november-2020>]. Accessed 19 November 2020.

2.5.2 Point of entry management

2.5.2a

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

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

Current Year Score: 0

There is insufficient public evidence of a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travellers and trace and quarantine their contacts in the event of an active or future public health emergency. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Also, there is no online presence of Tuvalu's border control authorities. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [1] There is no evidence of such an agreement or plan in the 'Talaaliki Plan' of the Tuvalu Government, which provides a blueprint for action to deal with the Covid-19 pandemic. [2] There is no mention of relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [3] The Emergencies and Threatened Emergencies (Special Powers) Act of 2008 of the Tuvalu Government contains no relevant information. [4] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contain relevant information. [5,6,7] There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 29 April 2021.

[2] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 29 April 2021.

[3] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 29 April 2021.

[4] Government of Tuvalu. 2008. "Emergencies and Threatened Emergencies (Special Powers) Act".

[<http://extwprlegs1.fao.org/docs/pdf/tuv79285.pdf>]. Accessed 29 April 2021.

[5] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 29 April 2021.

[6] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 29 April 2021.

[7] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".
[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 29 April 2021.

2.6 EPIDEMIOLOGY WORKFORCE

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

2.6.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 0

There is no evidence that an applied epidemiology training program is available in Tuvalu, or that its government provides resources to send citizens to another country to participate in such programs. Tuvalu is not among the countries where programs are offered by Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) or by South East Asia Field and Epidemiology and Technology Network (SafetyNet), the closest regional network for such training. [1,2] There is no evidence that the US Centres for Disease Control (CDC) conducts an applied epidemiology training program in Tuvalu. [3] There is no information about applied epidemiology training programs shared via a public website by the government of Tuvalu. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4]

[1] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs".

[<https://www.tephinet.org/training-programs>]. Accessed 19 November 2020.

[2] South East Asia Field and Epidemiology and Technology Network (SafetyNet). [<https://www.safetynet-web.org/>]. Accessed 19 November 2020.

[3] Centres for Disease Control. "Global Health Protection and Security: Field Epidemiology Training Program".

[<https://www.cdc.gov/globalhealth/healthprotection/fetp/index.htm>]. Accessed 19 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 19 November 2020.

2.6.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that an applied epidemiology training program is available in Tuvalu, or that its government provides resources to send citizens to another country to participate in such programs, let alone the possibility of the program being made available to animal health professionals. Tuvalu is not among the countries where programs are offered by Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) or by South East Asia Field and Epidemiology and Technology Network (SafetyNet), the closest regional network for such training. [1,2] There is no evidence that the US Centres for Disease Control (CDC) conducts an applied epidemiology training program in Tuvalu. [3] There is no information about applied epidemiology training programs shared via a public website by the government of Tuvalu. Tuvalu's Ministry of Health does not have an online presence. There is no evidence that Tuvalu has a national public health institute or a national laboratory system. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4]

[1] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs". [https://www.tephinet.org/training-programs]. Accessed 19 November 2020.

[2] South East Asia Field and Epidemiology and Technology Network (SafetyNet). [https://www.safetynet-web.org/]. Accessed 19 November 2020.

[3] Centres for Disease Control. "Global Health Protection and Security: Field Epidemiology Training Program". [https://www.cdc.gov/globalhealth/healthprotection/fetp/index.htm]. Accessed 19 November 2020.

[4] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 19 November 2020.

2.6.2 Epidemiology workforce capacity

2.6.2a

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

Yes = 1 , No = 0

Current Year Score: 0

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 1

There is public evidence that Tuvalu has a disease-specific plan in place, but there is no evidence of an overarching plan. There is a worst-case scenario plan named 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic along with phased contingency plans. [1] There is no evidence that Tuvalu has a national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential. The most seemingly relevant documents that are available on a public website are the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 or the National Disaster Management Act of 2008. Neither contains any provisions for dealing with public health emergencies, or for that measure any mention of combating disease, save a single mention in the Strategic Plan that disease outbreaks are among the risks Tuvalu faces. [2,3] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [2]

[1] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 19 November 2020.

[2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 19 November 2020.

[3] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 19 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 19 November 2020.

3.1.1b

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

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

Current Year Score: 0

There is no evidence that Tuvalu 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. Tuvalu only has a worst-case scenario plan named 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic along with phased contingency plans, which came out only in April 2020. [1] The most seemingly relevant documents that are available on a public website are the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 or the National Disaster Management Act of 2008. Neither contains any provisions for dealing with public health emergencies, or for that measure any mention of combating disease, save a single mention in the Strategic Plan that disease outbreaks are among the risks Tuvalu faces. [2,3] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open

source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4] Several bodies identified in the Strategic Plan has having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [2]

[1] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 19 November 2020.

[2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 19 November 2020.

[3] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 19 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 19 November 2020.

3.1.1c

If an overarching plan is in place, does it include considerations for pediatric and/or other vulnerable populations?

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

Current Year Score: 0

There is no evidence that Tuvalu has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, let alone one that includes plans for paediatric and vulnerable populations. Tuvalu only has a worst-case scenario plan named 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic along with phased contingency plans, which came out only in April 2020. The plan does not include considerations for pediatric or other vulnerable populations [1] The most seemingly relevant documents that are available on a public website are the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 or the National Disaster Management Act of 2008. Neither contains any provisions for dealing with public health emergencies, or for that measure any mention of combating disease, save a single mention in the Strategic Plan that disease outbreaks are among the risks Tuvalu faces. [2,3] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4] Several bodies identified in the Strategic Plan has having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [2]

[1] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 19 November 2020.

[2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 19 November 2020.

[3] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 19 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 19 November 2020.

3.1.1d

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

Yes = 1, No = 0

Current Year Score: 0

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

3.1.2 Private sector involvement in response planning

3.1.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tuvalu has a specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. Indeed, there is no evidence that Tuvalu has a national public health emergency response plan in place. Tuvalu only has a worst-case scenario plan named 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic along with phased contingency plans. This plan also does not include any specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. [1] The most seemingly relevant documents that are available on a public website are the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 or the National Disaster Management Act of 2008. Neither contains any provisions for dealing with public health emergencies, or for that measure any mention of combating disease, save a single mention in the Strategic Plan that disease outbreaks are among the risks Tuvalu faces. [2,3] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [2]

[1] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 19 November 2020.

[2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 19 November 2020.

[3] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 19 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 19 November 2020.

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 0

There is no evidence that Tuvalu has a policy, plan or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic for one or more diseases. There is insufficient evidence in the 'Talaaliki Plan' of the Tuvalu Government, which provides a blueprint for action to deal with the Covid-19 pandemic along with phased contingency plans. There is no mention that this disease specific plan can be used for other diseases. [1] The most seemingly relevant documents that are available on a public website are the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 or the National Disaster Management Act of 2008. Neither contains any provisions for dealing with public health emergencies, or for that measure any mention of combating disease, save a single mention in the Strategic Plan that disease outbreaks are among the risks Tuvalu faces. [2,3] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [2]

[1] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 20 November 2020.

[2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 20 November 2020.

[3] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 20 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 20 November 2020.

3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a

Does the country meet one of the following criteria?

- Is there evidence that the country has activated their national emergency response plan for an infectious disease outbreak in the past year?

- Is there evidence that the country has completed a national-level biological threat-focused exercise (either with WHO or separately) in the past year?

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

Current Year Score: 1

There is public evidence that Tuvalu has a national emergency response plan in place for a the coronavirus outbreak and which was activated in the past year. The 'Talaaliki Plan' of the Tuvalu Government, came out in April 2020, to provide a blueprint for action to deal with the Covid-19 pandemic along with phased contingency plans. [1] There is also evidence that the Tuvalu government worked with the Australian government in order to address health and education systems support, as well as investing in food security, climate resilient economic reform and maritime security, including fisheries, to support a resilient recovery in Tuvalu.[2] However, there is no evidence that the country has completed a national-level biological threat-focused exercise, either with WHO or separately, in the past year. [3] The most seemingly relevant documents that are available on a public website are the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 or the National Disaster Management Act of 2008. Neither contains any evidence that the country has completed a national-level biological threat-focused exercise in the past year. [4,5] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [6]

[1] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 31 May 2021.

[2] Tuvalu COVID-19 Development and Response plan [<https://www.dfat.gov.au/sites/default/files/covid-response-plan-tuvalu.pdf>]. Accessed 31 May 2021.

[3] World Health Organisation. "Simulation Exercise". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 31 May 2021.

[4] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 31 May 2021.

[5] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 31 May 2021.

[6] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 31 May 2021.

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 Tuvalu in the past year has undergone an exercise to identify a list of gaps and best practices through a biological threat-focused international health regulations (IHR) exercise with the World Health Organisation (WHO). There is no mention of such a review for Tuvalu on the WHO extranet webpage listing after action reviews, in the WHO online profile for Tuvalu, on the WHO Strategic Partnership Portal, or on the website of the WHO Western Pacific regional office. [1,2,3,4] There is no relevant information shared via a public website by the government of Tuvalu. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's

government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [5] Several bodies identified in the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group.

[1] World Health Organisation (WHO). "After Action Review". [<https://extranet.who.int/sph/after-action-review>]. Accessed 20 November 2020.

[2] World Health Organisation (WHO). "Tuvalu". [<https://www.who.int/countries/tuv/en/>]. Accessed 20 November 2020.

[3] World Health Organisation (WHO). "Strategic Partnership Portal". [<https://extranet.who.int/sph/>]. Accessed 20 November 2020.

[4] World Health Organisation (WHO). "Western Pacific". [<http://www.who.int/westernpacific>]. Accessed 20 November 2020.

[5] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 20 November 2020.

3.2.2 Private sector engagement in exercises

3.2.2a

Is there evidence that the country in the past year has undergone a national-level biological threat-focused exercise that has included private sector representatives?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tuvalu has undergone a national-level biological threat-focused exercise, either with WHO or separately, in the past year, let alone the inclusion of private sector representatives. No evidence of such exercises can be found for Tuvalu on the WHO extranet webpage listing simulation exercises, in the WHO online profile for Tuvalu, on the WHO Strategic Partnership Portal, or on the website of the WHO Western Pacific regional office. [1,2,3,4] There is no relevant information shared via a public website by the government of Tuvalu. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [5] Several bodies identified in the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [5]

[1] World Health Organisation. "Simulation Exercise". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 20 November 2020.

[2] World Health Organisation (WHO). "Tuvalu". [<https://www.who.int/countries/tuv/en/>]. Accessed 20 November 2020.

[3] World Health Organisation (WHO). "Strategic Partnership Portal". [<https://extranet.who.int/sph/>]. Accessed 20 November 2020.

[4] World Health Organisation (WHO). "Western Pacific". [<http://www.who.int/westernpacific>]. Accessed 20 November 2020.

[5] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 20 November 2020.

3.3 EMERGENCY RESPONSE OPERATION

3.3.1 Emergency response operation

3.3.1a

Does the country have in place an Emergency Operations Center (EOC)?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tuvalu has an emergency operations centre. The government's Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 contains a flow chart showing the bodies activated to respond to disasters, which does not include an emergency operations centre. [1] There is no relevant information in the National Disaster Management Act of 2008. [2] Tuvalu's Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 20 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 20 November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 20 November 2020.

3.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tuvalu has an emergency operations centre, or that it is required to conduct a drill once a year/that it conducts a drill once a year. The government's Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 contains a flow chart showing the bodies activated to respond to disasters, which does not include an emergency operations centre. [1] There is no relevant information in the National Disaster Management Act of 2008. [2] Tuvalu's Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either.[3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 20 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 20 November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 20 November 2020.

3.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tuvalu has an emergency operations centre, let alone one that can conduct, or has conducted within the last year, coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. The government's Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 contains a flow chart showing the bodies activated to respond to disasters, which does not include an emergency operations centre. [1] There is no relevant information in the National Disaster Management Act of 2008. [2] Tuvalu's Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 20 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 20 November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 20 November 2020.

3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

3.4.1a

Does the country meet one of the following criteria?

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

agreements between the public health and security authorities to respond to a potential deliberate biological event (i.e., bioterrorism attack)?

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

Current Year Score: 0

There is no evidence that Tuvalu'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 most seemingly relevant documents that are available on a public website are the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 and the National Disaster Management Act of 2008. Neither contains any provisions for dealing with deliberate biological events such as a bioterrorism attack. [1,2] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 23 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 23 November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 23 November 2020.

3.5 RISK COMMUNICATIONS

3.5.1 Public communication

3.5.1b

Does the risk communication plan (or other legislation, regulation or strategy document used to guide national public health response) outline how messages will reach populations and sectors with different communications needs (eg different languages, location within the country, media reach)?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence Tuvalu has in place a risk communication plan that is specifically intended for use during a public health emergency and which outlines how messages will reach populations and sectors with different communications needs. The most seemingly relevant documents that are available on a public website are the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 and the National Disaster Management Act of 2008. Neither contains any provisions for dealing with public health emergencies or for communicating risk. The Strategic Plan does detail the communications capabilities of the Tuvaluan infrastructure, which include phone connections between the main island, Funafuti, and outlying islands, based in post offices. Radiophone between islands is also available. [1,2] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the

website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] No evidence of a specific risk communication plan can be found in the worst-case scenario response plan named 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic. [4] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 23 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 23 November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 23 November 2020.

[4] Government of Tuvalu. 2020. "Talaaliki Plan". [https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf]. Accessed 23 November 2020.

3.5.1 Risk communication planning

3.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tuvalu has in place a risk communication plan, let alone one that is specifically intended for use during a public health emergency. The most seemingly relevant documents that are available on a public website are the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 and the National Disaster Management Act of 2008. Neither contains any provisions for dealing with public health emergencies or for communicating risk. [1,2] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] No evidence of a specific risk communication plan can be found in the worst-case scenario response plan named 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic. [4] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 23 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 23 November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 23 November 2020.

[4] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 23 November 2020.

3.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no public evidence that Tuvalu has a risk communication plan, let alone the designation of a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. The most seemingly relevant documents that are available on a public website are the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 and the National Disaster Management Act of 2008. Neither contains any provisions for dealing with public health emergencies or for communicating risk. [1,2] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] No evidence of a specific risk communication plan can be found in the worst-case scenario response plan named 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic. [4] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 23 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 23 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 23 November 2020.

[4] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 23 November 2020.

3.5.2 Public communication

3.5.2a

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

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

Current Year Score: 0

There is no evidence that the government uses media platforms to inform the public about public health emergencies. Neither the Ministry of Health nor most other Tuvaluan government entities have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. The account has been otherwise found to be relatively inactive in terms of informing the public about ongoing public health concerns. [1] Several bodies identified in the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. The Strategic Plan does not mention the use of radio or television to inform the public about public health emergencies. [2]

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 23 November 2020.

[2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 23 November 2020.

3.5.2b

Is there evidence that senior leaders (president or ministers) have shared misinformation or disinformation on infectious diseases in the past two years?

No = 1, Yes = 0

Current Year Score: 1

There is no evidence that the senior leaders (president or ministers) have shared misinformation or disinformation on infectious diseases in the past two years. There is an unverified social media account of the Government of Tuvalu with the latest post on Covid-19 policy from March 2020. The account has been otherwise found to be relatively inactive in terms of informing the public about ongoing public health concerns. [1] An unverified and inactive social media account of the Prime Minister of Tuvalu is also found online, with no posts on infectious diseases. [2] No evidence of any senior leaders sharing misinformation or disinformation on infectious diseases in the past two years can be found on any international and national news outlets.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 23 November 2020.

[2] Twitter. "Tuvalu PM". [<https://twitter.com/TuvaluPM>]. Accessed 23 November 2020.

3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a

Percentage of households with Internet

Input number

Current Year Score: 49.32

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: 70.36

2019

International Telecommunication Union (ITU)

3.6.3 Female access to a mobile phone

3.6.3a

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

Input number

Current Year Score: 2.87

2018-2019

Gallup; Economist Impact calculation

3.6.4 Female access to the Internet

3.6.4a

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

Input number

Current Year Score: 4.44

2018-2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

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

Yes = 0, No = 1

Current Year Score: 1

There is no evidence that Tuvalu 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. The Disease Outbreak

News of the World Health Organisation (WHO) does not list any such restrictions.[1] Likewise, the WHO Western Pacific regional office webpage for "Outbreaks and Emergencies" does not share any relevant information on Tuvalu. [2] No such evidence can be found on Tuvalu's trade portal. [3] There is no mention of any trade restrictions on medical goods in the emergency response plan named 'Talaaliki Plan' of the Tuvalu Government, which provides a blueprint for action to deal with the Covid-19 pandemic. [4] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [5] No mention of restrictions on the export/import of medical goods could be found in a search of news media outlets.

[1] World Health Organisation (WHO). "Disease Outbreak News: Tuvalu".

[<https://www.who.int/csr/don/archive/country/tuv/en/>]. Accessed 23 November 2020.

[2] World Health Organisation (WHO), Western Pacific Region. "Outbreaks and Emergencies".

[<http://www.who.int/westernpacific/emergencies>]. Accessed 23 November 2020.

[3] Government of Tuvalu. "Tuvalu Trade Portal". [<https://tuvalu.tradeportal.org/>]. Accessed 23 November 2020.

[4] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 23 November 2020.

[5] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 23 November 2020.

3.7.1b

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

Yes = 0, No = 1

Current Year Score: 1

There is no evidence that Tuvalu has issued a restriction, without international/bilateral support, on the export/import of non-medical goods (e.g. food, textiles, etc) due to an infectious disease outbreak. The Disease Outbreak News of the World Health Organisation (WHO) does not list any such restrictions.[1] Likewise, the WHO Western Pacific regional office webpage for "Outbreaks and Emergencies" does not share any relevant information on Tuvalu. [2] No such evidence can be found on Tuvalu's trade portal. [3] There is no mention of any trade restrictions on non-medical goods in the emergency response plan named 'Talaaliki Plan' of the Tuvalu Government, which provides a blueprint for action to deal with the Covid-19 pandemic. [4] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [5] No mention of restrictions on the export/import of non-medical goods could be found in a search of news media outlets.

[1] World Health Organisation (WHO). "Disease Outbreak News: Tuvalu".

[<https://www.who.int/csr/don/archive/country/tuv/en/>]. Accessed 23 November 2020.

[2] World Health Organisation (WHO), Western Pacific Region. "Outbreaks and Emergencies".

[<http://www.who.int/westernpacific/emergencies>]. Accessed 23 November 2020.

[3] Government of Tuvalu. "Tuvalu Trade Portal". [<https://tuvalu.tradeportal.org/>]. Accessed 23 November 2020.

[4] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 23 November 2020.

Final-PDF.pdf]. Accessed 23 November 2020.

[5] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 23 November 2020.

3.7.2 Travel restrictions

3.7.2a

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

Yes = 0, No = 1

Current Year Score: 0

There is evidence that in the past year, Tuvalu has implemented a ban, without international/bilateral support, on travellers arriving from a specific country or countries due to an infectious disease outbreak. On the U.S Embassy Page, it is mentioned that Tuvalu has announced entry restrictions for travellers who have been in China within 30 days of travel to the country because of the Covid-19 outbreak. [1] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [2] No relevant information can be found on the WHO Disease Outbreak News portal. [3]

[1] U.S. Embassy in Fiji, Kiribati, Nauru, Tonga and Tuvalu. "COVID-19 Information". [https://fj.usembassy.gov/u-s-citizen-services/covid-19-information/#:~:text=TUVALU-]. Accessed 23 November 2020.

[2] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 23 November 2020.

[3] World Health Organisation. "Disease Outbreak News". [http://www.who.int/csr/don/en/]. Accessed 23 November 2020.

[3] World Health Organisation. "Disease Outbreak News". [http://www.who.int/csr/don/en/]. Accessed 23 November 2020.

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

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

4.1.1 Available human resources for the broader healthcare system

4.1.1a

Doctors per 100,000 people

Input number

Current Year Score: 91.74

2014

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 426.09

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

Tuvalu does not appear to have a public health workforce strategy in place that is less than five years old, which identifies fields where there is an insufficient workforce and strategies to address these shortcomings. The Ministry of Health's Strategic Health Plan 2009-2018 states that there is a plan to develop a "health workforce plan", but there is no evidence on a publicly available website that such a plan has been created. [1] The Employment Act of 2008 does not contain provisions related to workforce capacity development. [2] There are no other relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [3] Neither the Ministry of Health nor the Ministry of Education, Sports and Culture has an online presence. Tuvalu does not have a Ministry of Labour. The Senior Secretary for Foreign Affairs and Labour is housed within the Office of the Prime Minister; neither of those entities has an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4]

[1] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 24 November 2020.

[2] Government of Tuvalu. 2008. "Employment Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/1965/1965-0006/EmploymentAct_1.pdf]. Accessed 24 November 2020.

[3] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 24 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 24 November 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 560

2001

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 public evidence to conclude that Tuvalu has the capacity to isolate patients with highly communicable diseases in a patient isolation facility located within the country. There is no information about isolation facilities shared via a public website by the government of Tuvalu. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [1] The country's only hospital, the Princess Margaret Hospital (PMH) on the main island of Funafuti, does not have an online presence. However, the Ministry of Health's Health Reform Strategy 2016-2018 states as a goal to "relocate the isolation unit from the PMH". There are no details provided about the isolation unit—one can only infer its existence from this phrase—and no other information provided suggesting that a new isolation unit has been created, let alone one that is adequate to isolate patients with highly communicable diseases. [2] Neither the Ministry of Health's Strategic Health Plan for 2009-2018 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [3,4,5] There is no evidence that Tuvalu has a national laboratory system or a national public health institute. There is no evidence of other relevant media reports or academic studies.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 24 November 2020.

[2] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 24 November 2020.

[3] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 24 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 24 November 2020.

[5] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 24 November 2020.

4.1.2c

Does the country meet one of the following criteria?

- Is there evidence that the country has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years?
- Is there evidence that the country has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years?

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Tuvalu has either demonstrated capacity expand isolation capacity or developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years. Tuvalu's Health Reform Strategy 2016-2019 mentions the construction of an isolation unit that is not close to the PMC, but does not provide any details. [1] Tuvalu's Ministry of Health does not have an online presence, and there is no evidence that Tuvalu has a national public health institute. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [2] Tuvalu's National Strategic Action Plan for Climate Change and Disaster Risk Management (NSAP) does not mention any relevant information about isolation building or pre-existing isolation capacity. [3] Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 does not provide any relevant information. [4]

[1] Health Reform Strategy 2016-2019

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf] Accessed 4 May 2021.

[2] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 4 May 2020.

[3] National Strategic Action Plan for Climate Change and Disaster Risk Management [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>] Accessed 4 May 2021.

[4] National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>] Accessed 4 May 2021.

4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

4.2.1 Routine health care and laboratory system supply

4.2.1a

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

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

Current Year Score: 0

There is no evidence that Tuvalu has national procurement protocols in place which can be utilised by the Ministry of Health for the acquisition of laboratory needs, and medical supplies for routine needs. There is no evidence that Tuvalu has a Ministry of Agriculture. The Public Procurement Act 2013 and the Public Procurement Regulations 2014 are, respectively, the

guiding legislation and regulations in this matter, and apply across ministries. While the Public Procurement Act and the Regulations Guidelines for Procurement and Contracting provide guidance for the procurement of goods and services but there is insufficient evidence to conclude whether it includes laboratory supplies or medical supplies. [1,2] Tuvalu's Ministry of Health does not have an online presence, and there is no evidence that Tuvalu has a national public health institute. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] There is no evidence of other relevant media reports or academic studies.

[1] Government of Tuvalu. 2013. "Public Procurement Act". http://www.tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2014/2014-0001/PublicProcurementAct2013_1.pdf. Accessed 24 November 2020.

[2] Government of Tuvalu. 2014. "Public Procurement Regulations". [https://tuvalu-legislation.tv/cms/images/LEGISLATION/SUBORDINATE/2014/2014-0002/PublicProcurementRegulation2014_1.pdf]. Accessed 24 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 24 November 2020.

4.2.2 Stockpiling for emergencies

4.2.2a

Does the country have a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency?

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

Current Year Score: 0

There is no evidence that Tuvalu maintains a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency. Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016, nor the National Disaster Management Act of 2008 contains any provisions for dealing with public health emergencies or for stockpiling medical supplies. [1,2] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu does not have a Ministry of Defence, Ministry of Security, a medicines authority, or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [4,5,6,7] The WHO Country Cooperation Strategy for Tuvalu 2013-2017 mentions the existence of a "National Medicines Policy and Pharmaceutical Strategic Plan", but there is no evidence that this plan is shared via a publicly available website. [7]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 24 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [[COUNTRY SCORE JUSTIFICATIONS AND REFERENCES](http://tuvalu-</p>
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legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 24 November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 24 November 2020.

[4] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_fin al2016.03.01.pdf]. Accessed 24 November 2020.

[5] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 24 November 2020.

[6] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 24 November 2020.

[7] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 24 November 2020.

4.2.2b

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

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

Current Year Score: 0

There is no evidence that Tuvalu maintains a stockpile of laboratory supplies for national use during a public health emergency. Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016, nor the National Disaster Management Act of 2008 contains any provisions for dealing with public health emergencies or for stockpiling laboratory supplies. [1,2] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu does not have a Ministry of Defence, Ministry of Security, a medicines authority, or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [4,5,6,7]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 24 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 24 November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 24 November 2020.

[4] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_fin al2016.03.01.pdf]. Accessed 24 November 2020.

- [5] Ministry of Health. "Strategic Health Plan 2009-2018".
[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 24 November 2020.
- [6] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".
[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 24 November 2020.
- [7] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".
[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 24 November 2020.

4.2.2c

Is there evidence that the country conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tuvalu requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. In the 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic, there are various mentions of ensuring that there are enough animal feed, food and fuel stocks but there is no mention of medical stockpile evaluation. [1] Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016, nor the National Disaster Management Act of 2008 contains any provisions for assessing stocks during a public health emergency. [2,3] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu does not have a Ministry of Defence, Ministry of Security, a medicines authority, or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [2] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [5,6,7,8] The WHO Country Cooperation Strategy for Tuvalu 2013-2017 mentions the existence of a "National Medicines Policy and Pharmaceutical Strategic Plan", but there is no evidence that this plan is shared via a publicly available website. [8]

[1] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 4 May 2021.

[2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016". [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 4 May 2021.

[3] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 4 May 2021.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 4 May 2021.

[5] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 4 May 2021.

[6] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 4 May 2021.

[7] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 4 May 2021.

[8] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

[2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)]. Accessed 4 May 2021.

4.2.3 Manufacturing and procurement for emergencies

4.2.3a

Does the country meet one of the following criteria?

- Is there evidence of a plan/agreement to leverage domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency?

- Is there evidence of a plan/mechanism to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency?

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

Current Year Score: 0

There is no evidence that Tuvalu has a plan to procure or produce medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency. In the 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic, there are various mentions of a response plan to procure biomedical supplies only in the case of a COVID-19 outbreak and does not apply generally to any type of public health emergency. [1] Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016, nor the National Disaster Management Act of 2008 contains any provisions for dealing with public health emergencies. [2,3] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu does not have a Ministry of Defence, Ministry of Security, a medicines authority, or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [2] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [5,6,7,8] The WHO Country Cooperation Strategy for Tuvalu 2013-2017 mentions the existence of a "National Medicines Policy and Pharmaceutical Strategic Plan", but there is no evidence that this plan is shared via a publicly available website. [8]

[1] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 24 November 2020.

[2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 24 November 2020.

[3] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 24 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 24 November 2020.

[5] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 24 November 2020.

[6] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 24 November 2020.

[7] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 24 November 2020.

[8] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 24 November 2020.

4.2.3b

Does the country meet one of the following criteria?

- Is there evidence of a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies (e.g. reagents, media) for national use during a public health emergency?

- Is there evidence of a plan/mechanism to procure laboratory supplies (e.g. reagents, media) for national use during a public health emergency?

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

Current Year Score: 0

There is no evidence that Tuvalu has a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies or a plan to procure laboratory supplies for national use during a public health emergency. In the 'Talaaliki Plan' of the Tuvalu Government to provide a blueprint for action to deal with the Covid-19 pandemic, there are no mentions of a response plan to leverage domestic manufacturing capacity to produce laboratory supplies. [1] Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016, nor the National Disaster Management Act of 2008 contains any provisions for dealing with public health emergencies. [2,3] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu does not have a Ministry of Defence, Ministry of Security, a medicines authority, or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [2] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [5,6,7,8] The WHO Country Cooperation Strategy for Tuvalu 2013-2017 mentions the existence of a "National Medicines Policy and Pharmaceutical Strategic Plan", but there is no evidence that this plan is shared via a publicly available website. [8]

[1] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 24 November 2020.

[2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 24 November 2020.

[3] Government of Tuvalu. 2008. "National Disaster Management Act". [<http://tuvalu->

legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 24 November 2020.

[4] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 24 November 2020.

[5] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_fin al2016.03.01.pdf]. Accessed 24 November 2020.

[6] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 24 November 2020.

[7] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 24 November 2020.

[8] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-

2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 24 November 2020.

4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

4.3.1 System for dispensing medical countermeasures (MCM) during a public health emergency

4.3.1a

Does the country have a plan, program, or guidelines in place for dispensing medical countermeasures (MCM) for national use during a public health emergency (i.e., antibiotics, vaccines, therapeutics and diagnostics)?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tuvalu has a plan, program, or guidelines in place for dispensing medical countermeasures (MCMs) for national use during a public health emergency. Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016, nor the National Disaster Management Act of 2008 contains any provisions for dealing with public health emergencies or for dispensing medical countermeasures. [1,2] There is no relevant information shared via a publicly available Tuvalu government website. The Ministry of Health does not have an online presence. Tuvalu does not have a Ministry of Defence, Ministry of Security, a medicines authority, or similar body. Tuvalu does not have a Ministry of Defence, Ministry of Security, a medicines authority, or similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [4,5,6,7] The WHO Country Cooperation Strategy for Tuvalu 2013-2017 mentions the existence of a "National Medicines Policy and Pharmaceutical Strategic Plan", but there is no evidence that this plan is shared via a publicly available website. [7]

- [1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 24 November 2020.
- [2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 24 November 2020.
- [3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 24 November 2020.
- [4] Ministry of Health. "Health Reform Strategy 2016-2019". [http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 24 November 2020.
- [5] Ministry of Health. "Strategic Health Plan 2009-2018". [http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 24 November 2020.
- [6] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022". [http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 24 November 2020.
- [7] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017". [http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 24 November 2020.

4.3.2 System for receiving foreign health personnel during a public health emergency

4.3.2a

Is there a public plan in place to receive health personnel from other countries to respond to a public health emergency?

Yes = 1, No = 0

Current Year Score: 0

There is no public plan in place to receive health personnel from other countries to specifically respond to a public health emergency. Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 nor the Disaster Management Act of 2008 include relevant information or provisions, though the Strategic Plan does mention in a depiction of the organizational response to a disaster that the "National Disaster Controller" is responsible for managing NGOs and foreign assistance. [1,2] There is no other relevant information shared by the government of Tuvalu via a public website. The Ministry of Health does not have an online presence. Tuvalu does not have a Ministry of Defence, Ministry of Security, or a similar body. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Controller, National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group.[1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [4,5,6,7] Tuvalu is a member of the Pacific Community (SPC) and the Pacific Public Health Surveillance Network (PPHSN), which is a joint initiative of the SPC and the World Health Organisation (WHO). [8,9,10] However, it does not appear, based on publicly available evidence, that either the SPC or PPHSN has relevant public plans in place.

- [1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 26 November 2020.
- [2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 26 November 2020.
- [3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 26 November 2020.
- [4] Ministry of Health. "Health Reform Strategy 2016-2019". [http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_fin al2016.03.01.pdf]. Accessed 26 November 2020.
- [5] Ministry of Health. "Strategic Health Plan 2009-2018". [http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 26 November 2020.
- [6] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022". [http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 26 November 2020.
- [7] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017". [http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 26 November 2020.
- [8] Pacific Community (SPC). "SPC Members". [http://www.spc.int/our-members/]. Accessed 26 November 2020.
- [9] Pacific Public Health Surveillance Network (PPHSN). [https://www.pphsn.net/Structure/CoreMembers.htm]. Accessed 26 November 2020.
- [10] World Health Organisation (WHO), Western Pacific Region. "Pacific Islands Surveillance". [https://www.who.int/westernpacific/emergencies/surveillance/pacific-islands-surveillance]. Accessed 26 November 2020.

4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a

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

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

Current Year Score: 0

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 93.1

2007

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: 3.63

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a

Are workers guaranteed paid sick leave?

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

Current Year Score: 0

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. The 'Talaaki Plan' of the Tuvalu Government, to provide a blueprint for action to deal with the Covid-19 pandemic, recognizes that healthcare workers are the most vulnerable to public health emergencies but does not contain any targeted plan for them. [1] Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 nor the Disaster Management Act of 2008 includes relevant information or provisions. [2,3] There is no other relevant information shared by the government of Tuvalu via a public website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [4] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Controller, National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [2] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent

WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [5,6,7,8]

[1] Government of Tuvalu. 2020. "Talaaliki Plan". [<https://mfed.tv/wp-content/uploads/2020/05/Chairs-Report-Talaaliki-Plan-Final-PDF.pdf>]. Accessed 26 November 2020.

[2] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 26 November 2020.

[3] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 26 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

[5] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 26 November 2020.

[6] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 26 November 2020.

[7] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 26 November 2020.

[8] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

[2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)]. Accessed 26 November 2020.

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that there is a system in place for public health officials and healthcare workers to communicate during a public health emergency in Tuvalu. Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 nor the Disaster Management Act of 2008 includes relevant information or provisions. [1,2] There is no other relevant information shared by the government of Tuvalu via a public website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Controller, National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022,

respectively) contains relevant information. [4,5,6,7]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 26 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 26 November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 26 November 2020.

[4] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 26 November 2020.

[5] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 26 November 2020.

[6] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 26 November 2020.

[7] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 26 November 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 a public health emergency in Tuvalu. Thus, there is also no evidence of such a plan that involves both the public and the private sector. Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 nor the Disaster Management Act of 2008 includes relevant information or provisions. [1,2] There is no other relevant information shared by the government of Tuvalu via a public website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Controller, National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [4,5,6,7]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf]. Accessed 26 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 26

November 2020.

[3] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 26 November 2020.

[4] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 26 November 2020.

[5] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 26 November 2020.

[6] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 26 November 2020.

[7] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 26 November 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 Tuvalu's public health system monitors for and tracks the number of health care associated infections (HCAIs) that take place in healthcare facilities. There is no relevant information shared via public websites by the government of Tuvalu. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [1] Neither the Ministry of Health's Strategic Health Plan for 2009-2018, its Health Reform Strategy 2016-2019 nor the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively) contains relevant information. [2,3,4,5] There is no evidence that Tuvalu has a national public health institute or a national laboratory system.

[1] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 26 November 2020.

[2] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 26 November 2020.

[3] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 26 November 2020.

[4] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf]. Accessed 26 November

2020.

[5] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

[2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)]. Accessed 26 November 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 no publicly available evidence of a national requirement for ethical review before beginning a clinical trial in Tuvalu. There are no relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [1] The 2016 Pharmacy and Therapeutic Products Act does not provide guidance on the ethical review of clinical trials. [2] The Tuvalu Pharmaceutical Country Profile, a 2012 document, states that there are no controls on clinical trials. [3] The WHO Country Cooperation Strategy for Tuvalu 2013-2017 mentions the existence of a "National Medicines Policy and Pharmaceutical Strategic Plan", but there is no evidence that this plan is shared via a publicly available website. [4] There is no evidence of a national laboratory or public health institute in Tuvalu. Neither the Ministry of Health nor the Ministry of Education, Sports and Culture has an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. No relevant evidence can be found through this social media account either. [5] There is no evidence of relevant media reports or academic studies.

[1] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 26 November 2020.

[2] Government of Tuvalu. Act No. 006 of 2016. "Pharmacy and Therapeutic Products Act". [https://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2016/2016-0006/PharmacyandTherapeuticProductsAct2016_1.pdf]. Accessed 26 November 2020.

[3] Ministry of Health. June 2012. "Tuvalu Pharmaceutical Country Profile".

[https://www.who.int/medicines/areas/coordination/Tuvalu_PSCP_NarrativeFeb18.pdf?ua=1]. Accessed 26 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

[2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)]. Accessed 26 November 2020.

[5] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

4.7.1b

Is there an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics. Indeed, there is no publicly available evidence of a national requirement for ethical review before beginning a clinical trial in Tuvalu. There are other relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [1] The 2016 Pharmacy and Therapeutic Products Act does not provide guidance on the ethical review of clinical trials. [2] The Tuvalu Pharmaceutical Country Profile, a 2012 document, states that there are no controls on clinical trials. [3] The WHO Country Cooperation Strategy for Tuvalu 2013-2017 mentions the existence of a "National Medicines Policy and Pharmaceutical Strategic Plan", but there is no evidence that this plan is shared via a publicly available website. [4] There is no evidence of a national laboratory or public health institute in Tuvalu. Neither the Ministry of Health nor the Ministry of Education, Sports and Culture has an online presence. There is no Ministry of Research. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020.[5] There is no evidence of relevant media reports or academic studies.

[1] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 26 November 2020.

[2] Government of Tuvalu. Act No. 006 of 2016. "Pharmacy and Therapeutic Products Act". [https://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2016/2016-0006/PharmacyandTherapeuticProductsAct2016_1.pdf]. Accessed 26 November 2020.

[3] Ministry of Health. June 2012. "Tuvalu Pharmaceutical Country Profile". [https://www.who.int/medicines/areas/coordination/Tuvalu_PSCP_NarrativeFeb18.pdf?ua=1]. Accessed 26 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 26 November 2020.

[5] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

Is there a government agency responsible for approving new medical countermeasures (MCM) for humans?

Yes = 1, No = 0

Current Year Score: 1

Tuvalu has a government agency responsible for approving new medical countermeasures for humans. According to the Tuvalu Pharmaceutical Country Profile, a 2012 Ministry of Health document, states that the National Drug and Therapeutic Committee (NDTC) is responsible for licensing medicines. [1] The Pharmacy and Therapeutic Products Act 2016 also appoints the NDTC as the licensing authority. The Act also states that "no person may import, manufacture, sell, supply or promote any therapeutic product unless that product has been approved by a recognised regulator and is on the Tuvalu Medicines Schedule". Although "recognized regulator" is not further explained in the law, it does explain elsewhere that the NDTC is responsible for creating the Tuvalu Medicines Schedule. Further, the law's definition of "therapeutic product" would seem to encompass medical countermeasures, though the latter term is not specifically mentioned. [2] Neither of the aforementioned documents discusses the approval of other medical countermeasures in greater detail. The World Health Organisation (WHO) Country Cooperation Strategy for Tuvalu 2013-2017 mentions the existence of a "National Medicines Policy and Pharmaceutical Strategic Plan", but there is no evidence that this plan is shared via a publicly available website. [3] There is no evidence of a national laboratory or public health institute in Tuvalu. Neither the Ministry of Health nor the

Ministry of Education, Sports and Culture has an online presence. There is no Ministry of Research. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [4] There is no evidence of relevant media reports or academic studies.

[1] Ministry of Health. June 2012. "Tuvalu Pharmaceutical Country Profile".

[https://www.who.int/medicines/areas/coordination/Tuvalu_PSCP_NarrativeFeb18.pdf?ua=1]. Accessed 26 November 2020.

[2] Government of Tuvalu. Act No. 006 of 2016. "Pharmacy and Therapeutic Products Act". [https://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2016/2016-0006/PharmacyandTherapeuticProductsAct2016_1.pdf].

Accessed 26 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

[2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)]. Accessed 26 November 2020.

[4] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

4.7.2b

Is there an expedited process for approving medical countermeasures (MCM) for human use during public health emergencies?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of an expedited process for approving medical countermeasures for human use during public health emergencies. According to the Tuvalu Pharmaceutical Country Profile, a 2012 Ministry of Health document, states that the National Drug and Therapeutic Committee (NDTC) is responsible for licensing medicines. [1] Pharmacy and Therapeutic Products Act 2016 also appoints the NDTC as the licensing authority. [2] However, neither of the aforementioned documents discuss the approval of other medical countermeasures, let alone expedited approval. There are no other relevant laws listed on the Office of the Attorney General's online index of Tuvaluan laws. [3] The WHO Country Cooperation Strategy for Tuvalu 2013-2017 mentions the existence of a "National Medicines Policy and Pharmaceutical Strategic Plan", but there is no evidence that this plan is shared via a publicly available website. [4] There is no evidence of a national laboratory or public health institute in Tuvalu. Neither the Ministry of Health nor the Ministry of Education, Sports and Culture has an online presence. There is no Ministry of Research. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [5] There is no evidence of relevant media reports or academic studies.

[1] Ministry of Health. June 2012. "Tuvalu Pharmaceutical Country Profile".

[https://www.who.int/medicines/areas/coordination/Tuvalu_PSCP_NarrativeFeb18.pdf?ua=1]. Accessed 26 November 2020.

[2] Government of Tuvalu. Act No. 006 of 2016. "Pharmacy and Therapeutic Products Act". [https://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2016/2016-0006/PharmacyandTherapeuticProductsAct2016_1.pdf].

Accessed 26 November 2020.

[3] Office of the Attorney General. "Tuvalu Legislation". [<https://tuvalu-legislation.tv/cms/>]. Accessed 26 November 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)

[2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1](http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1)]. Accessed 26 November 2020.

[5] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

Category 5: Commitments to improving national capacity, financing plans to address gaps, and adhering to global norms

5.1 INTERNATIONAL HEALTH REGULATIONS (IHR) REPORTING COMPLIANCE AND DISASTER RISK REDUCTION

5.1.1 Official IHR reporting

5.1.1a

Has the country submitted IHR reports to the WHO for the previous calendar year?

Yes = 1, No = 0

Current Year Score: 1

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

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

Yes = 1, No = 0

Current Year Score: 0

Pandemics are not integrated into Tuvalu's national risk reduction strategy, and there is not a standalone national disaster risk reduction strategy for pandemics. Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 and the National Disaster Management Act of 2008 contain any provisions or information on pandemics. [1,2] There is no relevant information shared via a publicly available Tuvaluan government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 26 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 26 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

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

5.2.1 Cross-border agreements

5.2.1a

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

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

Current Year Score: 0

There is insufficient public evidence to confirm that Tuvalu has cross-border agreements as part of a regional group, with regards to public health emergencies. Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 and the National Disaster Management Act of 2008 contain any provisions or information on public health emergencies or cross-border agreements. [1,2] There is no relevant information shared via a publicly available Tuvaluan government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1] Further, although Tuvalu participates in the Pacific Animal Health Laboratory Network (PAHLNet), organised through the Pacific Regional Influenza Pandemic Preparedness Project (PRIPPP); and in the Laboratory Network (LabNet) of the Pacific Public Health Surveillance Network (PPHSN), there is no evidence that these networks have agreements to specifically mobilise resources or cooperate during public health emergencies. [4,5,6,7]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 26 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 26 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

[4] Pacific Community (SPC). "SPC Members". [<http://www.spc.int/our-members/>]. Accessed 26 November 2020.

[5] Pacific Community (SPC) Land Resources Division. "Pacific Animal Health Laboratory Network (PAHLNet)". [<https://lrd.spc.int/information-and-networks/pahlNet>]. Accessed 26 November 2020.

[6] World Health Organisation (WHO), Western Pacific Region. "Pacific Islands Surveillance". [<https://www.who.int/westernpacific/emergencies/surveillance/pacific-islands-surveillance>]. Accessed 26 November 2020.

[7] Pacific Public Health Surveillance Network (PPHSN). [<https://www.pphsn.net/Structure/CoreMembers.htm>]. Accessed 26 November 2020.

5.2.1b

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

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

Current Year Score: 0

There is insufficient public evidence to confirm Tuvalu has cross-border agreements as part of a regional group, with regards to animal health emergencies. Neither the Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016 and the National Disaster Management Act of 2008 contain any provisions or information on animal health emergencies or cross-border agreements. [1,2] There is no relevant information shared via a publicly available Tuvaluan government website. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [3] Several bodies identified in the Strategic Plan as having a role in responding to disasters do not have an online presence. These include the National Disaster Committee, the National Disaster Management Office, and the National Disaster Preparedness Working Group. [1] Further, although Tuvalu participates in the Pacific Animal Health Laboratory Network (PAHLNet), organised through the Pacific Regional Influenza Pandemic Preparedness Project (PRIPPP); and in the Laboratory Network (LabNet) of the Pacific Public Health Surveillance Network (PPHSN), there is no evidence that these networks have agreements to specifically mobilise resources or cooperate during animal health emergencies. [4,5,6,7]

[1] Government of Tuvalu. "Tuvalu National Strategic Plan for Climate Change and Disaster Risk Management 2012-2016." [<http://extwprlegs1.fao.org/docs/pdf/tuv141428.pdf>]. Accessed 26 November 2020.

[2] Government of Tuvalu. 2008. "National Disaster Management Act". [http://tuvalu-legislation.tv/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0010/NationalDisasterManagementAct_1.pdf]. Accessed 26 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

[4] Pacific Community (SPC). "SPC Members". [<http://www.spc.int/our-members/>]. Accessed 26 November 2020.

[5] Pacific Community (SPC) Land Resources Division. "Pacific Animal Health Laboratory Network (PAHLNet)". [<https://lrd.spc.int/information-and-networks/pahlNet>]. Accessed 26 November 2020.

[6] World Health Organisation (WHO), Western Pacific Region. "Pacific Islands Surveillance". [<https://www.who.int/westernpacific/emergencies/surveillance/pacific-islands-surveillance>]. Accessed 26 November 2020.

[7] Pacific Public Health Surveillance Network (PPHSN). [<https://www.pphsn.net/Structure/CoreMembers.htm>]. Accessed 26 November 2020.

5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

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

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

Current Year Score: 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: 0

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 Tuvalu has allocated national funds to improve the capacity to address epidemic threats within the past three years. There is no mention of such an allocation in the Ministry of Health's Strategic Health Plan for 2009-2018; its Health Reform Strategy 2016-2019; or the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively). [1,2,3,4] There is no relevant information shared via a public website by the government of Tuvalu. Neither the Office of the Prime Minister, the Ministry of Health, nor the Ministry of Foreign Affairs has an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [5] There is no evidence in international news media or from the United Nations or WHO press releases that Tuvalu has allocated national funds to improve capacity to address epidemic threats within the past three years. The Global Health Security Tracking Dashboard does not report any grants specifically geared toward improving Tuvalu's capacity to address epidemic threats in the past three years. [6]

[1] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 26 November 2020.

[2] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 26 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 26 November 2020.

[4] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_fin

al2016.03.01.pdf]. Accessed 26 November 2020.

[5] Twitter. "Tuvalu Government". [https://twitter.com/TuvaluGov?s=20]. Accessed 26 November 2020.

[6] Global Health Security Tracking Dashboard. "Tuvalu". [https://tracking.ghscosting.org/#analysis/who/TV]. Accessed 26 November 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 Tuvalu can access in the face of a public health emergency. Tuvalu is among the countries eligible to borrow from the World Bank's International Development Association (IDA). [1] As a qualified borrower from the IDA, Tuvalu is also eligible to access funds from the World Bank's Pandemic Emergency Financing Facility (PEF). [2] There is no other publicly available evidence that Tuvalu has a dedicated national reserve fund. The Ministry of Health does not have an online presence. Tuvalu government had a national

portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [3]

[1] International Development Association. "Borrowing Countries". [<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 26 November 2020.

[2] Pandemic Emergency Financing Facility. December 2017. "Operational Brief for Eligible Countries". [<http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf>]. Accessed 26 November 2020.

[3] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

5.5.4 Accountability for commitments made at the international stage for addressing epidemic threats

5.5.4a

Is there evidence that senior leaders (president or ministers), in the past three years, have made a public commitment either to:

- Support other countries to improve capacity to address epidemic threats by providing financing or support?
- Improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity?

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

Current Year Score: 0

There is no evidence that senior Tuvaluan leaders have made a public commitment either to support other countries to improve capacity to address epidemic threats by providing financing or support in the past three years or improve Tuvalu's own domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity in the past three years. There is no mention of such a commitment or request in the Ministry of Health's Strategic Health Plan for 2009-2018; its Health Reform Strategy 2016-2019; or the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively). [1,2,3,4] There is no relevant information shared via a public website by the government of Tuvalu. Neither the Office of the Prime Minister, the Ministry of Health, nor the Ministry of Foreign Affairs has an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [5] There is no evidence in international news media or from the United Nations or WHO press releases that Tuvalu has made a request for such funding in the last three years. The Global Health Security Tracking Dashboard does not report any grants specifically geared toward improving Tuvalu's capacity to address epidemic threats in the past three years. [6]

[1] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 26 November 2020.

[2] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 26 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-

2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 26 November 2020.

[4] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 26 November 2020.

[5] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

[6] Global Health Security Tracking Dashboard. "Tuvalu". [<https://tracking.ghscosting.org/#analysis/who/TV>]. Accessed 26 November 2020.

5.5.4b

Is there evidence that the country has, in the past three years, either:

- Provided other countries with financing or technical support to improve capacity to address epidemic threats?
- Requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats?

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

Current Year Score: 0

There is insufficient evidence that, in the last three years, Tuvalu has either invested finances (from donors or its national budget) or provided technical support either to improve its own domestic capacity to address epidemic threats in the past three years or to support other countries to improve capacity to address epidemic threats in the past three years. There is no mention of such an investment or support in the Ministry of Health's Strategic Health Plan for 2009-2018; its Health Reform Strategy 2016-2019; or the two most recent WHO Country Cooperation Strategies (for 2013-2017 and 2018-2022, respectively). [1,2,3,4] There is no relevant information shared via a public website by the government of Tuvalu. Neither the Office of the Prime Minister, the Ministry of Health nor the Ministry of Foreign Affairs has an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [5] There is no evidence in international news media or from the United Nations or WHO press releases that Tuvalu has made such investment or support in the last three years. The Global Health Security Tracking Dashboard does not report any grants specifically geared toward improving Tuvalu's capacity to address epidemic threats in the past three years. During that time period, the tracker highlights funding for efforts such as NCDs, family planning and COVID-19 response. [6]. Evidence shows that recent funding has focused on response efforts to the COVID-19 pandemic, such as the European Union's ongoing support to increase response capabilities for this emergency. [7]

[1] Ministry of Health. "Strategic Health Plan 2009-2018".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Tuvalu/nhp_tuvalu.pdf]. Accessed 26 November 2020.

[2] World Health Organisation (WHO). "Tuvalu-WHO Country Cooperation Strategy 2018-2022".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13958/WPRO-2017-DPM-024-tuv-eng.pdf>]. Accessed 26 November 2020.

[3] World Health Organisation (WHO). "WHO Country Cooperation Strategy for Tuvalu 2013-2017".

[http://iris.wpro.who.int/bitstream/handle/10665.1/7888/CCS_TUV_2013-2017_eng.pdf;jsessionid=211558E56DCAC542A0C297A149697282?sequence=1]. Accessed 26 November 2020.

[4] Ministry of Health. "Health Reform Strategy 2016-2019".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/tuvalu/tuvalu_health_reform_plan_final2016.03.01.pdf]. Accessed 26 November 2020.

[5] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

[6] Global Health Security Tracking Dashboard. "Tuvalu". [<https://tracking.ghscosting.org/#analysis/who/TV>]. Accessed 26 November 2020.

[7] World Health Organization. February 2021. "Strengthening vital partnerships in the Pacific to support health sector responses to COVID-19." [<https://www.who.int/westernpacific/about/how-we-work/pacific-support/news/detail/25-01-2021-strengthening-vital-partnerships-in-the-pacific-to-support-health-sector-responses-to-covid-19>]. Accessed 24 June 2021.

5.5.4c

Is there evidence that the country has fulfilled its full contribution to the WHO within the past two years?

Yes = 1 , No = 0

Current Year Score: 1

2021

Economist Impact analyst qualitative assessment based on official national sources, which vary by country

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

5.6.1 Commitment to sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) in both emergency and nonemergency research

5.6.1a

Is there a publicly available plan or policy for sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) along with the associated epidemiological data with international organizations and/or other countries that goes beyond influenza?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available plan or policy for sharing genetic data, epidemiological data, clinical specimens, or isolated specimens (biological materials) with international organisations and/or other countries that goes beyond influenza. No information on such a plan is shared via a public website by the government of Tuvalu. Neither the Ministry of Health, the Ministry of Education, Sports and Culture; nor the Natural Resources, Energy and the Environment has an online presence. Tuvalu does not have a Ministry of Research, a Ministry of Agriculture, or similar bodies. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [1] There is no evidence of such a plan in media, academic studies, or other external documentation.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

5.6.1b

Is there public evidence that the country has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years?

Yes = 0, No = 1

Current Year Score: 1

There is no public evidence that Tuvalu has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past year. There is no information about sharing influenza data on a publicly available website of the Tuvalu government. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [1] There has not been any reports of Tuvalu not sharing samples in either national and international media. The latest External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution, published in 2016, does not refer to Tuvalu not sharing samples, nor does it list Tuvalu as a priority country for improving the "national ability to detect, monitor and share novel influenza viruses". [2] There is no other evidence of World Health Organisation sources suggesting Tuvalu has failed to share such samples.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 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 26 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 Tuvalu has not shared pandemic pathogen samples during an outbreak in the past two years. There is no reference to sharing pandemic pathogen data on a publicly available website of the government of Tuvalu. The Ministry of Health does not have an online presence. Tuvalu government had a national portal which listed all its ministries, however, as of November 13 2020, the website has expired and no further evidence on the ministries of Tuvalu's government can be found on open source. An unverified social media account of the Government of Tuvalu remains online with the latest post on Covid-19 policy from March 2020. [1] A recent regional report on the WHO Western Pacific regional office webpage on "Covid-19 situation" reports zero cases of Covid-19 as of November 11, 2020, in Tuvalu and has no evidence of the country not sharing Covid-19 samples.[2] There have not been any reports of Tuvalu not sharing samples in either national and international media, or in World Health Organisation sources. Relatedly, there are not reports in international media of pandemic pathogen outbreaks in Tuvalu in the last two years.

[1] Twitter. "Tuvalu Government". [<https://twitter.com/TuvaluGov?s=20>]. Accessed 26 November 2020.

[2] World Health Organisation (WHO), Western Pacific Region. "Covid-19 situation report for the Western Pacific Region". [<https://www.who.int/westernpacific/internal-publications-detail/covid-19-situation-report-for-the-western-pacific-region-28-4-november-2020---10-november-2020>]. Accessed 26 November 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: 43

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: 4

2021

Economist Intelligence

6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

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

Current Year Score: 3

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

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

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

Current Year Score: 4

2021

Economist Intelligence

6.1.4b

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

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

Current Year Score: 0

2020

UN Office of Drugs and Crime (UNODC)

6.1.4c

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

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

Current Year Score: 2

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

Is this country presently subject to an armed conflict, or is there at least a moderate risk of such conflict in the future?

No armed conflict exists = 4, Yes; sporadic conflict = 3, Yes; incursional conflict = 2, Yes, low-level insurgency = 1, Yes; territorial conflict = 0

Current Year Score: 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: 4

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: 88.1

2008-2018

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: 0.55

2018

United Nations Development Programme (UNDP); The Economist Intelligence Unit

6.2.3 Social inclusion

6.2.3a

Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)

Input number

Current Year Score: 0.4

2010

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

There is public evidence found in the International Labour Organisation's (ILO) Tuvalu country report, that 'Around 75% of Tuvalu's labour-force work in the subsistence and informal economy'. [1] The report is dated 24 November 2009. No recent data can be found on a public portal. The Tuvalu country page on the World Bank's website does not contain any data for the share of employment in the informal sector. [2]

[1] International Labour Organisation (ILO). "Decent Work Country Programme Tuvalu". November 2009.

[https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_120556.pdf]. Accessed 26 November 2020.

[2] The World Bank. "Tuvalu Data". [<https://data.worldbank.org/country/tuvalu>]. Accessed 26 November 2020

6.2.3c

Coverage of social insurance programs (% of population)

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

Current Year Score: 2

2016, or latest available

World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions

Input number

Current Year Score: 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: 0.39

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

What is the risk that the road network will prove inadequate to meet needs?

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

Current Year Score: 2

2021

Economist Intelligence

6.3.2 Adequacy of airports

6.3.2a

What is the risk that air transport will prove inadequate to meet needs?

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

Current Year Score: 1

2021

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: 3

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 63.22

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: 0

2008-2018

World Bank; Economist Impact

6.4.3 Natural disaster risk

6.4.3a

What is the risk that the economy will suffer a major disruption owing to a natural disaster?

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

Current Year Score: 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: 67.2

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: 666.23

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 6.68

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 48.7

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 51.6

2016

WHO

6.5.2 Access to potable water and sanitation

6.5.2a

Percentage of homes with access to at least basic water infrastructure

Input number

Current Year Score: 99

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 84.08

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: 605.24

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